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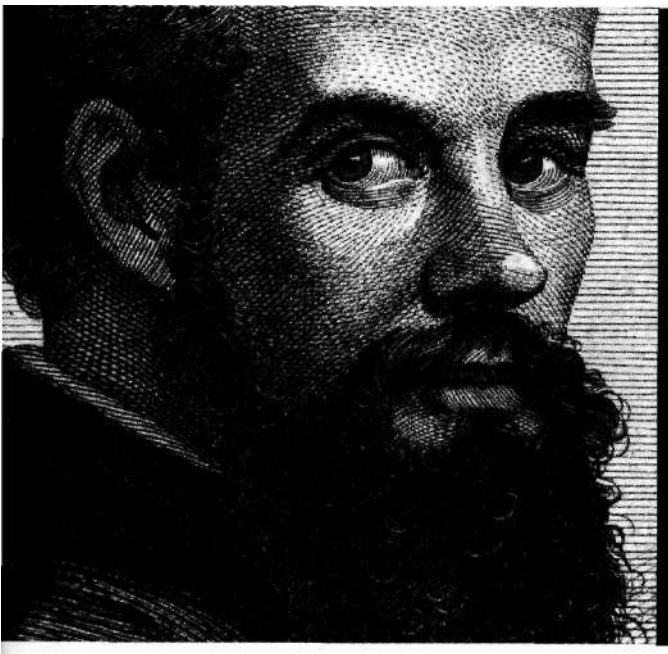
# Vesalius



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# *Editorial*

Again a new number of *Vesalius* appears, our official journal of the International Society for the History of Medicine. As you read it, you certainly will appreciate the high quality and diversity of the variety of articles that are included in this issue.

As with other societies, the journal *Vesalius* represents the backbone of our Society. Apart from the original scientific articles you will be kept fully informed on the uptodate membership situation, the Society's congresses, its board meetings, etc. This information is extremely useful in keeping all members of different continents adequately enlightened on what is going on in our active Society.

At the last September Congress of the I.S.H.M. in Kos, the Board reaffirmed its earlier decision concerning the membership subscription. From the 1997 subscription onwards, the membership fee definitely includes the provision of *Vesalius.* There will no longer be an opportunity for dual membership (as was the case for 1996). The journal Vesa//i/swill be send to you directly from the Editorial Office. This new form of dispatching will guarantee the speedy arrival of the journal on your reading desk.

The General Assembly of the I.S.H.M. agreed to the treasurers' suggestion to maintain in 1997 the membership fee, including the journal, at the same level of 1.500, BF or 250, FF or 50, US$. The 1998 membership fee will be fixed at the Bureau meeting next year.

The Board hopes that this fourth issue of *Vesalius* will convince all members of our Society to be not only enthusiastic readers of our journal but eventually also become active writers of original and interesting articles.

May we moreover ask the ISHM-members to look urgently for possible sponsors and advertisers. Ask them to contact the Editorial Office for more details.

In this way our International Society for the History of Medicine should grow and attract more and more interested scholars and amateurs to join us.

Meanwhile, I wish you pleasant reading.

Un nouveau numéro de *Vesalius,* journal officiel de la Société Internationale d'Histoire de la Médecine, vient de paraître. En le feuilletant, vous apprécierez certainement la haute qualité et la diversité des articles publiés.

Comme pour d'autres associations scientifiques, le journal *Vesalius* représente la pierre angulaire de notre Société. En plus d'articles scientifiques originaux, il renseigne sur les statuts de notre Société, les congrès, les décisions prises lors des réunions du Conseil d'Administration, etc. Ces informations sont utiles pour informer correctement les membres des différents continents sur les activités de notre Société.

Au cours du dernier Congrès de la S.I.H.M. à Kos, le Bureau a confirmé sa politique concernant les cotisations et les abonnements. A partir de 1997, la cotisation des membres inclura automatiquement l'abonnement à la revue *Vesalius,* (ce qui n'était pas le cas en 1996). Le journal *Vesalius* sera envoyé immédiatement par l'éditeur. Cette nouvelle formule devrait garantir une livraison rapide du journal.

L'Assemblée Générale de la S.I.H.M. a également approuvé la proposition des trésoriers de maintenir le tarif de la cotisation (qui inclut l'abonnement à la revue), pour 1997, à 1.500, BEF ou 250, FF ou 50, US$. La cotisation 1998 sera fixée l'année prochaine, par le Conseil d'Administration.

Les membres du Conseil espèrent que ce quatrième numéro de *Vesalius* convaincra les membres de notre Société de ne pas rester seulement des lecteurs passionnés du journal, mais de devenir des auteurs d'articles originaux.

Pouvons-nous encore suggérer aux membres de trouver des sponsors éventuels pour soutenir *Vesalius* et leur demander de se mettre en contact avec le bureau d'édition pour plus de détails.

De cette façon, notre Société Internationale d'Histoire de la Médecine pourra grandir et attirer de plus en plus d'érudits ou d'amateurs intéressés.

Entretemps, je vous souhaite une bonne lecture de ce dernier numéro.

*Rob Van Hee, Hon. treasurer*

# *Galenicae Quaestiones Disputatae Duae : rete mirabile and pulmonary circulation*

P Prioreschi

***Summary***

*The author discusses two points of Galenic medicine that have long interested medical historians: why didGalen describe a non-existent arterial* rete mirabile *atthe base ofthe human brain and was Galen the first to discover the pulmonary circulation. After reviewing the evidence, it is concluded that Gglen mistook the venous rete mirabile at the base of the human brain for an arterial one and that he indeed described the passage of blood from the right to the left ventricle although he did not discover the pulmonary circulation.*

***Résumé***

*L'auteur s'interroge sur deux questions de la médecine galénique qui ont longtemps interpelé les historiens de la médecine : pourquoi Galien a-t-il rapporté l'existence d'une* rete mirabile *artérielle (qui n'existait pas) à la base du cerveau humain et comment est-il arrivé le premier à reconnaître la circulation pulmonaire ? Après réflexion, l'auteur conclut qu 'en fait Galien a confondu une* rete mirabile *veineuse avec une* rete mirabile *artérielle et a donc décrit le passage du sang du ventricule droit vers le gauche, bien qu'il n'ait pas découvert la circulation pulmonaire.*

The purpose of this paper is to discuss two unsolved long-standing questions of Galenic medicine: one concerns the non-existent arterial *rete mirabilethat* Galen describes at the base of the human brain, the other whether he discovered the pulmonary circulation.

1. Galen's description of an arterial retiform plexus, a rete mirabile (1), at the base of the human brain has puzzled historians for centuries because such a plexus does not exist and it is difficult to understand how Galen, an experimenter of unusual observational skills, could have made such a mistake. Yet, the pertinent passage leaves no doubt:

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*"The plexus called retiform (rete* mirabile,) *by anatomists, is the most wonderful of the bodies located in this region. It encircles the gland (the hypophysis) itself and extends far to the rear; for nearly the whole base of the encephalon has this plexus lying beneath it. It is not a simple network but (looks) as if you had taken several fisherman's nets and superimposed them... But of course, on account of the delicacy of the members composing it and the closeness of its contexture, you could not compare this network to any man-made nets, nor has it been formed from any chance material. Rather, Nature appropriated as the material for this wonderful network the greatest part* (a.carotid interna*) of the arteries ascending from the heart to the head. Small branches are given off by these arteries to the neck, the face, and the external parts of the head. All the rest of them, as straight as they were formed*

*in the beginning, pass up through the thorax and neck to the head and are received there comfortably by a part of the cranium, which is pierced through (by the carotid canal) and admits them with no trouble into the interior of the head. The thick meninx (the dura mater) too was about to receive them and had already been pierced through along the line of their invasion(2) and all these things gave the impression that the arteries were making haste to reach the encephalon. But this was not the case. For when they have passed beyond the cranium, in the space between it and the thick meninx they are first divided into many very small, slender arteries, and then they are interwoven and pass through one another, some toward the front of the head, some toward the back, and others to the left and right, giving the other, opposite impression, namely, that they have forgotten the route to the encephalon. However, this is not true either; for, as roots combine to form a trunk, so from these many arteries there arises another pair of arteries* (aa.carotides cerebrales), *equal to the pair that passed upward in the beginning, and so these now enter the encepahlon through the perforations in the thick meninx" (3).*

It is evident that Galen describes here an extradural arterial *rete mirabile.* It must be underlined that this, however, is not a Galenic "discovery", but the confirmation of an alleged observation previously made by Herophilus or his school. As Galen tells us,

*"the 'net-like' plexus* (rete mirabile), *as it is called by those around Herophilus,...(is formed) when the carotid arteries ascend toward the brain, this is where they are divided in many ways by the dura mater, before they go through it. They twist around in many rows, as they would if you were to conceive of several nets lying on each other, and they occupy a very great area, which they call the 'base' (basis) of the brain" (4).*

One pauses at the thought that the two greatest anatomists of antiquity, both with anatomical knowledge based on dissection, should both have made the same mistake, that is, that they either saw a structure that was not there either in humans or primates or attributed to humans what they had seen only in certain animals (even though Galen frequently dissected primates and Herophilus had experience with the dissection of human bodies) (5).

Although Herophilus was the first to describe it, because of the greater fame of Galen, it is to his *rete mirabile*that reference was made when the topic was discussed throughout the centuries. The question of its presence in human, continued to be debated even after Vesalius, who clearly recognized Galen's error:

*"De reticulari vero Galeni plexu...novimus Galenum bourn cerebri dissectione delusum, non hominis cerebrum utineque ipsius vasa, sed bourn recensuisse" (6).*

*"About Galen's reticular plexus... we know that, misled by dissection of the brain of cattle, he did not describe the human brain, nor its vessels, but that of oxen".*

Harvey wrote :

*"Bauhinus contra Vesalium esse capitibus hominum; manifestum vero bubus etc. Riolanus amplum dempta dura meninge et aliud rete basi cerebri ex fibris venae ut illud arteriae" (7).*

*"Bauhin (8), contrary to (the opinion of) Vesalius, (says that) it exists in the human head; it is indeed evident in oxen, etc. Riolanus (9) (says) that, after the dura has been removed, another rete* mirabile *(can be seen) at the base of the brain composed of venous strands as the other was of arterial".*

As, subsequently, it has been shown that, without doubt, an arterial rete mirabile does not exist in humans, the most common position, so far, has been that Galen, lacking the possibility of dissecting human bodies, performed his

anatomical studies on animals and described something that, in fact, exists in some of them (e.g., ruminants(IO) and felidae(11)) without realizing that it does not exist in man (12). One attempt has also been made to prove that Galen was right and that such an arterial *rete mirabile* does indeed exist in humans (see below).

The explanation that Galen attributed to men a feature found in some animals appears unsatisfactory, as the following questions present themselves : Why would Galen rely on his dissection of ruminants and felidae and not on his frequent dissection of monkeys ? Why did he fail to note that the plexus did not exist in the monkey, the animal he considered to be most similar to man (13) ? If he found the plexus in other animals, why did he not verify its existence in primates ?

I n view of the fact that at the base of the brain of humans and primates there is a plexus, which had been already been noted by Riolanus (as quoted above), that fits Galen's description although it is venous rather than arterial, a more likely explanation appears to be that he mistook for an arterial plexus this quite large *venous rete mirabile.* This venous network surrounds the sella turcica and the *foramen magnum,* is under the brain, covers a large part of the base of the cranial cavity, and is composed of several intercommunicating sinuses and venous channels : the basilar plexus, the cavernous sinuses, the anterior and posterior intercavernous sinuses, the occipital sinuses, the sigmoid sinuses, the superior and inferior petrosal sinuses and the marginal sinuses. These structures (14) are closely associated with the internal carotid artery (which could explain Galen's belief that they were of arterial origin) and are located between two layers of dura mater, although they appear to be extradural because the parietal layer of the membrane adheres firmly to the bone (15).

The possibility that Galen may have mistaken the *venous* network at the base of the cranial cavity for an *arterial rete mirabile* has been considered "conceivable but unlikely" by Siegel (16), who, on the other hand, tried to prove that Galen was right in that an *arterial rete mirabileat* the base of the human brain does, in fact, exist:

> *"In man, however, the internal carotid artery, after passing through the petrous bone, forms a rete below the dura mater, as Spalteholz showed in his atlas of human anatomy (17), where he wrote that an artery passes through the foramen ovale of the petrous bone to form the rete foraminis ovale* (sic) *below the dura mater. This would be the exact analogy to the* rete mirabile *of Galen" (18).*

The problem with Siegel's position, however, is that it is not clear what he means when he mentions the "foramen ovale of the petrous bone" (the petrous bone is part of the temporal bone and the foramen ovale is in the sphenoid bone); in addition, Spalteholz, in the page indicated by Siegel, does not exactly say what Siegel attributes to him but says instead :

> *"Drilled through the root of the great wings, from above and behind to the front of the fades sphenomaxilaris (is) the* foramen rotundum *(for the nervus maxillaris), from above down to the fades infratemporalis (are)* ffreforamen ovale *(forthe rete foraminis ovalis; nervus mandibularis) and the*\ oramen spinosum *(for the arteria meningea media, venae meningeae mediae, nervus spinosus, plexus meningeus); the latter is located closely in front of the hindmost corner and can be incomplete" (19).*

Morevover, the *rete forminis ovalis,* mentioned by Spalteholz only cursorily, is not to be found in standard anatomy texts, which suggests that, if it exists, it must be small indeed and surely cannot be the rete that, as quoted above, Galen described as large ("It encircles the gland (the hypophysis)... extends far to the rear... nearly the whole base of the encephalon has this plexus lying beneath"). Finally, no rete

is visible in the figure of Spalteholz mentioned by Siegel (20). Harris refers to the possibility advanced and rejected by Siegel that Galen took the venous *rete mirabile* for an arterial one but passes no judgement on the question except to point out that Galen described a conspicuous system whereas the *rete foraminis ovalis* of Spalteholz and the circle of Willis are small structures (21).

In conclusion, considering that, in humans the *venous rete mirabile* appears to be extradu ral, covers a large part of the base of the encephalon and encircles the hypophysis (as Galen described it), considering that such a plexus is easily observed in primates, and considering that the dissection of the base of the skull is difficult (especially with the means available in antiquity), it seems more logical to conclude that Galen mistook the venous *rete mirabile* that he found in the skull of primates for an arterial one, than to think that he attributed to human anatomy observations made in felidae and ruminants and neglected to verify his findings in primates. As the venous *rete mirabile,* because of its close association with intracranial arteries, can be easily mistaken for an arterial *rete mirabile,* it is not surprising that both of antiquity's great anatomists could have taken one for the other, Herophilus in humans, Galen in primates.

2. It is generally assumed that the pulmonary circulation was discovered at least a thousand years after Galen by Ibn an-Nafis, or, even later, by Servetus or Colombo; some, however, have suggested that it was Galen who was the first to describe the passage of blood from the left to the right ventricle through the lungs. The point has been repeatedly debated (22).

Some, including Harvey (23), have held that Galen did, in fact, discover the pulmonary circulation (or at least had an idea of the pulmonary pathway) (24), others that he did not or that somebody else did (25).

Galen's notion of the perfusion of organs by blood was based on the ancient model, which went back to the Egyptian, Hindu and Chinese medical paradigms, of water irrigating fields (that is to say, on the idea that blood was used up at the periphery, like water in the fields) (26). The concept is clearly expressed in *De naturalibus facultatibus*:

> *"Numerous conduits distributed through the various limbs bring them pure blood, much like the garden water-supply...so that... (all) parts should be plentifully provided..."(27) .*

At the time, this model was satisfactory and the circulation of the blood, not being necessary to explain observations, was not even considered. Galen believed that blood, produced by the liver (28), was distributed to the entire body through the veins and that it reached the right heart through the inferior vena cava. Arteries carried from the heart to the periphery not only blood but *pneuma* (29) as well (30). Galen did not recognize the pumping action of the heart; blood was propelled inside the vessels by attraction from the peripheral tissues in need of nutrition (31) or by the squeezing of vessels by thoracic respiratory movements (32).

The picture was complete and everything was reasonably clear except for one problem : how did the blood reach the arterial tree ? That is to say, how did the blood, produced by the liver and carried to the right heart by the vena cava, reach the left heart so that it could be distributed to the arterial tree ? Before Galen the question was not asked because it was generally held that arteries did not contain blood but *pneuma*; however, as Galen had proven that the arteries indeed contain blood, he had to confront the problem.

Galen had a good notion of the aortic, pulmonary and cardiac valves (33) and held that arteries and veins communicate by what we would today call capillaries :

*"All over the body the arteries and veins*

*comunicate with one another by common openings and exchange blood and pneuma through certain invisible and extremely narrow passages" (34).*

The quantity of blood that passed through these invisible openings, however, was too small to account for the blood in the arterial tree; most of the blood passed from the right heart to the left through invisible openings in the interventricular septum :

*"Similarly, also, in the heart itself, the thinnest portion of the blood is drawn from the right ventricle into the left, owing to there being perforations in the septum between them : these can be seen for a great part (of their length) they are like a kind of fossae (pits) with wide mouths, and they get constantly narrower; it is not possible, however, actually to observe their extreme terminations, owing both to the smallness of these and to the fact that when the animal is dead all the parts are chilled and shrunken" (35).*

Again, the model was satisfactory and in reasonable agreement with observation (36). Galen, however, introduced another element as well: a small part of the right-heart blood reached the left heart through what we would call the lesser circulation. Galen's ideas on this point are expressed in the following passage, in which he also explains the function of the pulmonary valve :

*"But if the large orifice of the arterial vein (i.e., pulmonary artery) (37) always lay uniformly open and if Nature had not found some device that could close and open it again at the proper times (the pulmonary valve), the blood would never be taken over into the (venous) arteries (i.e., pulmonary veins) through the little, invisible orifices (i.e., pulmonary capillaries) when the thorax contracts... When the thorax contracts, the venous arteries (i.e., pulmonary veins), pushed inward and compressed from all sides, instantly force out the pneuma they contain and receive in exchange a portion of blood through those fine openings, an exchange that would never take place if the blood were able to run back through a very large opening, such as that of the (arterial) vein (i.e., pulmonary artery), into the heart. As it is, however, when the blood is compressed and cut off from returning through the large orifice, some of it trickles through those fine openings into the (venous) arteries (i.e., pulmonary veins)" (38).*

The passage is clear: some blood from the pulmonary artery is squeezed by thoracic contraction into the pulmonary veins, where it replaces some of the *pneuma* (39).

Galen's belief that the pulmonary veins contained blood is made clear in two passages:

*"I have already shown several times that the smooth arteries (i.e., pulmonary veins) that connect the rough arteries (i.e., bronchi) with the heart contain thin, pure and vaporous (i.e., mixed with* pneuma,) *blood and are not organs (i.e., carriers)* o/pneuma *alone"(40).*

*"Erasistratus thinks that the other artery, that is the smooth one (i.e., the pulmonary vein), also lacks blood, but he is wrong, as I have often said before; for it does contain a considerable quantity of pure, thin, spirituous blood" (41).*

The passing of blood from the pulmonary veins to the left ventricle (the atria were considered mere appendages of the vessels attached to the ventricles) is described as follows (42) :

*"And in fact, the heart is able to attract mingled blood and pneuma from the lung too through that opening which I have said is the only one to have placed upon it two tunics growing from the outside inward (i.e., the mitral valve)...I have shown before that in fully formed animals (as opposed to foetuses) this vessel (i.e., pulmonary veins) gets its share of blood... by way of many fine inoculations that escape the sight (i.e., the lungs' capillaries) (43)...*

The passage from the *De usu partium* concerning the pulmonary valve quoted above (44) underlines that, as mentioned before, Galen did not recognize the pumping action of the heart and believed that the movement of the blood through the lungs resulted from the compression secondary to thoracic movements (45).

This is the evidence on which the answer to the question "Did Galen discover the pulmonary circulation ? " must be based. As mentioned above, more commonly, the discovery of the lesser circulation is attributed to Ibn an-Nafis (c.1210-1288), or Servetus (1511-1553), or Colombo (c.1515-1599). We quote below the passages of these authors that describe the lesser circulation so that a comparison with Galen's ideas on the subject can be made.

Ibn an-Nafis :

*"The blood, after it has been refined in this cavity (i.e., the right ventricle), mustbetransmitted to the left cavity where the (vital) spirit is generated. But there is no passage between these two cavities; for the substance of the heart is solid in this region and has neither a visible passage, as was thought by some persons, nor an invisible one which could have permitted the transmission of blood, as was alleged by Galen. The pores of the heart there are closed and its substance is thick. Therefore, the blood after having been refined, must rise in the arterious vein (i.e.,pulmonary artery) to the lungs in order to expand in its volume and to be mixed with air so that its finest part may be clarified and may reach the venous artery (i.e.,pulmonary vein) in which it is transmitted to the left cavity of the heart. This, after having been mixed with the air and having attained the aptitude to generate the (vital) spirit. That part of the blood which is less refined is used by the lung for its nutrition" (46).*

Servetus :

*" The vital spirit has its origin in the left ventricle of the heart, and the lungs assist greatly in its generation... It is generated in the lungs from a mixture of inspired air with elaborated, subtle blood which the right ventricle of the heart communicates to the left. However, the communication is made not through the middle wall of the heart, as is commonly believed, but by a very ingenious arrangement the subtle blood is urged forward by a long course through the lungs; it is elaborated by the lungs, becomes reddish-yellow and is poured from the pulmonary artery into the pulmonary vein. Then in the pulmonary vein it is mixed with inspired air and through expiration it is cleansed of its sooty vapors. Thus finally the whole mixture, suitably prepared for the production of the vital spirit, is drawn onward from the left ventricle of the heart by diastole... (as a consequence), not merely air, but air mixed with blood, is sent from the lungs to the heart through the pulmonary vein; therefore the mixture occurs in the lungs. That reddish-yellow color is given to the spirituous blood by the lungs; it is not from the heart. ...That middle wall (i.e., the interventricular septum), since it is lacking in vessels and mechanisms, is not suitable for that communication and elaboration, although something may possibly sweat through. By the same arrangement by which a transfusion of the blood from the portal vein to the vena cava occurs in the liver, so a transfusion of the spirit from the pulmonary artery to the pulmonary vein occurs in the lung. If anyone compares these things with those which Galen wrote in books Viand VII, De usu partium, he will thoroughly understand a truth which was unknown to Galen" (47).*

Colombo :

*"Between these ventricles there is a septum through which almost everyone believes there opens a pa th way for the blood from the*

*right ventricle to the left, and that the blood is rendered thin so that this may be done more easily for the generation of vital spirits. But they are in great error, for the blood is carried through the pulmonary artery to the lung and is there attenuated; then it is carried, along with air, through the pulmonary vein to the left ventricle of the heart. Hitherto no one has noticed this or left it in writing, and it especially should be observed by all...*

*But let us return to the aforesaid four vessels (pulmonary artery, vena cava, aorta, pulmonary vein); two of them have been constructed so that they carry inwardly to the heart, that is, when the heart is dilated; but the other two carry outward when the heart is constricted. Therefore when it is dilated, and those membranes are loosened and yield ingress, the heart receives blood from the vena cava into the right ventricle, and also prepared blood from the pulmonary vein, as we said, along with air into the left ventricle. And when the heart is compressed (constricted), these valves are closed lest the vessels receive anything regressing along the same path; and at that same time the valves of both the aorta and the pulmonary artery are opened; they permit the passage of the outgoing spiritous blood which is diffused through the whole body and of the natural blood which is carried to the lungs; and it is always thus when the heart is dilated, as we noted before : (that the) other (valves) open and then shut. And so you will find that the blood which has entered the right ventricle is unable to return to the vena cava" (48).*

There is a progression toward the correct picture from Galen to Colombo. Galen thought that most of the blood going through the pulmonary artery was consumed by the lungs for their nutritional needs, that only a trickle would pass from there to the pulmonary veins and into the left ventricle, and that almost all blood going into the left ventricle came directly from the right ventricle through foramina in the interventricular septum. Ibn an-Naf is denies the existence of the foramina in the intrerventricular septum and states that, of the blood coming from the right ventricle through the pulmonary artery, some is used by the lungs for their nutritional needs and some goes into the left ventricle through the pulmonary veins. Servetus also denies the existence of interventricular communication through the septum (although he felt that "something may possibly sweat through") and does not mention the utilization of some of the right ventricle's blood by the lungs for their own nutrition. In other words, he seems to indicate that all the blood received by the right ventricle passes into the left. Finally, Colombo realizes that there is no communication between the ventricles through the septum, clearly understands the function of the heart valves, realizes the function of the heart systole and diastole, and has a clear idea of the function of the aorta in diffusing to the whole body the blood "prepared" by the lungs.

At this point we can try to answer the question : did Galen discover the pulmonary circulation ? The answer can be attempted only after we define what we mean by "pulmonary circulation". The following are four possible definitions:

1) The passage, through the lungs, of *some* (no matter how little) of the blood of the right ventricle into the left ventricle. (Galen)
2) The passage, through the lungs, of a *large part (or* most) of the blood of the right ventricle into the left ventricle. (Ibn an-Nafis)
3) The passage, through the lungs (where it is mixed with air), of a//blood of the right ventricle into the left ventricle. (Servetus)
4) The reception of blood from the vena cava by the right ventricle during diastole, its passage through the lungs where it is "prepared", and its reception by the left ventricle from which, when the heart is constricted, it is distributed to the whole body. (Colombo)

Galen discovered the lesser circulation if we accept our first definition of it, that is to say, if we consider that the most important component in the discovery is the concept that blood goes from the right to the left ventricle through the lungs and we do not concern ourselves with quantitative details. In this case, Galen is the discoverer and Ibnan-Nafis refined the concept; Servetus had an even clearer idea of the smaller circulation, and Colombo further clarified the question.

This conclusion, however, in our opinion, is not justified. It is true that Galen was the first to observe that some blood passes from the right to the left ventricle through the lungs, but in his view this was only a very small amount; in other words, he failed to recognize that the passage through the lungs was not a pleonastic physiological detail (after all, according to him, practically all blood passed through the septum) but that, in reality, all the blood passing from the right to the left ventricle followed that route. In addition, his erroneous notion of interventricular communication through the septum misled the medical community for centuries. The lesser circulation was discovered later.

**Notes**

1. A *rete mirabile* (remarkable, or wonderful net) is a vascular network that interrupts the continuity of an artery or vein as, for example, in the renal glomeruli (arterial *rete mirabile)* or in the liver (venous *rete mirabile).* It was called *mirabile* because usually a vascular network is interposed between the end of an artery and the beginning of a vein rather than between the end of an artery (or vein) and the beginning of another artery (or vein). In other words, the usual pattern is "artery -> *rete* -> vein" and not "artery -> *rete* -> artery" or "vein -> *rete* -> vein". The imaginary *rete mirabile* of Galen was an arterial one.
2. It is not clear what Galen means by stating that the dura mater "had already been pierced along the line of their invasion". Possibly he refers to the numerous openings through which various structures pierce the *dura mater* in the same area (the internal carotid, the optic, oculomotor, trochlear, trigeminal and abducens nerves).
3. Galen *De usu partium,* IX, iv, K, III, pp 696-698. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* translated by Margaret Tallmadge May, Ithaca, Cornell University Press, 1968.
4. Galen, *De usupulsuum,* ii, K, V, p. 155. Translation by von Staden in: Heinrich von Staden, *Herophilus : the Art of Medicine in Early Alexandria,* Cambridge, Cambridge University Press, 1989, p.223.
5. Herophilus'error is sometimes considered an argument to support the belief that he did not perform human vivisection. See: John Scarborough, "Celsus on Human Vivisection at Ptolemaic Alexandria", *Clio Medica,* XI (1), 25-38,1976; Plinio Prioreschi, *A History of Medicine, Vol. II, Greek Medicine,* 2nd Edition, Omaha, Horatius, 1996, Ch. VII, B.
6. Vesalius, *De humani corporis fabrica libri septem,* Basileae, ex off. loannis Oporini, 1543, p. 310. Vesalius repeats the same concept also on pages 524 and 642.
7. *The Anatomical Lectures of William Harvey: Prelectiones Anatomie Universalis, De Musculis,* edited by Gweneth Whitteridge, London, E. & S. Livingstone, 1964, p.336.
8. Caspar Bauhin, *Theatrum Anatomicum,* Basel, 1605,p.609,accordingtoO'Malleyetal. in: William Harvey, *Lectures on the Whole of Anatomy* : An annotated translation of *Prelectiones Anatomiae Universalis by* C D. O'Malley, F.N.L. Poynter, and K.F. Russell, Berkeley, University of California Press, 1961, p.229.
9. Jean Riolan, *Anthropographia,* iv, 2, p. 262, according to *The Anatomical Lectures of William Harvey : Prelectiones Anatomie Universalis, De Musculis,* edited by Gweneth Whitteridge, London, E. & S. Livingstone, 1964, p.336; *Anthropographia, in Anthropographia et Osteologia,* Paris, 1626, p. 389, according to O'Malley et al. in : William Harvey, *Lectures on the Whole of Anatomy* : An annotated translation of *Prelectiones Anatomiae Universalis by CD.* O'Malley, F.N.L. Poynter, and K.F. Russell, Berkeley, University of California Press, 1961, p.229.
10. Robert Getty, *Sisson and Grossman's The Anatomy of the Domestic Animals,* Philadelphia W.B. Saunders, 1975, p. 970; P.M.Daniel et al., "Studies of the Carotid Rete and its Associated Arteries", *Philosophical Transactions of the Royal Society of London, Series Biological Sciences,* CCXXXVII, 173-208,1953; B.A. Baldwin, "The Anatomy of the

Arterial Supply to the Cranial Regions of the Sheep and Ox", *Am. J. Anal* CXV, 101-118, 1964.

11. D. Dwight Davis and H. Elizabeth Story, "The Carotid Circulation of the Domestic Cat", *Zoological Series, Field Museum of Natural History,* XXVIII, 1, 1 -47, 1943.
12. See for example, Vivian Nutton, "Roman Medicine, 250 B.C. to A.D. 200" in : Lawrence I Conrad, Michael Neve, Vivian Nutton, Roy Porter, Andrew Wear, *The Western Medical Tradition: 800 B.C. to A.D. 1800,* Cambridge, Cambridge University Press, 1995, p.66. Such a rete is also said to occupy in animals the same place that the circle of Willis occupies in man *(Galen on the Usefulness of the Parts of the Body,* translated by Margaret Tallmadge May, Ithaca, Cornell University Press, 1968, p.430, note 9). This, however, cannot be correct because the circle of Willis is intradural and, in fact, many animals (e.g., cat, sheep, goat, ox, pig) have the extradural rete mirabile and the circle of Willis (intradural) as well (P.M.Daniel et al./'Studies of the Carotid Rete and its Associated Arteries", *Philosophical Transactions of the Royal Society of London, Series Biological Sciences,* CCXXXVII, 173-208,1953 ; B. A. Baldwin, The anatomy of the Arterial Supply to the Cranial Regions of the Sheep and Ox", *Am. J. Anal* CXV, 101-118, 1964.
13. In *De Anatomicis administrationibus* (I, ii, K, II, p.219), Galen says: "Among all animals, the monkey is the most similar to man in viscera, muscles, arteries, nerves and in the form of the bones". See also : Galen, *De usu partium corporis humani,* XI, ii, K, III, p.844.
14. For pictures of these structures see : *Gray's Anatomy,* edited by Peter L. Williams et al., Edinburgh, Churchill Livingstone, Thirty-seventh Edition, 1989, pp. 800,802-805 ; Carmine D. Clemente, *Anatomy : A Regional Atlas of the Human Body,* Baltimore, Urban & Schwarzenberg, Third Edition, 1987, Figs 637, 638, 642.
15. In *Deplacitis Hippocratis etPlatonis*(VII, iii, K, V, p. 607), Galen says that the *rete mirabile* is "surrounded by the dura mater".
16. Rudolf E.Siegel, *Galen's System of Physiology and Medicine,* Basel, S. Karger, 1968, p. 112, footnote 33.
17. Werner Spalteholz, *Handatlas der Anatomie des Menschen,* Leipzig, Verlag von S. Hirzel, 3 Vols, 1913.
18. Rudolf E.Siegel, *Galen's System of Physiology and Medicine,* Basel, S. Karger, 1968, p. 112
19. *Werner* Spalteholz, *Handatlas der Anatomie des Menschen,* Leipzig, Verlag von S. Hirzel, 3 Vols, 1913, Vol. I, p.5. Translations are by the author unless otherwise indicated.
20. Spalteholz, *Handatlas der Anatomie des Menschen,* Leipzig, Verlag von S. Hirzel, 3 Vols, 1913, Vol II, fig. 445, p. 400.
21. C.R.S. Harris, *The Heart and the Vascular System in Ancient Greek Medicine,* Oxford, At the Clarendon Press, 1973, p.358.
22. The notion that the idea of the circulation of the blood was already *in nuce* in the writings of the ancient authors goes back to Littre, who says : "Il n'est pas un developpement, le plus avance de la medecine contemporaine, qui ne se trouve en embryon dans la medecine anterieure... En science, comme en toute autre chose, rien n'est qui n'ait ete en germe". (There is no development of contemporary medicine, including the most advanced, that is not found *in nuce* in the past....In science, as in everything else, there is nothing that did not exist in an embryonic stage before) (E. Littre, *Oeuvres completes d'Hippocrate,* Paris, J.B.Balliere, 10 Vols., 1839-1861, I, p.223).
23. Harvey's Latin reads: "Sed quando aliqui sunt, qui nil nisi adductis autoritatibus admittunt, iidem ex ipsius etiam Galeni verbis hanc veritatem confirmari posse sciant; scilicet non solum posse sanguinem e vena arteriosa in arteriam venosam, et inde in sinistrum ventriculum cordis, et postea in arteria transmitti : sed ex continuo pulsu cordis, et pulmonum notu inter respirandum, hoc fieri". *(Exercitatio anatomica de motu cordis et sanguinis in animalibus Guilielmi Harvei,* Francofurti, Sumptibus Guilielmi Fitzeri, 1628, VII, p. 38). That is : "Those who accept only what is based on authority can find this truth confirmed by Galen himself: not only can blood pass from the pulmonary artery to the pulmonary veins into the left ventricle and then into the arteries, but that this happens because of the pulsation of the heart and the respiratory movements".
24. For example: J. Prendergast, "Galen's View of the Vascular System in Relation to that of Harvey", *Proc. R. Soc. Med.* XXI, 1839-1848, 1928. M. Bahuelos, "Los grandes errores en el estudio de la circulacion" *Gaceta medica espahola,* XX, 360-363,1946 :"DenuevosobreGalenoylacirculacion" Gaceta medica espanola, XXI, 353-355, 1947 ; "Conocio Galeno la circulacion de la sangre ?" Gaceta medical espanola, XXII, 55-57, 1948.; *El problema de la circulacion de la sangre. Nuevos*

*hechosynuevas ideas,* Editorial Cientifico Medica, Barcelona, 1946. Sigismund Peller, "Harvey's and Cesalpino's role in the History of Medicine", Bull. Hist. Med. XXIII, 213-235, 1949. Leonard G. Wilson, "Erasistratus, Galen and the *Pneuma", Bull. Hist. Med.,* XXXIII, 293-314, 1959. L.G. Wilson, "The Problem of the Discovery of the Pulmonary Circulation", *J. Hist. Med.XVU,* 229-244, 1962. R.E.Siegel, "Galen's expreriments and observations on pulmonary blood-flow and respiration", *Am. J. Cardiol.,* X, 738-745,1962 ; "Why Galen and Harvey did not compare the heart to a pump", *Am. J. Cardiol,* XX, 117,121, 1967 ; "The influence of Galen's doctrine of the pulmonary blood-flow on the development of modern conceptions of the circulation", *SudhoffsArch. Gesch. /*Wecf.XLVI, 311 - 332, 1962 ; *Galen's System of Physiology and Medicine,* Basel, Karger, 1968. Tallmadge May in : Galen, *on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 2 Vols., 1968, p.301, footnote 43.

25. For example : Lain Entralgo, "Conocio Galeno la circulacion de la sangre ?" *Medicina Clfnica,* VII, 464-466, 1946. Antonio De la Granda, "Galeno y Servet", *Gaceta medica espahola* XXII, 124-127, 1948. Donald Fleming, "Galen on the motion of the blood in the heart and the lungs", *Isis,* XLVI, 14-21, 1955. A. Rupert Hall, "Studies in the history of the cardiovascular system", *Bull. Hist. Med.,* XXXIV, 391 -413, 1960. Jerome J. Bylebyl and Walter Pagel, "The Chequered Career of Galen's Doctrine on the Pulmonary Veins", Medical History, XV, 211-219, 1971. C.R.S. Harris, *The Heart and the Vascular System in Ancient Greek Medicine,* Oxford. At the Clarendon Press, 1973, p.322. Alfred P. Fishman, "The Pulmonary Circulation", JAMA, CCXXXIX, 13, 1299-1301, 1978. M.R. Salem, "Discovery of the Pulmonary Circulation by an Arab in the Thirteenth Century", *Anesthesia and Analgesia,* XLVII, 7, 587-588, 1968. Donald Fleming, "Galen on the Motion of the Blood in the Heart and Lungs", *Isis,* XLVI, 14-21,1955. T.V.N. Persaud, "Historical Development of fhe Concept of a Pulmonary Circulation", *Can. J. Cardiol.,* V, i, 12-16,1989. T. Donath, "Who was the first to describe pulmonary circulation ?" *Gegenbaurs Morph. Jahrbuch,* CXXX, 819-826, 1984. G. Whitteridge, "La decouverte de la petite circulation", *Revue Medicate de la Suisse Romande,* CVI,25-33,1986. N. Hamarneh, "On the 700th anniversary of the death of Ibn an-Nafis", *Documenta Ophthalmologica,* LXXI, 143-154,1989. It must be underlined that the bibliography listed in this and in the previous footnote is far from being comprehensive and that the authors listed do not embrace two groups of opposite and incompatible conclusions. In many cases there is overlap in the two ways of thinking : for example, L. Wilson (mentioned in the previous footnote) recognizes that Galen found that a pulmonary pathway for the blood existed although he concludes that he did not discover the lesser circulation.
26. Plinio Pioreschi, *A History of Medicine, Vol. I, Primitive and Ancient Medicine,* Omaha, Horatius Press, 1996, Chs. II, III, IV and General Conclusions.
27. Galen, *De naturalibus facultatibus,* III, xv, K, II, p.211. Translation by Arthur J. Brock, The Loeb Classical Library, London, William Heinemann, 1916.
28. The belief that the liver was the organ that was the center of blood production may have been suggested by its aspect (it looks like a big blood clot) and by the fact that wounds of the liver bleed profusely.
29. A word that can be translated as air, vapor, breath.
30. Galen's distinction between arteries and veins was based on the thickness of their walls and on the fact that arterial blood contained *pneuma.*
31. Galen, *De naturalibus facultatibus,* III, xv, K, II, pp.210-211.
32. Galen, *De usu partium,* VI,x,K,lll, pp.455-457.
33. Galen, *De usu partium,* VI,xiv,K,lll, pp.476-480.
34. Galen, *De usu partium,* VI,x,K,lll, p.455. Translation by Tallmadge May in: *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 1968.
35. Galen, *De naturalibus factultatibus,* III, xv, K, II. pp.207-208. Translation by Arthur John Brock in : *Galen on the Natural Faculties,* The Loeb Classical Library, London, William Heinemann, 1916.
36. The model was only in *reasonable* agreement with observation because both the communications between arteries and veins and the openings in the interventricular septum were "invisible".
37. Galen called the pulmonary artery "arterial vein" and the pulmonary veins "venous arteries".
38. Galen, *De usu partium,* VI, x, K, III, pp.455-457. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 1968.
39. The pulmonary veins carried not only blood and pneumafrom the lungs to the left ventricle, but also "sooty and fuliginous" residues from the left ventricles to the lungs (whereas the aorta carries the same material at the periphery): "Nature...

opened all the smooth arteries (i.e., pulmonary veins) into one source, the left ventricle of the heart, which is the source of the innate heat... and in the contraction of the heart she pours all that is sooty and fuliginous in it through these same arteries and even more through the great artery (i.e., the aorta) into the others, thus providing safely that the heat in the heart should never be smothered by noxious residues and quenched." (Galen, *De usu partium,* VII, ix, K,lll, p.545. Translation byTallmadge May in : *Galen, on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 1968). This function, of course, presupposes a leaky mitral valve. Although the tricuspid is not supposed to leak, in the Pseudo-Galen we find that blood can reflux through it : "When nutrients have been transformed into blood in the liver, the blood flows from there into the right ventricle of the heart. From the right ventricle it is then distributed to the higher parts through the jugular vein and through the vena cava to the whole body." (Pseudo-Galen, *Introductio sive medicus,* xi, K, XIV, p.718).

40. Galen, *De usu partium,* VII, viii, K, III, p.537. Curiously enough, Harris, after having pointed out that the passage indicated that the pulmonary veins "carry a one-way traffic of light, clean vaporous blood, going in the direction of the heart" (C.R.S. Harris, *The Heart and the Vascular System in Ancient Greek Medicine,* Oxford, At the Clarendon Press, 1973, pp.307-308), two pages later says that "we maintain that Galen thought that only pneuma passes inward through the mitral valve". (C.R.S. Harris, *The Heart and the Vascular System in Ancient Greek Medicine,* Oxford, At the Clarendon Press, 1973, pp.310). In addition, he states that Galen "nowhere says" that some blood enters the left ventricle through the mitral valve (C.R.S. Harris, *The Heart and the Vascular system in Ancient Greek Medicine,* Oxford, At the Clarendon Press, 1973, pp.310). In fact the passage that follows (Galen, *De usu partium,* VII, viii, K, III, p.509-510) states just that.

41. Galen, *De usu partium,* VII, viii, K, III, p.521. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 2 Vols., 1968. Here Galen contradicts himself (a not uncommon occurrence) because, as we have seen, he states also that only "some of it (i.e., blood) trickles through those fine openings into the (venous) arteries (i.e., pulmonary veins'". Elsewhere, Galen seems to indicate that some of the blood contained in the pulmonary veins is used to nourish the lungs (Galen, *De usu partium,* VII, viii, K, III. p.542-544). This would imply a to-and-fro blood movement in the pulmonary veins.

. Bylebyl and Pagel assert that, according to Galen, the blood that passes from the lungs to the pulmonary veins is subsequently reabsorbed by the lungs and does not reach the left ventricle (Jerome J. Bylebyl and Walter Pagel, "The Chequered Career of Galen's Doctrine on the Pulmonary Veins," *Medical History,* XV, 211-219, 1971). This is in contradiction with the Galenic text that follows, in which it is clearly stated that the left ventricle attracts blood through the mitral valve. If the pulmonary veins contain blood, as there are no other vessel ending in the left atrium besides the pulmonary veins, any blood that passes to the ventricle through the mitral valve has to come from the pulmonary veins.

. Galen, *De usu partium,* VI, xxi, K, III, pp.509-510. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 2 Vols., 1968. The fact that, according to Galen, the pulmonary veins carry blood (even if only a trickle) to the left ventricle is evident. Yet, curiously enough, not only Harris but other authors as well disagree on this point. Fleming, for example, says that "whether Galen's venous artery, corresponding to our pulmonary veins, then carried blood to the left ventricle is in question"; yet, in previous pages, he admits that according to Galen, some blood passes into the pulmonary veins and then, discussing the backward passage of the smoky residues from the left ventricle to the lungs (through the pulmonary veins), he states that this flow is "against the natural current of fluids in the heart". (Donald Fleming, "Galen on the Motion of the Blood in the Heart and Lungs", *Isis,* XLVI, 14-21, 1955). Bylebyl and Pagel (Jerome J. Bylebyl and Walter Pagel, "The Chequered Career of Galen's Doctrine on the Pulmonary Veins", *Medical History,* XV, 211 -219,1971) state that there is no evidence that Galen held that there was a transit of blood from the right to the left ventricle through the lungs and that the passage quoted (Galen, *De usu partium,* VI, xxi, K, III, pp. 509-510) refers to the fetal heart (footnote 24). This is evidently not the case as one can see from the complete text of the passage, which reads : "And in fact, the heart is able to attract mingled blood and pneuma from the lung too through that opening which I have said is the only one to have placed upon it two tunics growing from the outside inward (i.e., the mitral

valve). For in animals confined in the uterus this vessel (i.e., the pulmonary vein) receives blood from the vena cava by way of an inosculation of remarkable size (i.e., *foramen ovale).* I have shown before that in fully formed animals this vessel (i.e., the pulmonary vein) gets its share of blood from instruments (i.e., organs) that are sanguineous in fully formed animals and pneumatic in fetuses by way of many fine inosculations that escape the sight (i.e., the lungs' capillaries'". (Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 1968, pp. 330-331). The same passage is similarly translated by Daremberg (Ch. Daremberg, *Oeuvres anatomiques, physiologiques et medicates de Galien,* Paris, J.B.Billiere, 2 Vols., 1854,1, pp. 453-454): "Le coeur pouvait meme prendre au poumon du sang et du pneuma melanges au moyen de l'orifice sur lequel seul, disions-nous, s'implantent uniquementdeuxtuniques *(valvule bicuspide)* dirigees de dehors en dedans. En effet, ce vaisseau, chez les animaux enfermes dans l'uterus, regoit le sang de la veine cave par une anastomose d'une grandeur remarquable (i.e., *foramen ovale).* Nous avons demontre precedemment que chez les animaux parfaits, le sang vient d'organes qui sont chez eux des organes sanguins, et chez le foetus des organes pneumatiques, au moyen d'anastomoses nombreuses et d'une finesse qui echappe a l'oeil". It would appear that to interpret the passage as referring only to the fetal heart and not to the heart of the adult as well is unjustified.

44. VI, x, K, III.
45. Galen, however, correctly understood that the movements of the lungs were passive and due to the expansion and contraction of the thoracic walls: "(I have shown) that the lung is moved by the thorax; that when dilated and expanded, it attracts the outer air, and this is inspiration; and when compressed and contracted, it expels its contents into the larynx and mouth and through them into the outer air, and this is expiration...(I also have described) all the muscles, the instruments moved by them, and the nerves conveying the psychic faculty to them from the encephalon." (Galen, *De placitis Hippocratis et Platonis,* II, iv, K, V, p. 236. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press, 1968, p.279, note 3).
"For when the whole thorax expands in inspiration... (it) causes the entire lung to expand to fill the space left vacant". (Galen, *De usu partium,* VII, iv, K, III, p.523. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press,1968. Galen applies here the principle of the *horror vacui).*
Another passage in which Galen underlines the relation between the heart, the pulmonary artery and veins, and the lungs is the following : "This organ (i.e., the lung) has no supply of blood to nourish itunless some veins (i.e., pulmonary artery) are attached to it, and... the heart has no way of profiting by respiration unless the lung is connected with it by other arteries (i.e., pulmonary veins)." (Galen, *De usu partium,* VII, viii, K, III, p.536. Translation by Tallmadge May in : *Galen on the Usefulness of the Parts of the Body,* Ithaca, Cornell University Press,1968).
46. Max Meyerhof, "Ibn an-Nafis (XIIIth cent.) and his theory of the lesser circulation", *Isis,* XXIII, 100-120, 1935.
47. C.D.O'Malley, *Michael Servetus. A translation of his geographical, medical and astrological writings with introductions and notes,* Philadelphia, American Philosophical Society, 1953, pp.204-205.
48. Quoted by : Coppola,E.D. "The discovery of the pulmonary circulation : a new approach", The William Osier Prize Essay for 1956, *Bull. Hist. Med.,* 1957, XXXI, 44-47 (pp.62, 65).

## Biography

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*Dr. Prioreschi is the author of over forty scientific publications in pharmacology and experimental medicine. Trained in internal medicine, he has practiced medicine at university clinics and hospitals; For several years, he has been interested in history of medicine and has published, in this field, papers, books and book reviews; his books on history of medicine are :* A Hisotry of Human Responses to Death *(New York, The Edwing Mellen Press, 1990);* A History of Medicine, Vol.I, primitive and Ancient Medicine *(SecondEd., Omaha, HoratiusPress, 1996);* A History of Medicine, Vol.II, Greek Medicine *(Second Ed., Omaha, Horatius Press, 1996). At present, Dr. Prioreschi is working on the third volume of his History of Medicine (Roman Medicine). HisbookMan* and War *(New York, Philosophical Library, 1987) is a historical work not related to medicine.*

# *La disgrâce d'Antoine Daquin, Premier médecin de Louis XIV (1693)*

J.J. Peumery

**Résumé**

*Antoine Daquin, Premier médecin de Louis XIV et comte de Jouy-en-Josas, naquit à Paris. Il était le fils de Louis-Henri Daquin, médecin de la reine Marie de Médicis; son grand-père paternel, né dans la religion juive, se convertit au catholicisme à Aquino, en Italie, d'où son nom d'Aquin, puis Daquin. A. Daquin fit ses études de médecine à Montpellier et fut reçu docteur le 18 mai 1648. Il épousa Marguerite Gayant, la nièce d'Antoine Vallot, Premier médecin de Louis XIV; cette parenté lui permit d'obtenir la charge de Premier médecin de la reine, puis, après la mort de Vallot, de lui succéder, le 18 avril 1672, comme Premier médecin du roi. Le soutien de la favorite, Mme de Montespan, le servit dans cette désignation. Daquin était bon médecin, mais Use montra maladroit: "grand courtisan, mais riche, avare, avide, voulant établir sa famille en toutes façons". Il osa réclamer au roi l'archevêché de Tours, pour l'un de ses fils abbé : "ce fut l'écueil où il se brisa". Le 2 novembre 1693, le comte de Pontchartrain vint chez lui, par ordre du roi, lui annoncer qu'ildevait quitter la Cour sur-le-champ, avec défense d'y revenir et d'écrire au roi. Guy-Crescent Fagon était nommé archiatre à sa place, le même jour; mais Fagon avait travaillé à la perte de Daquin, dans l'intention de lui ravir ce poste, avec la complicité de la nouvelle favorite, Mme de Maintenon. Après sa disgrâce, Daquin se retira vraisemblablement à Moulins; il mourut obscurément à Vichy, le 17 mai 1696. Daquin est aujourd'hui considéré comme une victime des intrigues de Cour, d'où sa célébrité.*

**Summary**

*Antoine Daquin, Principal Physician of Louis XIV and Earl of Jouy-en-Josas, was born in Paris. He was the son of Louis-Henri Daquin, Physician to Queen Marie de Medicis; his paternal grandfather, born in the Jewish religion, became converted to Catholicism at Aquino, in Italy, whence his name d'Aquin, then Daquin. A. Daquin studied to be a doctor at Montpellier and graduated on 18 May 1648. He married Marguerite Gayant, Antoine Vallot's niece, Antoine Vallot being the Principal Physician of Louis XIV. This relationship permitted him to get the position of Principal Physician of the Queen, then, after Vallot's death, to succeed him, on 18 April 1672, as Principal Physician of the King. The kindliness of the King's mistress, Mme de Montespan, helped him in that appointment. Daquin was a good doctor, he turned out awkward: "great courtier, but rich, miser, grasping, wanting to establish his family anyway" said the Due de Saint-Simon. He dared ask the King for the Archbishopric of Tours for his son : "it was the rock on which he broke up" said again Saint-Simon. On 2 November 1693, the comte de Pontchartrain came to his home by order of the King, to tell him, he was ordered to retire from Court without delay. It was forbidden him to come backorto write to the King. Guy-Crescent Fagon was designated "Premier Medecin" instead of him; but Fagon had worked at the undoing of Daquin, with a view to robbing him of his position, with the complicity of the King's new mistress, Mme de Maintenon. After his disgrace, Daquin retired probably to Moulins; he died obscurely in Vichy, on 17 May 1696. Today, Daquin is regarded as a victim of intrigues of Court, which explains his celebrity.*

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Les intrigues de la Cour ternissaient souvent la réputation des médecins du roi. Une des principales victimes en fut Antoine Daquin, qui encourut la disgrâce, bien qu'il fût digne de considération et que tout le monde regardât sa position comme inébranlable.

Antoine Daquin naquit à Paris. Sa date de naissance est controversée : d'après certaines sources, elle se situerait vers 1620, selon d'autres (et notamment les textes de Boislisle) Daquin serait né vers 1632. Il était le fils de Louis-Henri Daquin, médecin de la reine Marie de Médicis en 1640. Son grand-père paternel, né à Carpentras en 1578, dans la religion juive, s'appelait Mardochée; il se convertit au catholicisme à Aquino, en Italie, d'où son nom d'Aquin, puis Daquin, et le prénom Mardochée devint celui de Philippe. Il se rendit ensuite à Paris, où il fut nommé professeur d'hébreu au Collège de France (Friedenwald).

Antoine Daquin fit ses études de médecine à Montpellier; il y prit le bonnet doctoral le 18 mai 1648. En 1661, il était nommé intendant au Jardin du roi. Il épousa Marguerite Geneviève Gayant qui était la nièce d'Antoine Vallot, Premier médecin de Louis XIV. C'est sans doute cette parenté avec Vallot qui lui permit d'acquérir, en 1667, la charge de Premier médecin de Marie-Thérèse d'Autriche, épouse de Louis XIV. Malgré quelques insuccès, notamment la mort de la reine à l'âge de quarante-cinq ans qu'on lui reprocha, Antoine Daquin parvint, le 18 avril 1672, après la mort de Vallot, à la fonction tant convoitée de Premier médecin de Louis XIV. Le 1 er janvier 1684, il recevait le titre d'intendant de la Maison de la Dauphine.

Pendant plus de vingt années, Daquin se dévoua à son royal patient. Il le soigna pour différents syndromes : une luxation du coude à la suite d'une chute de cheval, une arthrite goutteuse du pied gauche, un furoncle de l'aisselle, une nécrose de la voûte palatine, fort gênante en raison de la cacosmie qu'elle occasionnait, une extraction des dents de !a mâchoire supérieure, sans omettre un abcès du périnée ayant entraîné une fistule anale intarissable qui donna beaucoup de soucis aux médecins et aux chirurgiens durant l'année 1686 (Simon).

Malgré ses qualités médicales, Antoine Daquin ne jouissait pas de la considération générale. Gui Patin, doyen de la Faculté de médecine de Paris (1600-1672), comme bien d'autres, nourrissait pour lui un profond mépris, et Mme de Sévigné n'en avait pas une meilleure opinion. Il s'était aliéné la sympathie du corps professoral montpelliérain en faisant nommer, en 1670, à la charge de démonstrateur de chimie à l'Université de médecine de Montpellier, son protégé Sébastien Matte la Faveur qu'il avait nonnu lorsqu'il faisait ses études (Dulieu). Et il n'était pas jusqu'à Molière qui ne le haïssait pour avoir soi-disant laissé mourir son fils. Aussi l'auteur de "Don Juan" se déclara-t-il contre l'antimoine dont Daquin était un chaud partisan: Sganarelle raconte à Don Juan comment il a tué un malade qui ne pouvait mourir, en lui donnant de l'émétique (acte III, scène 1).

Gui Patin reprochait à Daquin son origine juive qui ne remontait pas plus loin qu'à son grand-père, rabbin d'Avignon, converti à Aquino (royaume de Naples) et qui avait pris le nom de ce bourg. Son père, médecin ordinaire du roi en 1651 et intendant de la Dauphine, avait été anobli en 1669. Aussi quand Antoine, Premier médecin, acquit le comté de Jouy-en-Josas, il le fit rattacher directement à la mouvance du Louvre et plaça sur les armes italiennes d'Aquino une couronne comtale avec l'énumération de tous ses titres : "conseiller du roi en ses conseils d'Etat et privé, Premier médecin de Sa Majesté, surintendant général des bains, eaux et fontaines minérales et médicinales de France, etc.". Les épigrammes ne se firent pas attendre.

Ses détracteurs parlent aussi de sa "rapacité" qui était presque proverbiale. Outre sa

*Antoine d'Aquin, Premier médecin de Louis XIV (Photo, bilbiothèque Interuniversitaire de Médecine, Paris)*


charge qui lui rapportait 45.000 livres par an, il avait obtenu une pension de 4.000 livres en 1692 ainsi qu'une somme de 100.000 livres, en partage d'honoraires, après la grande opération du roi (1686); sans compter des charges ou des abbayes pour toute sa famille, même pour le précepteur de ses enfants (Boislisle, note 1, p. 285).

Il est certain que la protection de personnes influentes jouait un grand rôle dans la position de certains fonctionnaires du royaume. Après le départ de Louise de La Vallière, supplantée par la marquise de Montespan en 1667, Antoine Daquin ne perdit pas sa place, car la nouvelle favorite le soutint hardiment. Mais lorsque Mme de Maintenon succéda à Mme de Montespan, qui dut quitter Versailles en 1691, la situation de Daquin se trouva compromise et le Premier Médecin perdit tout son prestige. Daquin dut céder son poste à Gui-Crescent Fagon (1638-1718), le protégé de Mme de Maintenon, qui fut nommé Premier médecin du roi à sa place, le 2 novembre 1693. Une favorite le mit sur un piédestal, l'autre le fit descendre.

En dehors des intrigues et du favoritisme, qui en représentent la cause fondamentale, diffé-

rentes hypothèses ont été émises pour tenter d'élucider les motifs du renvoi d'Antoine Daquin.

Dans son "Tableau de Paris" (1781-1788), Louis- Sébastien Mercierfait intervenir Georges Mareschal dans la disgrâce de Daquin, Premier médecin de Louis XIV. Or Daquin fut remplacé par Fagon le 2 novembre 1693 et Mareschal ne devint Premier chirurgien du roi que dix ans plus tard, le 14 juin 1703. Mercier commet donc une erreur anachronique qui met en doute la "sûreté d'information" du "Tableau de Paris".

*"Louis XIV vieillissait; on avait l'habitude de le saigner tous les mois. Un jeune petit chirurgien qui avait gagné assez gros sur le pavé de Paris par une très grande habileté à saigner, s'imagina que sa fortune serait faite s'il pouvait parvenir à saigner une fois le roi. Il trouva des connaissances auprès de Daquin, pour lors Premier médecin, et lui conta son affaire, lui disant que s'il pouvait lui procurer ce qu'il désirait, il y avait dix mille écus consignés chez un notaire.*

*"Daquin avait bien envie de les gagner; mais la chose n'était pas facile à mener, parce que Mareschal, pour lors Premier chirurgien, ne quittait guère le roi. Il ne laissa pas de lui donner quelques espérances et lui conseilla de se tenir toujours à portée des occasions, en venant s'établir à Versailles, ce qu'il fit.*

*"Un jour enfin que Mareschal avait demandé au roi un congé de deux ou trois jours pour aller à sa campagne de Bièvre, Daquin crut le moment favorable. Il tâta le pouls du roi, le matin à son ordinaire, contrefit beaucoup l'effrayé, trouva un battement inquiétant, disait-il, et une saignée était absolument nécessaire. Il n'y avait pas de temps à perdre.*

*"Le roi avait d'abord eu quelques répugnances, n'ayant pas pour le moment Mareschal auprès de lui; la peur l'avait enfin déterminé à tout et Daquin avait proposé son petit chirurgien comme étant un des plus habiles saigneurs du Royaume. On l'avait envoyé chercher; la saignée fut faite et Daquin envoya aussitôt retirer les dix mille écus consignés chez le notaire.*

*"Sur ces entrefaites, Mareschal, à qui on avait envoyé un courrier, était revenu à la minute. Il n'avait pas été peu étonné de trouver le roi saigné, qu'il venait presque de quitter et auquel, à son retour, il ne trouvait plus le moindre symptôme de mal. Cela commença à lui donner à penser.*

*"Comme le petit chirurgien n'avait que quelques louis à espérer pour sa saignée, et qu'il commençait à voir qu'il pourrait fort bien s'être trompé dans son attente, Mareschal, à force de le tourner, vint à bout de savoir le fond de l'histoire; et le roi ne fut pas longtemps sans en être instruit, car Mares chai, ennemi de Daquin, avait été aussitôt lui en rendre compte.*

*"Le roi entra dans une fureur terrible ; il fit arrêter Daquin et abandonna l'affaire au jugement du Conseil d'Etat. Toutes les voix y furent pour la mort, disant que Daquin avait fait trafic du sang du roi. Enfin, le roi, un peu revenu de sa colère, lui fit grâce de la vie, mais à condition qu'il perdrait sa place de Premier médecin et se retirerait à Quimper-Corentin.*

*"Cela ne rendit pas l'argent au petit chirurgien, à qui il en coûta vingt-huit mille livres pour avoir eu l'honneur de saigner une fois Louis XIV".*

*("Tableau de Paris",* Amsterdam, 1788, T. IX, p.151).

Si l'anecdote rapportée par Mercier est véritable, ce fut Charles-François Félix, prédécesseur de Georges Mareschal, qui découvrit le marché conclu entre Daquin et le jeune chirurgien.

Saint-Simon donne une autre version de la mise à pied de Daquin et son remplacement par Fagon ; mais il ne parle pas de saignée faite au roi avec la complicité du Premier médecin.

Voici ce qu'il écrit :

*"D'Aquin, Premier médecin du roi, créature de Mme de Montespan, n'avait rien perdu du son crédit par l'éloignement final de la maîtresse; mais il n'avait jamais pu prendre avec Mme de Maintenon, à qui tout ce qui sentait cet autre côté fut toujours plus que suspect. D'Aquin était grand courtisan, mais riche (1), avare, avide, et qui voulait établir sa famille en toutes façons (...). Le roi peu à peu se lassait de ses demandes et de ses importunités. Lorsque M. de Saint-Georges passa de Tours à Lyon, par la mort du frère du premier maréchal de Villeroy(...) D'Aquin avait un fils abbé, de très bonnes moeurs, de beaucoup d'esprit et de sa voir, pour lequel il osa demander Tours, de plein saut, et en presser le roi avec la dernière véhémence. Ce fut l'écueil où Use brisa..."*(Saint-Simon, p. 121).

Mme de Maintenon profita du dégoût du roi pour un homme qui "quémandait" sans cesse et qui avait l'impudence de vouloir faire d'emblée de son fils un archevêque, en dépit des abbés de très belles qualités morales et de tous les évoques du Royaume - et Tours fut finalement donné à l'abbé d'Hervault qui avait été longtemps auditeur du tribunal de la Rote, à Rome, et y avait été estimé pour le bien qu'il avait accompli.

*"Mme de Maintenon qui voulait tenir le roi par toutes les avenues et qui considérait celle d'un premier médecin habile et homme d'esprit comme une des plus importantes, à mesure que le roi viendrait à vieillir et sa santé à s'affaiblir, sapait depuis longtemps d'A quin et saisit ce moment de la prise si fort qu'il donna sur lui et de la colère du roi : elle le résolut à le chasser, et en même temps à prendre Fagon à sa place.*

*Ce fut un mardi, jour de la Toussaint, qui était le jour du travail chez elle de Pontchartrain qui, outre la Marine, avait Paris, la Cour et la Maison du roi en son département. Il eut donc ordre d'aller le lendemain, avant sept heures du matin, chez d'Aquin, lui dire de se retirer sur-le-champ à Paris; que le roi lui donnait six mille livres de pension et à son frère, médecin ordinaire, trois mille pour se retirer aussi; et défense au Premier médecin de voir le roi et de lui écrire. Jamais le roi n'avait tant parlé à d'Aquin que la veille, à son souper et à son coucher, et n'avait paru mieux le traiter. Ce fut donc pour lui un coup de foudre, qui l'écrasa sans ressource.*

*La Cour fut fort étonnée et ne tarda pas à s'apercevoir d'où cette foudre partait, quand on vit, le jour des Morts, Fagon déclaré Premier médecin parle roi même qui le lui dit à son lever et qui apprit, par là, la chute de d'Aquin à tout le monde qui l'ignorait encore, et qu'il n'y avait pas deux heures que d'Aquin l'avait apprise lui-même. Il n'était point malfaisant et ne laissa pas, à cause de cela, d'être plaint et d'être même visité dans le court intervalle qu'il mit à s'en aller à Paris".* (Saint-Simon, p.122).

L'interprétation de Saint-Simon est conforme à l'article du "Journal de Dangeau" écrit à cette époque. Le mémorialiste Philippe de Courcillon, marquis de Dangeau, tint un journal, de 1684 à 1720, qui ne fut publié qu'entre 1854 et 1860, avec les "Additions de Saint-Simon".

Voici l'extrait du "Journal de Dangeau" du 2 novembre 1693 :

*"D'Aquin et Fagon, Premiers médecins du roi... D'Aquin était fort ignorant et fort intéressé, et devait sa fortune à Mme de Montespan. Sa faveur avait toujours paru la même; mais le roi se lassait de lui et était poussé par Mme de Maintenon pour Fagon qui avait eu soin des enfants du roi pendant qu'elle en était gouvernante et qu'elle avait depuis fait premier médecin des enfants de France. D'Aquin s'acheva de perdre en pressant trop le roi à donnera son fils, agent du clergé, l'archevêché de Tours.*

*On remarqua que, la veille qu'il fut chassé,*

*le roi lui parla pendant tout son souper et le traita à merveille. L'ordre était donné à Pontchartrain de l'aller congédier avant le lever. Cet abbé d'Aquin mourut évoque de Séez et avait beaucoup d'esprit, de savoir et d'application; très bon évoque, mais voulant dominer".*

Ce fut donc le comte de Pontchartrain ( 1643-1727) qui fut chargé d'annoncer à Daquin sa révocation et la nouvelle fonction de Fagon; et comme le médecin lui demandait quelle pouvait être la cause de sa disgrâce, il lui avoua qu'en homme d'honneur il n'en savait rien. Fagon avait su de son côté intriguer adroitement. Habile courtisan, il connaissait bien le roi ainsi que Mme de Maintenon et toute la Cour. Il avait été le médecin des enfants du roi, alors que Mme de Maintenon en était la gouvernante; c'est là que leur liaison avait commencé. De ce poste, il passa aux enfants de France d'où il fut désigné pour être le Premier médecin du roi. De toute évidence, il a mieux manoeuvré que Daquin pour obtenir et conserver cet emploi.

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*"Sa faveur et sa considération, qui devinrent extrêmes, ne le tirèrent jamais de son état ni de ses moeurs, toujours respectueux et toujours à sa place"* écrira Saint-Simon, p.123.

Jalousie et cupidité jouèrent un rôle certain dans l'affaire. Le Père Léonard, dans un article sur d'Aquin, dit en effet qu'on attribua la disgrâce du Premier médecin à ce qu'il avait reproché, en termes choquants, au Père de La Chaise, la nomination de l'abbé d'Hervault à Tours; mais il ajoute qu'on l'accusait aussi d'avoir conservé une correspondance avec Mme de Montespan qui lui avait fait avoir sa charge moyennant un pot-de-vin de 20.000 écus (Boislisle, note 3, p.286). Le succès de Daquin se retournait donc contre sa bienfaitrice.

Fagon travailla à la perte de Daquin, dans l'intention de lui prendre sa place ; mais il semble aussi que le Premier médecin soit allé au-devant de ses propres difficultés. Jean Astruc raconte une scène qui aurait dû l'inciter à ne plus importuner le roi avec ses demandes. Louis XIV, faisant l'éloge d'un vieil officier, ajouta en fixant les yeux sur le Premier médecin : "qualité rare, il ne m'a jamais rien demandé". A quoi Daquin, se sentant visé, répondit : "Oserait-on, Sire, demander à Votre Majesté ce qu'elle lui a donné ?" Le roi garda le silence (Lévy-Valensi).

La disgrâce de Daquin se répercuta sur les membres de sa famille. Son frère aîné, Pierre, médecin ordinaire depuis 1678, reçut l'ordre de se démettre de sa fonction et de se retirer à Jouy-en-Josas avec ses 3.000 livres de pension; mais il s'attira, ainsi que son autre frère, l'évêque de Fréjus, une nouvelle disgrâce en février 1698; ils furent exilés, l'un à Brive, l'autre à Carhaix, et y restèrent surveillés de très près (Boislisle, note 2, p.285).

De ses trois fils, l'aîné, Antoine d'Aquin de Châteaurenard, devint président du Grand Conseil, mais dut vendre sa charge après le renvoi de son père : "un autre aurait eu de quoi se consoler avec son bien, comme il le fit, mais beaucoup plus par une très belle femme qu'il avait, et encore plus vertueuse, pieuse, estimée et de beaucoup d'esprit et de sens. Il acheva une longue vie dans une parfaite obscurité" ("Journal de Dangeau" du 19 mars 1706). Le fils abbé, Louis, ne fut pas compris dans la disgrâce, puisqu'il termina son épiscopat comme évêque de Séez (aujourd'hui Sées), mais le troisième, qui avait obtenu le grade de capitaine dans le régiment des gardes, fut relevé de ses fonctions.

Antoine Daquin survécut à peine trois ans à sa déchéance de 1693; il ne finit cependant ni dans la solitude ni dans la misère. Il avait eu dix enfants qui étaient tous parvenus à des situations bien assises. C'est laisser supposer qu'il recevait fréquemment des visites. De plus, son titre de Premier médecin du roi lui avait attiré une très nombreuse et riche clientèle, lui ayant pro-

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eu ré une fortune considérable, à laquelle vint s'ajouter la pension allouée par le roi. On ne sait s'il passa le reste de sa vie à Paris, à Quimper-Corentin, ou - le plus probablement - à Moulins, où son fils, Châteaurenard, avait été intendant en 1688. Boislisle écrit :

*"Il mourut à Vichy, le 17 mai 1696, âgé de soixante-quatre ans environ"*(note 6, p.284).

Antoine Daquin fut enterré obscurément à Vichy; la pierre tombale de l'église Saint-Biaise, rappelant son souvenir, fut enlevée à la fin du XIXe siècle au cours de réparations du dallage (Veissieres).

Quels que fussent l'absolutisme de son pouvoir et cette sorte de mystique qui l'entourait, le Roi Soleil n'aurait jamais consenti à laisser dans le dénuement un de ses sujets qui avait tant de fois contribué au rétablissement de sa santé, même si celui-ci avait encouru sa disgrâce.

**Note**

1. - Ce mot est mal écrit dans le manuscrit intégral. Dans l'édition Sautelet (1829), ont lit "rêtre", dans celle de Boislisle (1879), on trouve "riche", ce qui paraît le plus probable.

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The wet nurse, Vesalius, II, 2, 86 - 97,1996

# *The wet nurse: A study in ancient medicine and Greek papyri*

A. Abou Aly

**Summary**

*This paper* examines Greek medical recommendations concerning the selection of the wet-nurse, her regimen, and her duties towards the child (in particular feeding, and later weaning) in comparison with some contemporary Greek papyri concerning wet-nursing which come from Roman Egypt. It also measures the degree of medical awareness among the laity presented in the papyri. This paper demonstrates that these medical recommendations, though they were perhaps insinuated by social needs, were not necessarily always followed either by the nurse of those who selected her. Greek contracts which correspond in points with medical recommendations differ in adding more prohibitions. Yet it seems hard to prove that they were either respected or supervised. They were meant to be a deterrent to ensure the nurse's well behaviour and every possible care for the child.*

**Résumé**

*Cet article * étudie les recommandations médicales grecques observées dans la sélection des nourrices, le régime médical qu'elles étaient censées suivre ainsi que leurs devoirs envers les enfants (surtout en ce qui concerne l'allaitement et, plus tard, le sevrage). L'article établit par la suite un parallèle avec les papyrus grecs originaires de l'Egypte Romaine datant de la même époque. Il étudie également à travers les papyrus la conscience médicale collective. Bien que ces recommandations puissent avoir émané des besoins sociaux, elles n'étaient observées et appliquées ni par les nourrices, ni par ceux qui les sélectionnaient. L'article souligne l'existence de points communs entre les recommandations médicales et les contrats grecs avec un surplus d'interdictions et de prohibitions dans ces derniers. Il s'est avéré difficile de prouver que ces recommandations étaient respectées ou contrôlées. Elles semblent plutôt a voir été une force de dissuasion assurant la bonne conduite de la nourrice et l'octroi de tous les soins possibles à l'enfant.*

## Introduction

Graeco-Roman doctors, unlike their laws which did not address the rights of the embryo to life, took an interest in what related to children from the moment of conception till they grew up. (1) They were also concerned with selecting the best wet-nurse who could bring up a child. My intention is to look at the recommendations of authors like Mnesitheus of Cyzicus, Rufus of Ephesus, Soranus of Ephesus and Galen who wrote on the nurse selection, her regimen, her milk and her duties and obligations (in particular feeding and later weaning) (2) in comparison with several contemporary Greek papyri concerning wet-nursing which come from Roman Egypt. (3) The degree of medical awareness among the laity presented in the papyri is investigated here. I shall argue that doctors, by considering these matters, were responding to social needs for recognizing the qualities of the prospective wet-nurse. Yet their recommendations were not necessarily always followed by either the nurse or those who selected her.

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**Medical recommendations**

Classical medical authors, Greek papyri and Latin inscriptions indicate that the employment of wet-nurses was a common practice in Graeco-Roman societies. (4) Nevertheless doctors admitted that mothers were the best candidates to nurse their babies: their milk is more suitable; babies are used to their feeding them while being in the wombs and of course mothers are more sympathetic. (5) Yet in the case of circumstances arising that might impede the mother from nursing her own baby any of the mother's relatives or those who are similar in physique should be employed. (6) Concern over the mother growing prematurely old or becoming emaciated due to breast feeding provoked Soranus of Ephesus to recommend selecting a nurse. He went even further in recommending the mother only if she shows the characteristics of the best wet-nurse. (7)

On the other hand, Greek and Roman moralists expressed their dislike of mercenary nurses. (8) Plutarch was convinced that mothers are more affectionate whereas the emotions of paid nurses are insincere. (9) Favorinus even feared that the emotional bond, due to mercenary nursing, between the mother and the child would relax while the emotions of the child divert towards the nurse. (10) He compared depriving a child of the nourishment of his own mother with killing a foetus in her womb. (11) Yet Plutarch, acknowledging that mothers, due to physical weakness oran interest in having more children, might not be able to feed their babies, advocated careful nurse selection. (12) It seems that Graeco-Roman societies were careless in their nurse selection for both Tacitus and Favorinus criticized their society for selecting at random incompetent nurses. (13) Such concern with nurse selection was well founded : wet-nursing was an influential and respectable job which did not require training *or* qualification, but only finding a woman with experience of pregnacy, labourand mothering. (14) Evidence from papyri indicate that a woman who had defined herself as a grave digger also worked temporarily as a wet-nurse. (15) Hence doctors were stimulated by their concern over their society to guide parents and owners of children in recognizing the moral and physical qualities of the best wet-nurse. They paid attention to her health record, number of deliveries, sex of her children and her age. Yet it is questionable how far their recommendations could stand the test of putting them into practice.

Soranus recommended the provision of as many wet-nurses as available so that the child would be safely and successfully nourished. (16) Soranus' motive was purely medical for he was concerned with the possibility of the nurse falling ill or even dying. The child in this case either would suffer from the strange milk or would reject it completely and might fall prey to hunger. (17) His advice could have been followed by only upper class Roman families that could afford hiring several wet-nurses (Galen himself recommended in case of illness that one should change to another nurse, for "the rich are likely to have more than one". (18) The mother in law with whom the philosopher Favorinus had a discourse declared that nurses would be provided for her grand child. The child's father was of a distinguished and wealthy family. (19) Soranus' and Galen's statements were influenced by the wealthy social milieu in which both lived. Their medical recommendation also suggests that there were many wet-nurses available for hiring. Mnesitheus himself firstly advised, in case of any change in milk quality or quantity, to switch to another wet-nurse. (20)

Physical appearance was one of the most important criteria Greek doctors stressed. (21) Some of those physical qualifications can be easily examined by mere sight, while others, such as what concerns breasts are hard to check without violating the decency of the nurse. (22) Yet those which concern the nipples are in particular theoretical or perhaps doctors were

promoting the ideal. Such an ideal medical attitude appears in their insistence that the nurse should be free from all diseases : in particular from epilepsy, "hysterical suffocation" and neurotic disorders without elaborating over the method by which the nurse health record might be examined. (23) Hearsay or perhaps appearance might be the method. Such medical interest in the nurse's health suggests that diseases could be transmitted from the nurse to the nursling. Unfortunately the mode of transmission is not clear, but presumably the nurse's milk is a strong possibility. However, singling out these diseases carries a fear of their occurrence especially in babies. Epilepsy was already known as a childhood disease. (24)

Doctors insisted that the nurse should be prudent, clean, tidy, not ill-tempered, sympathetic, merry, easy going, gentle and self-controlled in relation to drinking and sexuality. (25) Such qualities are hard to be found in one person. Yet Soranus explains that the nurse's moral characteristics have a bearing on the way she performs her duties and consequently affect the baby. Exclusive moral and physical qualifications might have been the reason behind Mnesitheus' choice of Thracian or Egyptian (or the like) wet nurses, both of whom are non Greeks. On the other hand Soranus prefers her to be Greek so that the child gets accustomed to the best language, and not for any other reasons. (26) Whether he thought that the nurse's moral qualities would be transmitted to the nursling is not defined. He only admits that by nature the child becomes similar to the nurse in disposition which means that by living together the child picks up her manners. (27) Yet if we bear in mind the Hippocratic strong link between humours and personality, the nurse's milk which is affected by humours might carry traits of her personality to the nursling. (28) Despite their claims for the value of moral qualities, doctors did not discuss the wet-nurse's optimum social status: whether she should be free or slave, married or single. This in fact suggests that doctors did not object to employing slave women to nurse the children of wealthy Roman families. (29)

Doctors opted for the ideal when Soranus recommended that the chosen nurse should have given birth twice or three times before, whereas Mnesitheus advocated that she should have nursed more children of the same sex as the baby. (30) Yet they disagreed on the length of the period that should elapse between delivery and beginning of breast feeding : Mnesitheus specified forty days while Soranus recommended two or three months so that the milk quality would be better. (31) Soranus' advice takes into consideration the nurse's health and its influence on her milk. (32) It is in the nurse's favour as it gives her time to rest before offering her services.

Medical opinion concerning the suitable age for nursing changed over time. This change might be ascribed to a new medical awareness of the longevity of female fertility in the Roman period. (33) While Mnesitheus insisted that she should not exceed thirty but could be a year or two less, Rufus preferred her to be between twenty five and thirty five. (34) Soranus allowed her to be a little older, between twenty and forty, for "younger women are not experienced in child upbringing; they are still careless and childish in their minds. Milk in older women... is more watery, while in women at their prime, every physical function is at its best". (35)

Yet medical recommendations concerning both the nurse's diet and the method by which her milk might be examined reflect traces of difficult applicability. Doctors were aware of the impact of a healthy diet on procuring a healthy milk supply. They ascribed qualitative and quantitative changes in her milk to faults in her regimen which should be rectified. (36) Moreover Mnesitheus succeeded in estimating the role of good digestion in procuring good milk supply as he recommended a nurse with a good stomach which could be satisfied with all kinds of food and

not agitated. (37) A diet should be adequate without causing repletion or stomach upsets or constipation. (38) Diet was generally a pattern of life. Edelstein has argued that only the rich and healthy could afford following the diet prescribed by Greek doctors, for only they had the means and leisure for it. (39) In the nurse's case caution is needed in maintaining her ability to follow the prescribed medical diet, given the difficulty of looking after at least one child and a household while maintaining such a diet.

Milk, which is the prime reason for employing wet nurses, was carefully examined by doctors who elaborated on its quality and the method by which it could be judged. Texture, quantity, froth: taste, smell, colour and appearance were the principal criteria a parent or perhaps a midwife would examine.(40) Yet it seems difficult to believe that parents or midwives when first employing the nurse would be paying attention to all these qualities. It is also difficult to believe that a mid-wife would follow Galen, who linked milk with blood, for he asserted that milk decreases because blood decreases or deteriorates. This would imply a need for blood testing to discover the cause of milk decrease. (41) Furthermore Mnesitheus specified four milk tests, one of which is oddly enough to be made in the spring. (42)

Soranus, on the other hand, suggested that milk should be tested after the nurse has had a healthy regimen and also after an unhealthy one, for the best milk is that which is not spoiled even by an unhealthy regimen. (43) Soranus' suggestion implies that in the future, as the nurse surely would not report to her employee any defect in her milk, a doctor or perhaps a midwife should accompany the wet-nurse to check her milk regularly. Yet parents and owners of nurslings might have been following Soranus' first method of recognizing the milk of the nurse by merely looking at her and her child. (44) Neverthless all these medical recommendations, though advanced, were not necessarily followed. To see how far this might be the case, it is necessary to look at the Greek papyri from Roman Egypt and to examine the non-medical point of view.

**Greek papyri**

Surviving Greek nursing contracts and acknowledgments of receipt of wages for nursing from Roman Egypt indicate that free nurses outnumber slave ones. (45) The employment of slave nurses suggests that they were considered equal to free nurses in physical and moral values, or perhaps any idea of differentiation between the two was never raised. Yet it is interesting to note that a considerable number of the nurslings were also servile and the argument of the bad influence of slave women on free nurslings would not have been discussed by owners of children. (46) A large number of the servile nurslings were obtained by picking them up from the gutter. The availability of exposed children to be picked up made easierthe nurse's obligation in some contracts, orthe child's owners in others, in case of the child's natural death, to find another child to nurse. (47)

The majority of the surviving contracts and receipts are silent about the nurse's age except for two : B.G.U. 297,7 where the nurse is thirty while in P.Bour. 14, 5 she is forty. The latter age which is rather old agrees with the reformed medical opinion which has been noted above. (48)

Whereas doctors are silent about the place where a baby is best nursed and looked after, some contracts show that the baby is nursed at the nurse's home. (49) They clearly oblige the nurse to nurse only one baby at a time. (50) On the other hand, there is no indication that doctors insisted on the same. Soranus, when dealing with the implication of the nurse having large breasts and hence abundant milk, did not make it clear if the norm was to nurse just one baby.

Soranus said :
*"...while excessively large (breasts) have more (milk) than is necessary so that after nursing if large quantity remains it will be drawn out by the baby when no longer fresh and in some way already spoiled. If, on the other hand, it is all sucked out by other children or other animals, the wet nurse will be exhausted". (51)*

However one might infer, reading carefully Soranus' passage that it was only under this particular circumstance that other children were nursed by the same nurse for it is inconceivable that the nurse should nurse animals too. Yet doctors, as has been noted above, recommended employing a woman who has given birth from forty days to three months earlier. This indicates that the nurse would nurse her child as well as the nursling she was hired for.

Nursing contracts are silent about the nurse's diet. Neither contracts nor receipts assign to the nurse any ration of dietary value. Wine, which had been recommended by doctors, is missing. (52) Only in P.Bour.14,15 is wine included as one of the nurse's rations. (53) Had it been meant for the baby as well, as recommended by Rufus and Soranus, though not by Galen (54), there would have been a clause to ensure its use for the baby and a penalty in case of misuse. Surely the nurse would not spend her wages on wine for the nursling if she were not compelled to do so. Those contracts failed to recognize the value of wine in the nurse's diet. Her diet was not of much concern to laymen perhaps because they could not see the effect of a healthy diet on producing healthy milk. As for the baby, Greek contracts are utterly silent about the baby's food while being weaned. It seems that it was left to the nurse's discretion.

In afew contracts the nurse's milk is described as clean and pure *(katharon kaiaphthoron)* (55), while in others it is mentioned without further qualifications. (56) A number of contracts also prohibit the nurse from spoiling her milk. (57) Such interdiction and the allusion to these qualities denote the layman's recognition of the value of healthy milk for the nursling and the possible danger that the child might face if the milk is spoiled. Yet one must wonder if the nurse's milk in these contracts was really tested for cleanliness and purity. However, neither type of contract alludes to any kind of milk testing. This might lead us to assume that references to such qualities were either made by the nurse to compliment herself or given to her by those who merely looked at her and her child, a method which was recommended by Soranus for judging the nurse's milk. (58) Hence when BGU 1109 explains that the reason behind employing a wet-nurse is the spoiling of the milk produced by the baby's mother due to an illness orweakness, we might inferthatthe only criterion of this spoiling isthe quantity which in itself offers sufficient grounds for seeking a wet nurse. (59) Yet one must speculate how a nurse would spoil her milk. Though contracts do not elaborate on this issue nurses would certainly understand the meaning of this clause. This might mean preserving her health and not necessarily following a particular medical diet. (60)

Nurses were prohibited not only from spoiling their milk but also from having sexual intercourse. Both doctors and laymen prohibited the nurse from sleeping with men. Whereas doctors explained the reasons, contracts remained silent. Doctors feared that sexual intercourse would diminish, spoil and even suppress milk as it either induces menstruation (Mnesitheus did not recommend the nurse whose menses had begun again) or leads eventually to conception. It also diverts the nurse's emotions away from the child. (61) Galen clearly advises his reader to look for another nurse if she gets pregnant or falls ill. (62) Yet it is puzzling that, though contraceptives were already known in the ancient world for Soranus himself gave lists of them (63), neither of these two parties did discuss the possible use of contraceptives to prevent

unwanted pregnancy. Doctors did not discuss it perhaps because they were interested in keeping the emotional bond strong between the nurse and the nursling. Or perhaps they were so in doubt of the efficacy of the contraceptives that they promoted what was certain and free from risk. (64) It seems that laymen shared the same stance with specialists, perhaps for the same reasons. As both doctors and laymen were primarily concerned with a continuous flow of healthy milk, sexual abstinence was the ideal. (65)

While doctors elaborated on the issue of weaning, nursing contracts did not oblige the nurse to return the child already weaned. (66) Nor was there a discussion of the child's diet during weaning, nor an indication of any penalty if a child was returned unweaned. Even in the surviving acknowledgments of receipt no evidence was given of handing the child back weaned, exceptfor P. Oxy. 91 (18-20) where the nurse has returned the child weaned and having received every possible care. (67) Yet a bigger problem of estimating the average duration for nursing and also the proper age for weaning arises as these documents disagree among themselves on the duration of nursing ; one contract is for six months, another for three years (68), while a large number are for two years. (69) This difficulty is increased by our ignorance of the nursling's age when he was first handed to his wet-nurse. Some contracts are also drawn after nursing has already started suchasBGU 1110. Other contracts declare that the first six months are for breast feeding while the rest of the time, which varies from one contract to another, is for looking after the nursling. (70) Other contracts declare without specification of duration that the purpose of hiring the wet-nurse is for feeding with milk and looking after the child. (71) In other words we are ignorant of the child's age when it is returned to the original family. In short it is difficult to gather absolute information from these contracts or receipts concerning weaning. Yet it seems possible to argue that, given that contracts for two years outnumbertheothertypes of contracts, and that doctors recommended two years as an age proper, two years was then the usual age for weaning.

## Conclusion

Greek doctors helped their society in recognizing the best wet-nurse to hire by writing on the nurse selection, her regimen and her duties. Several voices were already complaining about the neglect children were receiving from their parents, who handed them down to any hired nurse. Yet medical recommendations concerning the nurse's physical and moral qualities seem rather idealistic as doubts emerge on their applicability. As regards testing the milk and letting the nurse follow a particular regimen, this would appear to have been followed only with difficulty. Nursing contracts and receipts which come from Roman Egypt correspond with the medical point of view showing their interest in her age, the nature of her milk and naturally her obligations. Both doctors and contracts prohibited her from sleeping with a man. Yet nursing contracts were more strict on the nurse by adding more prohibitions against spoiling her milk and nursing another child. They comprise penalties if the nurse violates any of these regulations. Nevertheless there is no indication of any right of inspection or how such an inspection might have been achieved. On the other hand the child's belongings which had been entrusted to the nurse were to be shown to the child's sponsor or family, if requested, and a particular penalty was to be inflected upon the nurse if it appeared that she did not keep them unless there was evidence on the wasted possessions. (72) Yet in some documents the nurse was required to bring the child to his owner or parents to be seen for three or four days a month. (73) This would have given the child's owner or parents the opportunity to check. Yet in other documents this clause is missing and one might be driven to conclude that the child

was totally left at his nurse's home without any parental surpervision. Moreover given the fact that the nurses did not necessarily live in the same household as the child's parents or owners and the private nature of some of these regulations (spoiling her milk and sleeping with men) it seems hard to imagine how a nurse could be supervised and how these regulations could be enforced. (74) In addition, though it is wrong to make sweeping assumptions, there is no evidence of a contract being annulled due to the breaking of any of these regulations.

If these interdictions were in practice difficult to follow or be inspected, why were they included in nursing contracts ? Parents and owners of children entrusted nurses with their dearest. They needed every kind of legal protection against any transgression on the nurse's part. Economic strain was, as Bradley argued, behind accepting these stipulations. (75) Nevertheless nurses were aware that there would be no inspection on them to put their life in jeopardy. These penalties were meant to be a deterrent to ensure the nurse's good behaviour and every possible care for the child.

**Notes**

1. Husbands filed law suits against wives who aborted themselves, not because they killed the foetus but because they denied the husband his heir. The women's actwas considered against society for it denied it its prospective citizens. Etienne (1976,133-134). Bradley (1986, n. 19, p.223) noticed that Soranus, though he "assumed that infants had no inherent right to be reared, was amazingly punctilious about the care of those worth preservation". Soranus (II, 6) did not discuss or allude to any rights for babies to live. He was interested in drawing attention to which infant is medically fit to survive, and which is not. He should not be grouped with those who exposed children or believed in doing so.
2. Mnesitheus apud Oribasius, Collectiones Medicae, lib. incert. 15; Rufus apud Oribasius, ibid, 13-14, 20; Galen apud Oribasius, ibid, 16, De Sanitate tuenda I, 9-11; Soranus Gynaikeia (Gynaecology), II, 12-15, 21 (References are made for the CMG's edition throughout unless it is otherwise indicated) (chapters 32-25, 41 Rosein's edition). It is important to note that Rufus' authorship of these chapters is disputable. However because of their closeness to some Arabic fragments which are attributed to Rufus by the Arabic authors, al-Baladi and Ibn al-Jazzar, I shall be using them as Rufus' own.
3. BGU1297; IV 1058,1106,1107,1108,1109, 1110, 1111,1112, 1153; P.Bour14; P.Cairo Preis. 31 V 17-28, XVI71-84; P. Grenf. II, 75; P. Meyer 11; P. Mich V 238; P. Oxy I, 37, 38, 91, XIV 1717; P. Rein II 103, 104; P. Ryl. II, 178,342; PSI III 203, IX1065; P. Tebt. II, 399; AegyptusXIII p. 563 f.
4. For medical works and papyri see supra. For inscriptions see Bradley (1986) and Sandra Joshel (1986). Bradley's study of inscriptions has led him to maintain that hired nursing was known to the lower classes as well as to the upper classes at least in Roman society. Bradley (1986, 201). Soranus' recommendations of different types of exercises according to the nurse's means as well as the low wages of some nurses in nursing contracts seem to support Bradley's argument.
5. Soranus, II, xi, 18; Orib., Coll. Med., lib. incert. 15, 7; Galen, VI, 35; XV, 394.
6. Mnesitheus apud Orib., Coll. Med., lib. incert. 15,7.
7. Soranus, II, 11, 18.
8. Plutarch, *De liberis educandis,* 5; Favorinus apud Aulus Gellius, XII, 1.
9. Plutarch, *De liberis educandis,* 5.
10. Aulus Gellius, XII, 1,21-23.
11. Ibid., XII, 1,9.
12. Plutarch, *De liberis educandis,* 5.

13. Tacitus, *Dialogues,* 29 ; Aulus Gellius, XII, 1, 17. Quintilian advocated choosing a nurse, with good character, who could speak correctly. Quintilian, I, 1.4.
14. Bradley (1986, 202-3)
15. P. Grenf II, 75, 1. Her employer is also a grave digger called Cassianus. He housed and paid for four nurses. Yet it is not clear if he employed them for his own services or for somebody else, and who could it be ?
16. Soranus, II, 12, 20.
17. Soranus, II, 12, 20.
18. Orib. , lib. incert. 16, 3. One should not take Soranus' advice of employing as many wet nurses as available as contradicting his recommendations of particular types of exercises to the poor nursing women (II, 14, 24) for Soranus was interested in helping all the social strata.
19. Aulus Gellius, XII, 1.5.
20. Mnesitheus recomends changing to another nurse if milk stops. Yet he admits if this is not possible one should treat the case. Orib. ibid., 15, 17.
21. Mnesitheus apud Oribasius, ibid, 15, 2, 8; Rufus apud Oribasius, ibid, 13,3-4; Soranus, II, 12, 19.
22. I disagree with Temkin (Soranus 1956 xxxiii) in explaining Soranus' choice of particular nipples (neither too compact nor too porous) as a consequence of Asclepiades, theory of atoms and pores, which the Methodists had reinterpreted. Rufus, who was not a Methodist, recommended exactly the same type of nipples. Soranus whose choice is theoretical, is mainly concerned with the milk flow. His object is to keep the nursling from harm by illness or suffocation.
23. Mnesitheus apud Oribasius, lib. inc. 15, 3. According to Rufus parsley and the nurse's thick milk lead to epilepsy (Orib., ibid, 13,13, 28). Children fall into epilepsy if they are bathed while digestion is not yet complete or after having been filled with much food (Orib. lib.inc. 20,8) Rufus warns against great noises, shouting and frightening with dreadful scenes as they lead to the disease known as "children disease" (Orib.lib.inc. 20, 27). Soranus' on the other hand, declares that babies who are fed wine prematurely fall into epilepsy (II, 14, 27). He warns if the nurse's milk is spoiled the babies'and nerves are harmed, both epilepsy and apoplexy occur (I, 17,38).
24. Rufus apud Oribasius, lib.inc. 20,27.
25. Orib., ibid., 15, 4 ; 13, 5 ; Soranus, II, 12, 19. According to Soranus, coitus cools the nurse's affection toward the child. It spoils her milk and eventually leads to pregnancy. Drinking harms the nurse in soul and body. It puts the child in danger when the nurse goes to sleep leaving the baby unattended. The baby might fall ill through her spoiled milk. It seems that Soranus thought that the sense of smell in babies at that tender age is so developed that the odour of the swaddling clothes which are not frequently changed due to the nurse's untidy mindednessupsests the baby's stomach.
26. On another occasion Soranus differentiates between Greek and Roman women ; the former looks after her children while the latter neglects them (II, 20, 44).
27. Soranus, II, 12, 19.
28. Favorinusclaimesthatthe nurse's milkwhich is a variation of her blood carries the traits of her character. He tried to prove his point by drawing attention to the influence of the foster mother's milk on animals. He also drew attention to the effect of a new soil on transplanted plants. Hefurtheracknowledged the influence of the nurse's disposition on the child. Aulus Gellius, XII, 1. 10-20. Bradley (1986, 214) argues that the objection of Plutarch and Favorinus to mercenary nursing was perhaps due to snobbery more than to biological reasons.
29. Favorinus claimed a corruptive influence of the nurse on both the body and mind especially if she were a slave or of a servile origin, a foreigner, dishonest, ugly, unchaste orwine drinker (Aulus Gellius, XII, 1;17). It is interesting to note that Sandra Joshel (1986,

8) has noticed a resemblance between Soranus' instructions for nurse selection and treatment and "the judicious purchase and use of property of an object for one's control".

30. Soranus,II, 12,19;Orib.,ibid.,15,5. Soranus criticizes those who say so for they do not pay attention to the fact that mothers who have twins, one of whom is male and the other is female, nourish them with the same food. Moreover animals use the same nourishment which does not make either of the two sexes more feminine of less masculine. Soranus II, 12, 20.
31. Orib., ibid., 15, 6 ; Soranus, II, 12, 20.
32. Soranus, II, 11, 18.
33. Rufus agrees with Hesiod on eighteen as the age proper for getting girls married (Orib., ibid., 2, 1-4). Rufus compares the present and the past in favour of the past. This leads us to think that girls in his time married even earlier. On the other hand Soranus thinks that 14 is a suitable age of girls for defloration (I, 8, 33).
34. Orib., ibid., 15,4: 13,2-3.
35. Soranus, II, 12, 19.
36. Mnesitheus apud Oribasius, ibid., 15, 20; Rufus, ibid., 13,22-34; Galen, ibid., 16,3-13; Soranus, II, 15. Galen also declares that milk quality depends on the nurse's regimen *(De sanitate tuenda,* I, 9). It is interesting to note that Soranus, who is a Methodist, follows Hippocrates in using diet as a therapeutic measure. He refuses folk practices to induce milk which has stopped in wet-nurses because they cause stomach upsets, deterioration and double the atrophy.
37. Orib., ibid., 15,2.
38. Rufus apud Oribasius, ibid., 13, 6. Diet normally consists of exercises, rubbing, anointing, baths, (both warm and cold) and certainly food which consists of bread, soup, fish, meat, birds and wine. When the baby grows diet changes. The wet-nurse has to eat particular kinds of food while avoiding others. Exercises should be for all the parts of the body. Rufus apud Oribasius, ibid, 13, 6-22; Soranus II, 14. Soranus'exercises are not only for the humble as Bradley suggested (1986, 203) but for all backgrounds.
39. Edelstein (1987, 303-316)
40. Orib., ibid., 15, 9 ; 16, 1 ; Soranus, II, 13, 22; Galen, De sanitate tuenda, I, 9.
41. Orib., ibid., 16, 3-4. If blood decreases one changes the whole diet into humid and warm. It it deteriorates one purges, and uses medicaments. See also Galen. *De sanitate tuenda,* I, 9.
42. Oribasius., ibid., 15, 10-14.
43. Soranus, II, 13, 23.
44. Soranus believed that there were three ways by which milk was judged : by looking at the nurse; by looking at the child for if he is in a good condition the milk is then good; and finally by testing the milk.
45. Free nurses : BGU 297, 1106, 1107, 1108, 1110, 1153; P. Bour. 14; P. Grenf 75; P. Meyer 11; P. Oxy 37, 38; P. Ryl. 178+; P. Rein 103; P. Rein 104; PSI 203; Aegyptus XIII, p. 565. Slave nurses : BGU 1058,1109, 1111, 1112; P. Oxy. 91; PSI 1065; P.Tebt. 399. Bradley's study of inscriptions from Rome indicates that the majority of nurses were either slaves or freed (Bradley 1986, 203).
46. Slave nurslings : BGU 297, 1058, 1106, 1107,1108,1110,1111,1112,1153; P.Oxy, 37, 38; PSI 203; P.Ryl. 178 + P. Rein 103; P. Rein. 104; Aegyptus XIII, p.565; P. Bour. 14 (daughter of a slave); P. Tebt. 399 (son of a slave and a free person); P. Meyer 11 (son of a slave and a free person). Free nursling: P. Oxy 91; PS11065; BGU 1109 (son of a freed woman). Bradley's study of inscriptions from Rome indicates that nearly half of the nurslings are from distinguished families while a "good proportion of nurslings seem to be slaves or children of slaves of freed status". Bradley (1986, 203).
47. BGU 1058,19-22; 1106,20-26; 1108,11 -12; P. Ryl 178,3-6. There is a legal differentiation between the two types of contracts given by Johannes Hermann (1959, 494-497).

48. In P. Meyer 11, 3 and P. Cairo. Preis. 31, XVI, 71 the age was previously indicated but is no longer legible.
49. BGU 1106, 10; 1107, 6; 1108, 6; 1109, 7; AegyptusXIII,p.565, 11-12. Bradley (1986, 213) has maintained that no separation occurred between the mother and her baby as the employed wet-nurse lived in the same household. This could be the case at Rome, but the above-mentioned documents from Roman Egypt warns against the general applicability of this inference.
50. BGU 1058,31; 1106,30; 1107,14; 1108,15; 1109, 19; P. Ryl. 178, 1 : P. Bour. 14, 19-20; Aegytus XIII, p. 565,27. They might not have meant the nurse's own child but being employed to nurse another child.
51. Soranus, II, 12, 19.
52. Both Rufus and Soranus listed in detail what kind of wine might to be taken, when to be taken and for how long. Wine is prescribed for its good effect on the nurse's strength, digestion and milk which benefits the baby. Rufus apud Oribasius, ibid., 13, 10-12; Soranus, II, 14,26. The nurse usually receives her wages in money and oil which were not recommended by doctors, while wine is missing : BGU 1106, 15-16 ; 1107, 10-11; 1108,8-9; 1109, 12-13; P.Meyer 11, 13-15; P.Cairo Preis. 31 XVI, 75-76; PSI 203, 5; P. Rein. 103,10-16; 104,11 -14 (oil is no longer legible). In Aegyptus XIII, p.565, 19-25 oil is for the child. In BGU 1058,13-15 she is paid with money and morsels of dark bread ? In both P. Tebt. II399,3-4 and P. Oxy 91,13-15 she is paid with money to cover clothes, oil, caring and other expenses. In BGU 297,13-14 she is paid with money, oil, clothes and other things. In BGU 1110, 13; 1111, 9 she is paid with money. In BGU 1112, 6-7 she is paid with money and other expenses. In P. Grenf 75, 10-11 she is paid with money and clothes.
53. Four birds monthly are also mentioned as part of her wages.
54. Orib., ibid., 20,19; al-Baladi, Tadbiral-Habala, Ms. Royal College of Physician n° 8, Maq. II, bab. 38,44; Soranus, II, 21, 48; Galen, *De sanitate tuenda,* 1,11. Soranus warns against its removal during weaning. He in general warns against preventing the child from having access to whatever he has been accustomed to before weaning such as water, cold and hot food, and fatty things. Soranus, 11,21,46,48.
55. BGU 1106, 11; 1107,7; 1108,7; 1109,6-7.
56. BGU 1110,8; P.Rein II, 103,8; 104,8-9; P. Cairo Preis. 31, V 18 : P. Bour. 14, 9.
57. BGU 1058,29; 1106,29; 1107,13; 1108,14; 1109,18; 1110,9-10; P.Bour. 14,20; P.Rein. II 103+P. Ryl. 178.
58. Soranus, II, 13,21.
59. Despite all these recommendations concerning milk, it seems that children under their nurse's care suffered from emaciation due to hungerordietto which the proceedings of a lawsuit recorded in P. Oxy 37 allude. An owner of a two year old slave child testified that he had taken the child away from his nurse after the child having become emaciated. The nurse claimed that the mentioned child had died whereas the one who had been taken by that person was her own child.
60. The nurse is obliged to look after herself and the child in every sense of the word ; BGU 1058, 28-29; 1106, 27-28; 1107, 12; 1108, 14; 1109, 17-18. In P. Bour. 14 the clause of looking after herself and the child is incomplete.
61. Mnesitheus apud Oribasius, ibid., 15, 5; Rufus, ibid., 13,19; Soranus II, 12,19; Galen, *De sanitate tuenda,* I, 9.
62. Galen, *De sanitate tuenda,* I, 9.
63. Soranus, I, 19. On ancient doctors who discussed contraceptives see Keith Hopkins (1965). Suder (1991), on the other hand, takes the medical prohibition against sexual intercourse as an indication of failure to recognize the contraceptive effect of lactation on nursing women.
64. Ann Hanson (1992) and Gigi Santow (1995) argue that coitus interruptus as a contracep-

tive measure was also known in the ancient world. Yet it seems as my study tries to prove that both doctors and laymen might have been sceptical about the efficacy of contraceptives. They both promoted the safer and ideal method which was abstinence.

65. Bradley (1980), though he acknowledges the influence of medical opinion, ascribes such regulations to economical motivation. Slave-owners employ nurses for slaves' babies lest work might be interrupted. Nurses, on the other hand, accepted such terms under the pressure of need.
66. Soranus believed that weaning should take place in the third or fourth half-year of the child's age when teeth are grown. Soranus and Rufus disagree on the season that should witness the process of weaning; Rufus chooses autumn as it precedes winter which is the best season for digestion; while Soranus avoids autumn for its sudden changes in weather which is the most harmful and chooses spring for it is a well-tempered season. Weaning should be gradual starting from six months by increasing solid food and decreasing milk. Soranus was against the common practices of anointing the nipples with bitter materials for its sudden and injurious effect on the baby's stomach. He also prescribed the child's food during weaning. It is interesting to note that Rufus agrees with Soranus on the age two as the age proper for weaning. Orib., ibid., 20, 23-24; Soranus, II, 21.
67. In PSI 203,9 the word *apogegalaktismenon* (weaned) appears but it is difficult to understand the sentence because of the fragmentary nature of the papyrus. In P.Oxy 37, which is a record of the proceedings of a lawsuit filed by a child owner against his ex-nurse and her husband because of the child's death, we learn that the nurse received the child after having weaned her own.
68. Six months : P. Meyer, 11, 11; three years : P. Tebt. II, 399, 4.
69. BGU 1058, 8; P.Bour, 14, 9; PSI 203, 4; P. Rein, 103,8-9; 104,9-10.
70. BGU 297; P.Cairo Preis. 31 V 22. Herrmann (1959 f.n. 25, 493) draws the attention o P. Ross. Georg. II 18 XVI, 72.
71. BGU 1058, 1106, 1107, 1108, 1109, 1112, 1153, I : P. Ryl 342; P. Cairo.Preis 31 v ; P. Rein. II, 103,104; AegyptusXIII p. 564 f.; P. Bour. 14; PSI 203, 1065; P. Meyer 11.
72. BGU 1058,32-36; 1106,31 -35; 1107,14-16; 1108, 16-17; 1109,20-22.
73. BGU 1106,49-52; 1107,27-29; 1108,25-26; 1109,29-30.
74. BGU 1058,37-41; 1106,35-39; 1107,19-21; 1108,18-20; 1109, 23-25; P.Bour. 14, 24-27 (the clause of clothes mentioned above in other papyri is missing here); P.Ryl. 178, 8-12.
75. Bradley (1980)

**Abbreviations**

BGU : Berliner Griechische Urkunden
CMG : Corpus Medicorum Graecorum
P. as in P.Oxy : Papyrus

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# *La* Phrenitis *dans le Corpus hippocratique Etude philologique et médicale*

S. Byl et W. Szafran

***Résumé***

*La phrenitis a une histoire qui va d'Hippocrate à Pinel. La présente étude, due à deux auteurs de formation différente - l'un est philologue classique, l'autre est psychiatre - ne concerne que la phrenitis dans le Corpus hippocratique. Les auteurs aboutissent à la conclusion que la phrenitis se rapproche de ce que nous appelons le syndrome délirant organique.*

***Summary.***

*Phrenitis has a history, from Hippocrates to Pinel. This study is owed to two scholars of different disciplines; the first is a classicist, the other a psychiatrist. It only concerns "phrenitis" in the hippocratic Corpus. The authors have come to the conclusion that phrenitis has a pathology similar to the organic delirium.*

Le mot "phrenitis" atteint 25 occurrences dans le Corpus hippocratique; "phreniticos" figure 55 fois dans le même Corpus (1). Les occurrences de ces deux mots se trouvent dans les oeuvres suivantes : les livres III, IV, V et VII des *Epidémies,* les *Prénotions coaques,* les *Aphorismes,* le *Prorrhétique* I, les *Maladies* I et III, les *Affections,* le *Régime des maladies aiguës* et le *Pronostic.* Ce sont les *Epidémies* qui comptent, avec les *Prénotions coaques,* le plus grand nombre d'occurrences, à savoir 22 pour chacune des deux oeuvres. Mirko D. Grmek a très justement remarqué que l'usage et la signification du mot phrenitis se sont perdus (2). Nous nous proposons dès lors d'établir le dossier complet de la "phrenitis" hippocratique et de déterminer ensuite s'il est possible d'identifier la nature de cette affection.

Au IIe siècle de notre ère, soit près de six siècles après la rédaction des grandes oeuvres hippocratiques, Galien(3) écrit dans son *Commentaire au Prorrhétique* I : "(Hippocrate) appelle *phrenitis* un délire ininterrompu dans une fièvre aiguë... Tout le monde s'accorde à utiliser "mainesthai" pour des malades qui délirent sans fièvre, par opposition à "phrenitizein" pour ceux qui délirent avec fièvre. Quant au délire qui arrive en pleine fièvre, on emploie les termes de *parakopsai, parechthènai, paralérèsai, paraphronèsai...* Hippocrate appelle donc phrénitiques tous ceux qui ont la pensée dérangée sans interruption comme les maniaques, la seule différence entre eux étant la fièvre" (4).

Comparant Hippocrate et Galien, Jackie Pigeaud a écrit fort correctement : "Galien, considérant le consensus des médecins pour distinguer, par la présence de la fièvre, la phrenitis de la manie, a sans aucun doute raison à son époque. Mais rien ne dit que chez Hippocrate la chose fût si claire. (5)" Bien qu'il ait considéré que la *phrenitis* ait été engendrée par l'affection du cerveau, Galien rappelle qu'"aucune partie ne cause un délire continu, sinon le diaphragme. En effet, le délire est presque continu dans ce cas; aussi les Anciens jugeaient-ils que l'inflammation de cette seule partie produisait la

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*phrenitis,* et l'ont-il nommée *phrênes,* dans l'opinion qu'elle a de l'influence sur la partie pensante" (6). Néanmoins, ces textes de Galien ne nous aident pas à poser un rétrodiagnostic.

Au Ve siècle, Caelius Aurelianus définit la *phrenitis* de cette façon : "délire aigu avec fièvre intense, carphologie et pouls petit et serré" (7). Il faut noter ici que les médecins hippocratiques négligeaient l'étude du pouls.

Au tome II de ses *Oeuvres complètes d'Hippocrate,* publié en 1840, Emile Littré nous apprend que des historiens de la médecine de son temps admettaient que le nom de *phrenitis* désignait l'encéphalite ou la méningite. Quant à Littré, il était d'avis que la *phrenitis* était "une variété des fièvres rémittentes et continues des pays chauds" (8). Au début du XXe siècle, W.H.S. Jones estimait que la *phrenitis* était une forme de malaria (9). Les auteurs de la récente anthologie, Hippocrate. *De l'art médical,* (D. Gourevitch, M.Grmek et P. Pellegrin), Paris, 1994, p. 600 expliquent de cette façon le mot phrenitis : "maladie "psychiatrique" aiguë qui associe au symptôme majeur du délire, l'agitation et la fièvre". En 1834, Pitschaft *(Hufeland's Journal du* mois d'avril p.29) et Simon jeune de Hambourg *(Berliner medicinische Zeitung,* p. 191) ont reconnu que la description de la phrenitis ne cadrait pas exactement avec ces deux maladies, encéphalite ou méningite.

Nous commencerons par vérifier la définition de 1994:

- maladie "psychiatrique" : le vocabulaire hippocratique relatif à la *phrenitis* ne laisse aucun doute à ce sujet. Ainsi Apollonios d'Abdère, qui mourut au trente-quatrième jour de sa *phrenitis,* délirait *(paralêros)* (10). Un jeune homme de Mélibée, phrénitique, eut au dixième jour de sa maladie un délire (parekrousen) modéré ; au quatorzièmejour, il eut des hallucinations *(parekrousthê)* et beaucoup de délire de paroles *(parelegen)* (11). A Abdère, Polyphante "délira comme on délire dans la *phrenitis" (parekrouse).* (12) L'auteur du traité *Des maladies* j, 30 affirme que le patient atteint de phrenitis délire *(paranoeei)* et qu'il est hors de lui (13); quelques lignes plus loin, le même médecin emploie le mot *paraphronêsis* pour désigner le délire; quatre paragraphes plus loin encore, il recourt au même vocabulaire *(paraphroneousin, paraphroneontes)* (14). Au paragraphe 10 du traité *des Affections,* l'auteur signale que l'intelligence du phrénitique se dérange *(tou nouparakopê),* c'est-à-dire que le patient délire *(tou nou parakoptontos)* (15). Au paragraphe 9 des *Maladies* III, le médecin souligne deux fois le symptôme majeur de la maladie : le délire *(ekphrones),* en ajoutant que le patient a le regard fixe (16). Nous remarquons que le délire en grec s'exprime par des mots formés avec les préfixes *para-* ou *ek-* car le malade a un état mental qui va à rencontre *(para)* de la normalité, qui dévie ou qui sort *(ek)* de cette normalité. On remarquera alors l'emploi fréquent de la racine grecque *phroneo,* penser, ou celle de *noeo* qui a presque le même sens. Les *ekphrones* sont les patients qui sortent de leur bon sens. Le lecteur pourra consulter aussi l'excellente note 133, à la p.79 de l'édition commentée du livre III des *Maladies des femmes* de Soranos (éd. D. Gourevitch et & al.), Paris, Les Belles Lettres, 1994.

La définition relevée dans *De l'art médical* comporte les mots "maladie...aiguë". Le traité hippocratique *Du Régime des maladies aiguës* définit celles-ci comme celles qui tuent le plus grand nombre de gens (17) et compte parmi elles la *phrenitis* et toutes celles dont les fièvres sont continues (18). Le médecin, qui est l'auteur du troisième livre des *Epidémies,* dit des *causus* - dont nous reparlerons - et des *phrenitis* qui commencèrent avec le printemps que ce furent les maladies qui attaquèrent le plus de monde et qu'elles étaient aiguës et mortelles (19).

L'auteur des *Prénotions coaques,* qui insiste notamment sur la fixité du regard des malades, envisage la *phrenitis* comme une fièvre aiguë (20). Celui des *Affections* écrit de son côté : "Quant aux maladies du ventre, il faut se recorder ceci : la pleurésie, la péripneumonie, le *causus,* la *phrenitis* sont dites maladies aiguës" (21 ). Dans la définition de là *phrenitis donnée* par l'index de *Y Art médical,* sont cités encore deux symptômes: l'agitation et la fièvre. Le premier de ces symptômes, qu'Emile Littré rend souvent par le mot transport, est exprimé par deux verbes à l'aoriste; *exemanê* (22) et *ekstantes* (23), formés avec un préverbe très significatif "ek", hors de, que nous avons déjà rencontré. Mais la fièvre est assurément le symptôme de la *phrenitis* le plus fréquemment mentionné par les médecins hippocratiques.

Passons en revue quelques-uns des nombreux passages du Corpus où la fièvre *{puretos)* est associée à la *phrenitis :*

- "le malade atteint de *phrenitis,* s'étant alité le premier jour... fièvre tremblante, très forte ... deuxième jour… fièvre aiguë" (24).
- "Dans l'île de Thasos, la femme de Déalcès, qui demeurait dans la Plaine, fut prise, après avoir éprouvé un chagrin, d'une fièvre tremblante et vive *(puretos* phrikodes... *oxus)...* la fièvre était légère, froid des extrémités... *Phrenitis"* (25).
- "Polyphante, à Abdère, souffrait de la tête avec une forte fièvre... *phrenitis."* (26).
- "Dans une fièvre aiguë, (les) malades... sont pris de *phrenitis"* (27).
- "la *phrenitis...vu* la force de la fièvre" (28).

Bien que la fièvre ait toujours été mentionnée d'une manière qualitative - Robert Joly d'abord, Mirko D. Grmek ensuite ont longuement insisté sur le "règne de la qualité" de la médecine hippocratique, sur son absence de mesure (ce qui explique que le thermomètre ne fut inventé qu'au XVIIe siècle) il ressort néanmoins de tous ces textes que la fièvre des phrénitiques devait être généralement très élevée. Ce n'est pas sans raison, comme Littré (29) l'a bien remarqué, que les médecins hippocratiques ont nommé constamment la *phrenitis* à côté du *causus* traduit généralement par fièvre ardente (mais, ainsi que le remarque Mirko D.Grmek, (30) cette expression ne fait pas partie du vocabulaire médical moderne). Mirko D. Grmek, après avoir constaté que le mot causus dérivait certainement du verbe grec *kaio* (= je brûle; cf. cautériser; caustique), conclut ainsi son examen : "le mot *kausos* n'est pas traduisible dans le langage actuel : il recouvre une notion périmée, sans équivalent dans la conceptualisation nosologique moderne" (31). Il ajoute ceci : "le *kausos est,* certes, un nom de maladie pour les médecins grecs, mais, quant à la réalité nosologique sous-jacente, c'est un syndrome à étiologie multiple qui tient son unité d'un mécanisme pathogénique commun, c'est-à-dire d'un trouble particulier de l'équilibre hydrique et électrolytique" (32). Le *causus* est une affection fébrile et, pour cette raison, il a été nommé une vingtaine de fois, dans les textes hippocratiques, à côté de la *phrenitis.*

Mais dans le Corpus, dans les textes où se trouve mentionnée la *phrenitis,* il se trouve signalé beaucoup d'autres symptômes que nous citerons d'après leur fréquence.

Tout d'abord le phrénitique souffre d'insomnies *(agrupnos)* (33); ses urines ont souvent les caractéristiques suivantes : elles sont tantôt ténues (34) ou tantôt transparentes et incolores (35).

C'est surtout en hiver que la *phrenitis* se manifeste. En témoignent les exemples suivants : "la soeur d'Hippias, en hiver, prise de *phrenitis..."* (36); "l'habitant d'Halicarnasse... souffrit, en hiver, de l'oreille et de la tête non médiocrement... des accidents de *phrenitis* survinrent..." (37); "la pleurésie, la péripneumonie, le causus, *aphrenitisson*\ dites maladies aiguës;

elles surviennent le plus souvent et avec le plus d'intensité en hiver.." (38).

La douleur de la *phrenitis se* porte souvent à la tête; le seul paragraphe 112 du septième livre des *Epidémies* en porte témoignage : "Polyphante, à Abdère, souffrait de la tête... la douleur de la tête ne cessant pas...*phrenitis...* ; la servante d'Evalcidas, à Thasos... souffrait de la tête; étant devenue phrénitique... ; l'habitant d'Halicarnasse... souffrit de l'oreille et de la tête non médiocrement... des accidents de *phrenitis* survinrent..." (39). En témoigne aussi cet extrait du protocole du quatrième malade - un phrénitique - du livre III des *Epidémies* : "...pesanteur de la tête et du col, avec douleur" (40).

Le phrénitique, en proie à une forte fièvre, a des "sueurs continues et générales" (41); il est très souvent plongé dans le "coma", état qui ne correspond pas à ce que nous entendons aujourd'hui par ce mot : en effet, le "coma" désigne, dans le Corpus, un état de somnolence puisque le patient demeure conscient (42).

Le texte suivant est très significatif : "Les *phrenitis* et les *causus* étaient particulièrement accompagnés de "coma"; ce symptôme survenait aussi dans le cours de toutes les autres grandes maladies qui étaient avec fièvre. En somme, on observait chez la plupart, ou un "coma" profond, ou des sommeils courts et légers". (43)

L'aphonie - qui ne correspond pas non plus à notre banale aphonie (44) - est parfois associée à la *phrenitis.* Il faut rappeler ici que l'aphonie hippocratique peut être l'aphonie hystérique, l'aphasie due à une atteinte cérébrale, le mutisme ou encore la mutité. Trois textes (45) mentionnent l'aphonie parmi les nombreuxsymptômes de la *phrenitis* mais deux d'entre eux ne font que signaler cette pathologie; l'un des trois souligne toutefois que la patiente (46) garda le silence au début de sa maladie.

Plusieurs cas de *phrenitis* comportent la mention de nausées et de vomissements. Ainsi le quatrième malade du troisième livre des *Epidémies,* atteint de *phrenitis,* "eut des vomissement abondants de matières érugineuses (c'est-à-dire à l'aspect du vert-de-gris) et ténues .." (47); le seizième patient eut des nausées (48). Le *Prorrhétique* I signale que "dans les affections phrénitiques, le ptyalisme, avec un grand refroidissement, annonce un vomissement noir" (49).

Quelques cas de *phrenitis* sont accompagnés par la description de carphologie qui est évoquée de cette façon dans un texte célèbre : "J'ai observé ce qui suit sur les mouvements des mains : dans les fièvres aiguës, dans les péripneumonies, dans les *phrenitis,* dans les céphalalgies, les mains promenées devant le visage, cherchant dans le vide, ramassant des fétus de paille, arrachant brin à brin le duvet des couvertures, détachant les paillettes des murs de l'appartement, présentent autant d'indices d'une terminaison funeste *(thanatodeas)* (50). "Ces deux derniers mots nous amènent à constater que presque tous les cas de *phrenitis* aboutissent à la mort; dans l'ensemble du Corpus, nous n'avons découvert que deux cas de guérison : "Le foulon à Syros atteint de *phrenitis...* au dix-huitième jour, amendement; le mal disparut sans sueur" (51).

Le phrénitique est parfois caractérisé par son adipsie *(adipsos)* (52), par le fait qu'il boit peu *(brachupotai)* (53). Dans les descriptions de phrenitis sont parfois mentionnés d'autres symptômes tels que la sputation (54), surtout si elle est fréquente, les convulsions *(spasmoi)* (55), les frissons (56), l'inflammation (57), la surdité *{kophoma)* (58) et la stupeur *(nothrotês)* (59).

Plusieurs textes hippocratiques concernent l'étiologie et la thérapeutique de la *phrenitis.* Mais quelques-uns concernent aussi le siège de la pathologie. Ainsi le traité des *Affections* nous

apprend que la phrenitis..."... se fixe aux viscères et aux parties phrénitiques *(phrenas)"* (60). Celui des *Maladies* III signale que le phrénitique "a la région phrénique *(phrenas)* douloureuse, à ce point qu'il n'y laisse pas porter la main.."(61 ). Si l'affection tire son nom des phrènes, c'est alors une étymologie conforme à ce que laissait entendre l'auteur des *Maladies* IV, 51,4 lorsqu'il écrivait à la fin du Ve siècle : "Quand l'une des humeurs se fixe en un point du corps, la plupart du temps la maladie tire son nom de cette partie du corps". Plusieurs textes abordent donc le problème de l'étiologie de cette pathologie. Selon l'auteur des *Epidémies* III, 16e malade, la *phrenitis* peut être due à "des excès de vin et de femme" (62); selon d'autres médecins, l'affection est due à la bile (63), comme le soutient entre autres l'auteur des *Maladies* I selon qui "la phrenitis se comporte ainsi : le sang dans l'homme apporte la plus grande part de l'intelligence; quelques-uns même disent qu'il l'apporte tout entière. Quand donc la bile mise en mouvement a pénétré dans les veines et dans le sang, elle ôte à ce liquide, en le déplaçant et en le changeant en sérum, son mouvement et sa constitution habituelle, et elle l'échauffé. Echauffé, il échauffe à son tour le corps entier; dès lors le patient délire et est hors de lui, vu la force de la fièvre et le changement qu'a subi le sang par sa modification séreuse et dans son mouvement. Les malades atteints de *phrenitis* ressemblent surtout aux individus en proie à la folie atrabilaire *(melanchotosi kata tên paranoian).* En effet, c'est quand le sang est gâté par la bile et le phlegme que les mélancoliques sont pris de leur mal et qu'ils délirent; quelques-uns même ont le transport. Il en est de même dans la phrenitis. Au reste, le transport *(manie)* et le délire *(paraphronêsis)* sont moindres en proportion que la bile est plus ou moins faible" (64). Ce texte aussi révèle que la *phrenitis* est bien une maladie "psychiatrique".

La thérapeutique se trouve évoquée dans quelques rares textes. Ainsi, on lit dans le septième livre des Ep/c/ém/esque Nicoxène, qui va guérir, "...prit en boisson l'eau de farine, parfois du suc de pomme et de grenade, mêlé avec de l'eau de lentilles grillées, avalé froid; de la lavure de farine prise cuite et froide; une décoction d'orge légère; il se rétablit" (65). La thérapeutique fournie par le traité des *Affections* est plus circonstanciée : "... pour la douleur on administrera ce qui a été dit à l'article *pleurésie,* et on fomentera l'endroit douloureux; on aura soin du ventre.. Il y a une exception pour la boisson; on emploiera, il est vrai, la boisson que l'on voudra, à condition que le vin soit exclu; on peut encore donner le vinaigre, le miel et l'eau. Le vin ne convient pas quand il y a délire, soit dans cette maladie, soit dans les autres. Il importe, dans cette affection, de faire des infusions chaudes et abondantes sur la tête; car le corps étant assoupli, il y a davantage tendance à la sueur, aux évacuations alvines et urinaires, et au retour de l'intelligence" (66). Dans des prescriptions de thérapeutique, l'auteur des *Maladies* III insiste beaucoup sur les boissons destinées à humecter le ventre du patient mais, comme l'auteur des *Affections,* il exclut le vin (67). (Sur la thérapeutique hippocratique, voir notamment Simon Byl, *Le traitement de la douleur dans le Corpus hippocratique,* in *Tratados Hipocraticos* (ed.J.A. Lopez-Ferez), Madrid, 1992, pp. 203-213).

Quelques rares textes mentionnent l'âge des phrénitiques ou l'âge à partir duquel un individu peut souffrir de cette maladie. C'est ainsi que dans les *Aphorismes*on trouve cette longue liste de maladies: "Chez les individus qui ont passé... vingt-cinq ans, des asthmes, des pleurésies, des péripneumonies, des léthargies, des phrenitis, des causus, des diarrhées chroniques, des choléras, des dysenteries, des lientéries, des hémorroïdes" (68).

Un autre *Aphorisme* nous apprend que "ceux qui sont pris de *phrenitis* après quarante ans ne guérissent guère; car ce qui diminue le danger, c'est le rapport de la maladie avec la constitution et l'âge du malade" (69). Un passage des

*Epidémies* VII signale que l'habitant d'Halicarnasse, qui mourut de *phrenitis,* était âgé d'environ cinquante ans. (70) (Sur la liaison entre les maladies et l'âge, entre les maladies et les saisons, voir Jacques Jouanna, Hippocrate, Paris, Fayard, 1992, pp. 210-213). Les textes hippocratiques nous apportent encore d'autres renseignements sur cette maladie ; en effet, outre le ptyalisme souvent donné (71) comme un symptôme de la *phrenitis,* la métastase - c'est-à-dire le changement d'une maladie en une autre - est mentionnée, comme en témoignent ces textes ;

- "la *phrenitis* peut... se changer *(methistataî)* en péripneumonie" (72).
- "cette *métastase* se fait ainsi..." (73).
- "il y a changement de pleurésie en *causus,* de phrenitis en péripneumonie, mais non de péripneumonie en *causus"* (74).

L'histoire de la *phrenitis* a commencé pour nous, avec Hippocrate, à la fin du Ve siècle avant notre ère; elle va se poursuivre jusqu'au XIXe siècle avec Pinel (75).

Soulignant les difficultés du diagnostic rétrospectif, Mirko D. Grmek écrit ceci : "... on ne dira jamais assez combien, en règle générale, le diagnostic rétrospectif est difficile et fragile. Il est toujours hypothétique, souvent douteux et rarement exclusif... Sans doute, dans l'avenir, un ordinateur pourra donner, pour un bon nombre de descriptions anciennes, des listes presque exhaustives des diagnostics possibles, mais sans pouvoir assortir chaque proposition d'un indice de probabilité" (76).

Comme nous venons de le noter et comme nous le rappelle aussi Akis Sakaï (77), le terme grec *phrenitis* a été employé jusqu'au XIXe siècle et il a été remplacé par les mots *delirium* et par celui de *confusion.*

Il est certain, comme l'a souligné Mirko D. Grmek, qu'un rétrodiagnostic est ici particulièrement difficile; ceci est d'autant plus vrai qu'un diagnostic précis d'une psychopathologie contemporaine est déjà très malaisé. Les symptômes qui appartiennent à la *phrenitis* hippocratique nous font cependant penser que la correspondance avec un diagnostic actuel se situe dans le cadre des syndromes mentaux organiques dont nous donnons un tableau d'après le D.S.M. III R, pp. 87-88 *(Manuel diagnostique et statistique des maladies mentales,* 1987, version française abrégée) (78).

Plus particulièrement, et même si ce concept de *phrenitis,* selon certains auteurs, est le point de départ d'un modèle d'affection médicale qui présente des manifestations tant somatiques que psychiques, la description des patients hippocratiques atteints de *phrenitis* se rapproche de ce que nous appelons le *syndrome délirant organique,* caractérisé de la façon que voici par le D.S.M. III R, pp.91-92:

A. Les idées délirantes sont prédominantes.
B. Mise en évidence d'après l'histoire de la maladie, l'examen physique ou les examens complémentaires d'un (ou de plusieurs) facteur(s) organique(s) spécifique(s) jugé(s) étiologiquement lié(s) à la perturbation.
C. Ne survient pas de façon exclusive au cours de l'évolution d'un Delirium.

Or, l'on sait actuellement que, parmi les facteurs organiques, il y a, entre autres, l'hyperthermie, les troubles métaboliques, toxiques...

**Notes**

1. Cf. *Concordance des oeuvres hippocratiques* éditée par G. Maloney et W. Frohn, Québec, Les Editions du Sphinx, 1984, t. V, pp. 4631-4632.
2. Mirko D. Grmek, *Les maladies à l'aube de la civilisation occidentale,* Paris, Payot, 1983, p.20.
3. Sur la *Phrenitis chez* Galien, voir M. Centanni, Nomi del maie. *Phrenitis e epilepsia nel corpus Galenicum,* in *Muséum Patavinum,* 5,1987, pp. 47-79; Sur cette affection, voir aussi A. Sakai, *Phrenitis, inflammation ofthe Mind and Body,* in *History of Psychiatry,* 2 (2) n° 6, 1991, pp. 193-

205. ConsulteraussiJ.PosteletCI.Quétel(dir.) *Nouvelle histoire de la psychiatrie,* Toulouse, Paris, 1994(2).
4. K XVI, 492-494
5. Jackie Piegeaud, *Folie et cures de la folie chez les médecins de l'antiquité gréco-romaine. La manie,* Paris, Les Belles Lettres, 1987, p.35.
6. Galien, *Lieux affectés* (K VIII, 327 sqq.)trad.Ch. Daremberg.
7. Cf. Emile Littré, *Oeuvres complètes d'Hippocrate,* Paris, Baillière, 1840, t.II, p.572.
8. Id., *ibid.*
9. In *Malaria andGreekHistory,* Manchester, 1909, p.68.
10. Cf. *Epidémies* III, 13e malade (L III, 141).
11. Cf. *Epidémies* III, 16e malade (L III, 149). La forme verbale *parekrousen* se trouve aussi en *Epidémies* III, 4e malade (LUI, 117-9).
12. Cf. *Epidémiesyw,* § 112 (L V, 461).
13. Cf. L VI, 201
14. Cf.LVi,204.
15. Cf. L VI, 217-219
16. Cf. L VII, 129.
17. *Du Régime des maladies aiguësV,* 1 (LU, 232).
18. *Ibid.*
19. Cf. *Epidémies* III, 6 (L III, 81).
20. Cf. *Prénotions coaques,* § 223 (L. V, 633).
21. *Des Affections,* 6 (L. V, 615).
22. Cï.*'épidémies* III, 6 (L III, 83); III, 16e malade (L III, 149).
23. Cf. *Prénotions coaques* I, 2, § 94 (L V, 603); *Prorrhétique* I,§15(LV,515).
24. *Epidémies* III, 4e malade (L III, 117-9).
25. *Ibid,* 15e malade (L III, 143-147).
26. *Epidémiesyw, §* 112 (LV, 461).
27. *Prénotions coaques,* § 223 (L V, 633).
28. Ma/ac//esl,30(LVI,201).
29. Cf. E. Littré, *op. cit.* p. 571.
30. *Op. cit.* p. 417, n. 26.
31. *Ibid.*
32. *Ibid.,* p. 419.
33. Cf. *Epidémies* III, 13e malade (L III, 141); *ibid.* 16e malade (L III, 149); *Prénotions coaques,* § 223 (L V, 633); § 571 (L V, 717)...
34. Cf. *Epidémies* III, 4e malade (L 111,117); 13e malade (LUI, 141).
35. Cf. *Aphorismes,* 4e section, § 72 (L IV, 529); *Prénotions coaques,* § 568 (L V, 715).
36. *Epidémies* VII, § 53 (L V, 423).
37. *Epidémies* VII, § 112 (L V, 461).
38. *Des Affections,* 6 (L VI, 215).
39. LV, 461.
40. LIN, 117.
41. *EpidémiesW,* 4e malade (LUI, 117); un peu plus bas dans le texte, le médecin mentionne de nouveau la sueur du patient.
42. Cf. Fernand Robert, in Mirko D. Grmek, op. cit. p. 493.
43. *Epidémies* III, 11 (L III, 91)3.
44. Sur ce sujet, cf. Danielle Gourevitch, *L'aphonie hippocratique,* in *Formes de pensée dans la collection hippocratique* (éd. François Lasserre et Philippe Mudry), Genève, Droz, 1983, pp. 297-305.
45. Cf. Epidémies III, 4e malade (L III, 119); ibid., 15e malade (L III, 147); Epidémies VII, § 53 (L V, 423).
46. Il s'agit de la 15e malade (voir la note 45).
47. LIN, 117.
48. *Epidémies,* III, 16e malade (L III, 147).
49. *Prorrhétique* I, 31 (L V, 519). Pour le ptyalisme, voir *infra.*
50. *Pronostic,* §4(LII, 123). Voiraussi *Prorrhétique* I,34(LV, 519).
51. *Epidémies* VII, § 79 (L V, 435-437.
52. Cf. *Epidémies* III, 16e malade (L III, 149).
53. Cf. *Prénotions coaques,* § 95 (L V, 603).
54. Cf. *Prorrhétique* I, § 6 (L V, 511); *Prénotions coaques,* § 239 (L V, 637).
55. Cf. *Epidémies* I, 6 (L II, 637); *Epidémies* III, 4e malade (LIN, 119).
56. Cf. *Epidémies* III, 16e malade (L III, 147); *Prénotions coaques,* § 90 (L V, 603).
57. Cf. *Epidémies* VII, § 79 (L V, 435); *Epidémies* VII,§80(LV, 437).
58. Cf. *Epidémies* VII, § 71 (L V, 433).
59. Cf. *Prénotions coaques,* 90 (L V, 603).
60. *Affections,* 10 (L VI, 219).
61. *Des Maladies* 111,§ 9 (L VI 1,129). Surlesiègede la *phrenitis,* voir Jackie Pigeaud, *La maladie de l'âme,* Paris, pp. 77-79.
62. *Epidémies* 111, 16e malade (L 111, 147).
63. Cf. *Des affections,* 10 (L V, 219).

64. *Maladies,* I, 30 (L VI, 201). Ce texte est évoqué par Marie-Paule Duminil, à la p. 229 de son livre *Le sang, les vaisseaux, le coeur dans la Collection Hippocratique,* Paris, 1983.
65. *Epidémies* V11, § 80 ( L V, 437).
66. *Des Affections,* 10 (L VI, 217).
67. Cf. *Des Maladies* III, 9 (L VII, 129).
68. *Aphorismes,* 3e section, 30 ( L IV, 501).
69. *Aphorismes, 7,* 82 (L IV, 607).
70. Cf. *Epidémies* VII, § 112 (L V, 112).
71. Cf. déjà *supra,* n 49. Cf. e.a. *Prorrhétique* I, § 12 (LV, 515).
72. *Des Affections,* 10 (L VI, 219).
73. *Des Affections,* 12 (L VI, 221 ).
74. *Des Maladies* I (L VI, 145).
75. Cf. sa *Nosographie philosophique,* Paris, 1813 (5e éd.), t. 2, pp. 397-413.
76. Mirko D. Grmek,op.c/f., pp. 20-21. Pour l'étude de la *phrenitis* dans la médecine arabe, voir l'article de Danielle Jacquart, *Les avatars de la phrenitis chez Avicenne et Rhazès,* in *Maladieet Maladies. Mélanges en l'honneur de Mirko Grmek(éô.* Danielle Gourevitch), Genève, Droz. 1992, pp. 181-192. L'article le plus récent est celui de J. Godderis, *Une antique description du délire fébrile : Galien de Pergame et la "phrenitis" ou "delirium cum febre",* in *Medi-Sphere,* Bruxelles, novembre-décembre 1994, numéro 35 (Medi-Sphere est une publication mensuelle réservée aux généralistes et internistes belges et tirée à 15.000 exemplaires).
77. Cf. *op. cit.*
78. Syndrome mentaux organiques. Delirium.

A. Diminution de la capacité à maintenir l'attention envers les stimulations externes (par exemple, les questions doivent être répétées car l'attention ne se fixe pas) et à s'intéresser de façon appropriée à de nouvelles stimulations externes (par exemple, le patient persévère à répondre à une question posée antérieurement).

B. Désorganisation de la pensée, comme le montrent des propos décousus, inappropriés ou incohérents.

C. Au moins deux des manifestations suivantes :

1. obnubilation de la conscience, par exemple difficultés à rester éveillé pendant l'examen;

2. anomalies de la perception; erreurs d'interprétation, illusions ou hallucinations;

3. perturbation du rythme veille-sommeil, avec insomnie ou somnolence diurne;

4. augmentation ou diminution de l'activité psychomotrice;

5. désorientation temporo-spatiale, non reconnaissance des personnes de l'entourage;

6. troubles mnésiques, par exemple impossibilité de retenir des éléments nouveaux comme une liste de plusieurs objets sans liens entre eux énoncée cinq minutes avant, ou de se souvenir des faits passés, comme ceux caractérisant l'épisode pathologique en cours.

D. Evolution de cette symptomatologie sur une courte période (habituellement de quelques heures à quelques jours) et tendance à des fluctuations tout au long de la journée.

E. soit 1., soit 2. :

1. mise en évidence d'après l'histoire de la maladie, l'examen physique ou les examens complémentaires, d'un (ou de plusieurs) facteur(s) organique(s) spécifique(s), jugé(s) étiologiquement lié(s) à la perturbation

2. en l'absence de cette mise en évidence, on peut présumer l'existence d'un facteur organique si les symptômes ne sont pas explicables par un trouble mental non organique, comme par exemple un épisode maniaque expliquant l'agitation et les modifications du sommeil.

## Biographies

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# *Willughby's Observations in Midwifery: The Dutch Translation*

M. Thiery

**Summary**

The Dutch translation of the manuscript of "Observations in Midwifery" (ca. 1672) by the English man-midwife Percival Willughby (1596-1685) - pupil and friend of William Harvey - was printed in The Netherlands in 1754 and antedated the English edition (1863) by more than a century. This delay may explain why this valuable 17th-century text had no impact on obstetrical practice in Willughby's native country.

**Résume**

La traduction néerlandaise du manuscrit "Observations in Midwifery" (ca. 1672) de Percival Willughby (1596-1685), accoucheur anglais et ami de William Harvey, parût en Hollande en l'année 1754. Comme elle antidata l'édition anglaise (1863) de plus d'un siècle, elle ne put influencer la pratique des accoucheurs anglais.

## Introduction

This is the story of an English manuscript on the midwifery of the 17th century, a Dutch translation of which appeared one hundred years before the original was finally published in 1863 (14). Had Willughby's *Observations in Midwifery been* printed in the 17th century, this book would have influenced the course of midwifery in England. But fate decided otherwise and Willughby's text, circulating in only a small number of Ms copies, was doomed to become a fossil.

Eighty odd years after Willughby completed the final version of his MS and one century before it was finally printed, two municipal doctors of Amsterdam decided to lift the veil over the secret instrument used by the Roonhuysian accoucheurs : the obstetric lever (11b). Impressed by the timeliness of Willughby's teaching, Jacobus de Visscher and Hugo van de Poll appended a translation of Willughby's MS (3) to their pamphlet "The Roonhuysian midwifery secret discovered", printed in 1754 (2). The initiative taken by the two physicians (not surgeons !) to make Willughby's teaching known in 18th-century Holland raises some questions and asks for some comments.

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## Percival Willughby

Our hero was born in 1596 as the son of an impoverished country squire (8). Having completed his studies in the humanities, his MD uncle sent him to London as apprentice to Mr. James van Often, a barber-surgeon and Dutch immigrant. After the untimely death of his master, Percival took up the practice of midwifery in the capital city, where he became acquainted with the 22 years older lecturer on anatomy and surgery at the College of Physicians, Dr. William Harvey, who was to become his venerated mentor and friend (5). In 1631 Willughby moved to Derby, then a small country town, where he

practised until *ca* 1672. He died in 1685, almost 90 years old.

During half a century, Willughby devoted himself exclusively to the novel speciality of male-midwifery. His practice was large and his life harassing. But this strenous life was highly rewarding, and over the years he accumulated a clinical experience probably unique in 17th-century England.

This experience Willughby wished to convey to the midwives. From the start of his practice he made notes on difficult or interesting cases. He later classified his notes, provided them with comments and instructions to form a treatise on midwifery, the final version of which was ready in about 1672. He titled his MS : *Observations in Midwifery.*

**Willughby's teaching**

What were the messages Willughby wished to convey to midwives ? In point of fact, these messages are threefold. First a warning : midwives should refrain from intervening in the natural course of labour. Almost daily Willughby and W. Harvey found themselves confronted with disasters caused by the "meddlesome practices" of midwives. Both of these man-midwives condemned "meddlesome obstetrics" which they considered the main cause of abnormal labor, and both pleaded for "natural obstetrics", long before this therm was formally coined by Lucas Boer, at the end of the 18th century (1).

Willughby's second message to midwives was that they should learn the indications for internal podalic version and become thoroughly versed in the practice of this potentially lifesaving manoeuver. Indeed, non-destructive instruments for extraction of the fetus had not yet been made public and caesarean section was not practised in England. Horrified as Willughby was by the use of the traditional obstetric instruments - the crotchet and the knife - he advised version-extraction instead applying this manoeuvre as a panacea for difficult labour, as long as the fetus was alive.

Willughby's third and final message reminds us of that kind and deeply religious surgeon Ambroise Pare (7). It is one of sheer humanity: "I desire that all midwives may have a happy success in all their undertakings and that their knowledge, charity, patience and tender compassion may manifest their worth and give their women just cause to love, honour and to esteem them... Let midwives pray to God to direct them, and free their women from all the dangers and perilous accidents happening sometimes in childbed".

**The Translator**

As already mentioned, de Visscher and van de Poll appended an abbreviated translation of Willughby's *Observations in Midwifery* to their monograph on the Roonhuysian secret, published in 1754, titled *"Vroedkundige aanmerkingen,* etc..." (3).

The translator is unknown but in their introduction the editors inform the reader that they had received the text from Reinier Boom, written in both English and Dutch which suggests that it was Boom who translated the original MS. The editors go on to add that they had been unable to learn more about the author than what the reader will find in the *Vroedkundige aanmerkingen,* i.e., that Willughby practised midwifery in neighbouring England, with hisdaughter, before the year 1630. Because most of this statement is wrong and the English MS contains a wealth of information on Willughby and his relations, one might assume thatthe English text submitted by Boom may itself have been an excerpt of the original. Boom himself is a rather elusive character. He was accredited as a surgeon, passed the midwifery examination of the notorious Collegium Medicum of Amsterdam in

1746, and was a third-generation recipient of the Roonhuysian secret instrument (4, 11b).

How the Dutch obtained a copy of Willughby's MS is another unanswered question. Two hypotheses have been advanced. The first is that it occurred through Willughby's former preceptor who, being a Dutch expatriate, may have maintained contact with members of the profession overseas. The other contention - equally apocryphal - is that Hugh Chamberlen Sr, who lived for some time in The Netherlands, showed a copy or a summary of Willughby's MS to Boom or one of his fellow accoucheurs (8).

**Purpose of the Dutch Translation**

What exactly was the intention of de Visscher and van de Poll in wishing to publicize the *Observations in Midwifery* almost one century after the MS had been finalized ? Obviously, the editors must have felt that even in 1754 obstetricians and midwives in Holland could take profit from the messages their British colleague had attempted to divulge many years ago. In other words, "meddlesome" obstetrics was current practice in The Low Countries, where destructive operations were performed excessively and podalic version was generally ignored in the middle of the 18th century.

Of course, podalic version was known in Holland and Hendrik van Deventer had given detailed instructions for its performance by properly instructed midwives in 1701 (12). However, there was little enthusiasm for this conservational procedure, as can be deduced from Mrs Schraders' diary, in which the Frisian midwife mentioned podalic version as a very unusual procedure in 1745 (10).

**Contents of the translation**

The Dutch translation consists of three parts; the main text and two introductions, one drafted by the editors themselves, the other a summary of the first pages of Willughby's MS.

The main body is a faithful translation of Willughby's *ObservationsbuX* the translator made large cuts in the text, deleting in this process most of Willughby's quotations and references. Of the case reports he dropped many, while amalgamating or splitting-up others. Positively, on the other hand, by rearranging the subject matter, prefacing the main topics by an abstract, and dividing the text into numbered paragraphs, the translator increased the readability of Willughby's *Observations* considerably. To our regret, however, the Dutch version was bereft of most of the data concerning Willughby, his relationship with his mentor William Harvey, and of many colourful anecdotes.

The Dutch treatise is composed of three main sections concerned with normal labor, pathologic labor, and a small number of complications of pregnancy and parturition.

1. Normal labor.

The various tasks of the midwife during normal labor are discussed in detail notwithstanding the fact that it was Willughby's contention that in "natural births" the role of the midwife is marginal. Her presence, although desirable, is not essential because many parturients will safely deliver unattended and, in any case, they will be better off with no midwife than with a "meddlesome" one.

Delivery of the placenta should be procured without delay and for a refractory placenta Nature may be assisted. Sneezing or coughing may help expulsion and the administration of a "birthing powder" is admissible, but only in the third stage of labor. Although the author was certainly aware of the infective hazard of placental retention as originally exposed by his mentor W. Harvey (13). Willughby kept silent about puerperal fever which had been ravaging Western Europe since 1652 (11). For this omission

there can be only one explanation : that the epidemic had not yet reached England. Because his own patients were usually delivered in their own surroundings sporadic cases of puerperal fever were extremely rare in his practice.

2. Abnormal labor

The second and most interesting section of the *Aanmerkingen* is concerned with abnormal labor. The translator amplified Willughby's introductory paragraph by carefully listing the various causes of dystocia to be discussed, and this list is extremely interesting because it gives an idea of 18th-century views on dystocia.

Pelvic dystocia is not mentioned as such, but cephalopelvic disproportion is discussed at the end of the section among the instances where performance of podalic version may be difficult or even impossible. This, again, may seem peculiar because rickets was widespread in Willughby's country, where the "English disease" arose in the 17th century spreading through all northern parts of Europe, including Holland. Moreover, Willughby had been the first to point out the pernicious effect of the rickety pelvis on the course of labor, describing the "flat pelvis" in a case report dated 1650, not to be found in the Dutch translation.

Dry labor is mentioned as another cause of dystocia, but most of the examples given are cases of premature rupture of the membranes. It is clear that Willughby's message to the midwife was to caution her against the practice of rupturing the membranes artificially.

The misconception that fetal demise may hamper the delivery, which goes back to Antiquity, was shared by Harvey and his pupil Willughby, who still accepted - at least in part - the active role of the fetus during delivery. Although this theory had been shattered by van Deventer (12), the Dutch translator did not delete it. In point of fact, fetal demise is a consequence, not a cause of malpresentation and cephalopelvic disproportion. Therefore, cases were to be handled accordingly, although in fetal demise one was allowed to make abstraction of the fetus and use the crotchet.

When, however, the fetus was still alive, destructive operations were to be condemned. For the delivery of the fetus, whatever its presentation and provided the pelvis was grossly normal, Willughby wished to use "only his hand and deliver the woman by the Child's feet". The translator took over almost literally the author's detailed description of the technique of internal podalic version which Willughby had refined considerably. He insists, among other things, on keeping the back of the fetus in the anterior position and probably was the first to use malar traction for the extraction of the aftercoming head. In constrast with the French, who kept their patients recumbent, Willughby insisted that the most convenient posture to perform version-extraction (as well as other obstetric manoeuvers) was the knee-chest position. However, because his MS was not published, the paternity of the knee-ellebow position for version-extraction was attributed to Fielding Ould who described it in 1742 (6).

3. Ominous complications

The final and third section of the *Aanmerkingen* is concerned with ominous complications of pregnancy, delivery and puerperium such as vomiting, diarrhoea and fits. The discussion is superficial as the factors causing fits were unknown and eclampsia had not yet been recognized as a clinical entity.

In the next paragraphs follows a discussion of vaginal haemorrhage. The etiology of antepartum bleeding is mysterious and its treatment a riddle. Indeed, Willughby's contemporaries - as those of the Dutch translator - did not yet distinguish accidental from unavoidable haemorrhage, a distinction which was to be

made by Rigby in 1775 (9). However, that Willughby knew about placenta praevia can be easily derived from his case notes, although we are unable to affirm that his insight as to the etiopathology of the disease was correct. At all events, his directions for treatment according to the degree of coverage of the cervix is entirely correct : attempts at spontaneous delivery for partial placenta praevia and podalic version for total placenta praevia, possibly after digital dilatation of the cervix.

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**Biography**

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# *La phobie des inhumations prématurées de Michael Ranft (1728) à Eugène Bouchut (1849)*

R. Olry

***Résumé***

*Au cours des XVIII etXIXe siècles, une authentique phobie des inhumations prématurées fit rage dans toute l'Europe. Bien que cette question remonte en fait à la nuit des temps, la publication de l'ouvrage de Michael Ranft (1728) d'une part, et l'attribution du prix Manni à Eugène Bouchut (1849) d'autre part, sont deux dates-clé entre lesquelles le nombre des recherches sur le diagnostic de la mort témoigne de l'urgence de réponses rassurantes pour une population inquiète. Cet article résume la bibliographie sur les inhumations prématurées, et ses implications dans le diagnostic de mort de 1728 à 1869.*

***Abstract***

*In the XVIII and XIXth centuries, a real morbid fear of premature burial raged all over Europe. Though this question is lost in the mists of time, the publication of Michael Ranft's book (1728) on the one hand, and the awarding of the Manni Prize to Eugene Bouchut (1849) on the other hand, are two key-dates, between which the amount of researches on the diagnosis of death show the need of reassuring answers to an anxious population. This paper summarizes the bibliography on premature burial, and its results on the diagnosis of death from 1728 till 1849.*

Aux XVIII et XIXe siècles, une authentique phobie des inhumations prématurées fait rage dans toute l'Europe (Milanesi, 1989). Les incertitudes médicolégales quant aux signes indiscutables d'une mort réelle et définitive font le lit d'une fantasmagorie encore influencée par plus de trois siècles de « Hexenwahn » (1). Des cas de mastication tumulaire (2) fleurissent çà-et-là, entre autre sous la plume de Michael Ranft, et la population se raccroche à l'imaginaire, faute de pouvoir être rassurée par la Science contemporaine. Aussi implacable dans sa réalité que dans sa trompeuse apparence, la mort frappe ou simplement frôle toutes les catégories sociales, comme pu en témoigner le célèbre anatomiste Jacques-Bénigne Winslow qui, aux dires de Monsieur de Fouchy, failli par deux fois être enterré vivant pendant son adolescence (Garraud, 1955), et jugea donc la question suffisamment importante pour lui consacrer plusieurs monographies (1732, 1740, 1742).

Cet article se focalise sur la période allant de la publication de Michael Ranft (1728) à la remise du Prix Manni à Eugène Bouchut en 1849. Toutefois, la phobie des inhumations prématurées remonte en fait à la nuit des temps (3), et l'Académie de Médecine de Paris n'a que très temporairement calmé les esprits par la reconnaissance officielle des signes indiscutables de mort réelle et définitive (4).

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**Un défi pour la Science**

Le problème des signes infaillibles de la mort, et donc celui des inhumations - voire même des dissections - prématurées, remonte en fait à la nuit des temps. Bien avant le XVIIIe siècle, la question avait été admirablement résumée par Ambroise Paré («Rien n'est plus sûr que la mort, rien n'est moins sûr que son heure»), et certains anatomistes commirent, dit-on, l'imprudence de ne pas s'assurer du caractère réel et définitif de la mort avant de commencer leur oeuvre (5). Insaisissable mélange d'une abominable réalité et d'égarements mythologiques, la phobie des inhumations prématurées va avoir ses heures de gloire pendant un siècle et demi, période au cours de laquelle la Science va devoir impérativement jouer un rôle social en descendant dans la rue pour rassurer une population qui exige des certitudes.

Anatomistes, médecins légistes se mettent à l'ouvrage, mais le nombre des travaux publiés ne fait malheureusement que traduire une réflexion encore très nouvelle sur un sujet pourtant ancien, tant en France (Winslow, 1732, 1740; Bruhierd'Ablaincourt, 1742, 1745, 1746; Louis, 1752; Janin, 1772; Thiéry, 1790; Portai, 1796) qu'en Allemagne (Brinkmann, 1777; Mùller, vers 1790; Struve, 1797; Ackermann, 1804; Kaiser, 1822; Donndorf, 1823; Taberger, 1829; Desberger, 1833; Kraus, 1837; Nasse, 1841; Lothmar, 1847), en Suède (anonyme, 1775, 1776; Bjôrn, 1795; anonyme, 1801; Fahlman, 1808; anonyme, 1840), au Danemark (anonyme, 1807; Nissen, 1827) ou en Russie (Simon, 1835) (voir tableau 1). La rapidité des traductions atteste du caractère à la fois international et urgent de la question (voir tableau 2), mais les résultats demeurent modestes: des moyens sont certes proposés pour conforter un diagnostic de décès, mais la place au doute reste inexorablement présente et suscite la recommandation d'un certain nombre de précautions.

**Affiner le diagnostic, mais rester prudent**

La mort étant un phénomène incompris, il convient de multiplier les différents tests et examens afin de ne pas être trompé par sa forme apparente: François Thiéry recommande ainsi (6)

*«des frictions sur tout le corps, faites avec un mélange tiède de vinaigre et d'eau, l'irritation des lèvres et du fond de la bouche par les barbes d'une plume; l'introduction et l'agitation de l'extrémité de cette plume dans le nez (...) l'insufflation dans la bouche et dans les narines du sujet, soit par le souffle d'une personne saine, soit au moyen d'un chalumeau (...) la conclamation ou les cris, l'appel de la personne répété plusieurs fois, de même que le nom des objets qu'elle a le plus chéris (...) de grands coups donnés à la plante des pieds avec des verges ou des fouets, la scarification de cette même partie, l'incision ou le renversement de quelques doigts (...) l'application d'un cautère actuel ou fort chaud sur quelque extrémité du corps».*

Lorsque le présumé défunt demeure impassible à tous ces tests, le diagnostic de mort réelle et définitive est fortement probable, mais Thiéry conseille de se méfier de ce que l'on nommerait actuellement des faux négatifs: il recommande ainsi de respecter un délai entre ce diagnostic et l'inhumation, délai qui doit être corrélé à la cause supposée du décès (7):

*«On ne doit les porter (les défunts, N.d.A.) aux scépultures que vingt-quatre heures après les signes ordinaires de la mort, quand elle paraît à la suite des maladies chroniques qui auront duré plusieurs mois; qu'après trente heures, si elles n'ont persisté que six semaines; qu'après quarante heures, quand elles ont eu le cours de quatorze à vingt-un (sic) jours; qu'après cinquante heures, quand leur durée a été de sept à quatorze jours; qu'après soixante heures, s'il n'y a eu que de quatre à sept jours de maladie; qu'après*

*soixante-douze heures ou trois jours révolus, quand la mort subite ou rapide est survenue en trois jours ou en peu de moments, par divers accidents naturels et propres au corps, ou par différents causes extérieures (...) mais dans tous les cas de maladies nerveuses, soporeuses ou convulsives, même chroniques, il convient que l'exposition soit de deux jours entiers».*

Dans le but évident de rassurer l'entourage familial ou les amis du défunt, l'auteur prévoit même que toute personne qui nourrirait encore le moindre doute sur l'authenticité du décès peut exiger la prolongation de l'exposition. Il demande en effet qu'il soit (8)

*«permis à tout spectateur, ami ou inconnu, de s'opposera l'inhumation, en souscrivant la somme de trois livres pour chaque jour de plus».*

**Le développement des obitoires**

Pendant la période d'exposition ou de «probation», le corps (on n'ose encore parler de cadavre) peut certes demeurer chez lui, mais il est fortement conseillé de le déposer plutôt dans des chambres mortuaires d'attente: les obitoires (9) (Masius, 1797; Speyer, 1826; Schnackenberg, 1836; Biophilos, 1838). Les caractéristiques de ces locaux sont clairement définies jusque dans leurs moindres détails (10):

*«Ce serait donc une oeuvre de justice et de bienfaisance, sil'on formait, surtout dans les grandes villes, des dépôts ou lieux d'attente, où les familles qui ne voudraient ou ne pourraient pas garder chez elles leurs morts au-delà de douze heures, auraient liberté de les faire porter. On aurait donc soin de choisir ou construire aux dépens des fabriques, près des églises paroissiales, ces lieux suffisamment aérés, même aux anciens cimetières, s'ils sont spacieux et peu éloignés; il serait, dis-je, préparé le plus promptement possible, un logement double, fermé et couvert, dont la grandeur devrait être proportionnée au nombre des paroissiens (...) un poêle, ou mieux encore une cheminée les échauffera (...) pour y entretenir une température modérée».*

Dans le cas où le défunt viendrait à se réveiller, une petite clochette reliée à son poignet par une ficelle ne manquerait pas de rappeler les vivants à la réalité, et de surseoir ainsi à une bien fâcheuse méprise...

**Et si tout cela ne suffisait pas?**

L'instinct de conservation, poussé dans ses derniers retranchements, confine à l'instinct de «réssuscitation». Dans le cas où la mort serait suffisamment trompeuse pour amener un sujet encore vivant jusque dans son cercueil, il convient de trouver quelques parades que la malheureuse victime puisse utiliser du fond de son tombeau pour se sortir de ce mauvais pas: soit en attirant l'attention des vivants (Pickel, 1812; Rolffs, 1843), soit en parvenant à s'extraire elle-même de ce qui devait être - mais un peu trop tôt - sa dernière demeure (Schâffer, 1839). Qu'elle soit réellement efficace ou plus modestement rassurante, cette « technologie de l'auto-extraction tombale » stimule encore aujourd'hui quelques esprits comme celui de Jacques Delarue (11) qui proposait un procédé infaillible il y a à peine trente ans...

**L'Académie s'impatiente**

Bien que d'indéniables progrès aient été faits dans le diagnostic de la mort et la prévention des inhumations prématurées, la phobie semblait toujours bel et bien présente dans la population. L'Académie de Médecine de Paris décide alors en 1837, tant pour stimuler les travaux que pour tenter de rassurer une fois pour toute, de créer un prix qui récompensera les résultats les plus péremptoires. Décerner ce prix devrait enfin prouver que le problème est résolu, d'autant plus que le prix en question portera le nom de Pietro Manni, célèbre pour ses recherches sur

*Tableau 1 - Bibliographie chronologique de Michael Ranft (1728) à Eugène Bouchut (1849)*

les signes de la mort. Ce n'est que douze ans plus tard que le prix sera enfin décerné (Bouchut, 1849), mettant ainsi théoriquement un terme tant aux interrogations des scientifiques qu'aux angoisses de la population.

Cette période de l'histoire médicale montre que tous ont assumé leurs responsabilités: la population en exprimant ses attentes, les scientifiques en multipliant leurs recherches, et l'Académie de Médecine en affirmant l'urgence de la question. Bien que tout débat ne puisse être exclus, même de nos jours, les XVIII et XIXe siècles furent les témoins d'une exploitation optimale des connaissances de l'époque dans un domaine pourtant bien délicat.

| Auteur | Date | Ville | Pays |
|---|---|---|---|
| M. Ranft | 1728 | Leipzig | Allemagne |
| J.B. Winslow | 1732 | Paris | France |
| | 1740 | Paris | France |
| | 1742 | Paris | France |
| J.J. Bruhier | 1745 | Paris | France |
| | 1746 | Paris | France |
| A. Louis | 1752 | Paris | France |
| J. Janin | 1772 | Paris | France |
| Anonyme | 1775 | Stockholm | Suède |
| Anonyme | 1776 | Stockholm | Suède |
| J.P. Brinkmann | 1777 | Munster | Allemagne |
| F. Thiéry | 1790 | Paris | France |
| Anonyme | 1790 | Paris | France |
| von Mùller | vers 1790 | ? | Allemagne |
| D.G. Bjôrn | 1795 | Linkôpping | Suède |
| A. Portai | 1796 | Paris | France |
| C.A. Struve | 1797 | Hannovre | Allemagne |
| G.H. Masius | 1797 | Leipzig | Allemagne |
| Anonyme | 1801 | Stockholm | Suède |
| J.F. Ackermann | 1804 | Francfort | Allemagne |
| Anonyme | 1807 | Copenhague | Danemark |
| A. Fahlman | 1808 | Stockholm | Suède |
| G. Pickel | 1812 | Wùrzburg | Allemagne |
| K.L. Kaiser | 1822 | Francfort | Allemagne |
| J.A. Donndorf | 1823 | Quedlinburg | Allemagne |
| CF. Speyer | 1826 | Erlangen | Allemagne |
| N.L. Nissen | 1827 | Copenhague | Danemark |
| J.G. Taberger | 1829 | Hannovre | Allemagne |
| A.F.A. Desberger | 1833 | Leipzig | Allemagne |
| L.C. Simon | 1835 | St Petersbourg | Russie |
| W.P.J. Schnackenberg | 1836 | Kassel | Allemagne |
| L.A. Kraus | 1837 | Helmstàdt | Allemagne |
| Biophilos | 1838 | Neustadt | Allemagne |
| P. Manni | 1839 | Leipzig | Allemagne |
| F. Schâffer | 1839 | Landsberg | Allemagne |
| Anonyme | 1840 | Uddevala | Suède |
| C.F. Nasse | 1841 | Leipzig | Allemagne |
| J.C.F. Rolffs | 1843 | Cologne | Allemagne |
| C.J. Lothmar | 1847 | Leipzig | Allemagne |
| E. Bouchut | 1849 | Paris | France |

***Tableau 2 - Traductions de quelques monographies sur les inhumations prématurées.***

| Ouvrage de | Traduit en | Par |
|---|---|---|
| M. Ranft (1728) | Allemand (1734) | ? |
| J. B. Winslow (1742) | Anglais (1746)<br>Suédois (1751)<br>Allemand (1754) | ?<br>O. Tillaeo<br>C. Jantke |
| F. Thiéry (1790) | Allemand (1788) | A. Wittenberg |
| A. Portai (1790) | Allemand (1793) | D. Humpel |
| E. Bouchut (1849) | Allemand (1850) | F. Dornblùth |

## Notes

La « Hexenwahn », ou « chasse aux sorcières », a sans l'ombre d'un doute participé au développement des légendes entourant le passage de vie à trépas. Guerre ouvertement déclarée par le Pape Innocent VIII dans sa Bulle «Summi desiderantes affectibus» du 9 Décembre 1484, elle sévira pendant près de 300 ans jusqu'à ce que Louis XV interdise la question sous ses formes ordinaire et extraordinaire en 1780 (Villeneuve, 1974).

La mastication tumulaire viserait à assouvir la faim des personnes enterrées vivantes. De nombreux auteurs firent état de ce phénomène lors de l'exhumation des corps auxquels manquait parfois un fragment de membre dévoré par le défunt lui-même (Ranft, 1728).

Le célèbre anatomiste parisien Riolan soulevait la question du diagnostic de décès dès 1653, et l'allemand Wilfroth soutenait une thèse de doctorat sur le sujet en 1725 à Halle.

Le mythe (?) de l'inhumation prématurée et de la mastication tumulaire refait régulièrement surface depuis 1849 (Stohlman, 1851 ; Walsh, 1897). En 1948, le Bulletin municipal officiel de la ville de Paris annonçait qu'un français sur 550 est encore enterré vivant (cité par Dérobert, 1974). Pour une étude détaillée de la question, voir Peron-Autret (1979).

Tel semble avoir été le cas de l'italien Giacomo Berengario da Carpi, et la tradition, véhiculée par Ambroise Paré lui-même mais controversée depuis, voulait que le célébrissime André Vésale soit lui aussi tombé dans ce piège (voir à ce sujet Dumaître, 1986).

6. Anonyme (1790, p. 312). Ces méthodes évoquent aujourd'hui davantage une caractérisation d'un état de coma qu'un diagnostic de mort réelle et définitive.
7. Anonyme (1790, pp. 304-305). La durée d'exposition doit donc être inversement proportionnelle à la durée d'évolution de la maladie, comme si la mort était plus sûre quand elle s'approche lentement. Cette notion de délai différentiel existait déjà plus de trois siècles avant notre ère (voir à ce sujet Thomas, 1980).
8. Anonyme (1790, p. 309). Le coût de ce sursis vise probablement à éviter la systématisation de cette pratique.
9. Ce terme dérive du latin *Obitus* qui signifie fin, mort, trépas ou destruction. Il ne fut donc pas choisi au hasard, mais comme pour confirmer par avance l'authenticité du diagnostic de décès.
10. Anonyme (1790, pp. 305-306).
11. Le moindre mouvement du sujet dans son cercueil provoquait l'entrée d'air dans la tombe et le déploiement d'un drapeau à la surface! (voir à ce sujet Thomas, 1980).

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**Biographie**

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# *The Highlands and Islands Medical Service Precursor of a State Funded Medical Care System ?*

M. Crosfill

**Summary**

*The Highlands and Islands of Scotland cover a large area of the country and are sparsely populated. A series of man-made and natural disasters ensured that, early in the nineteenth century, they were also poverty stricken. It was gradually recognised that the degree of social deprivation was too severe for self-help and could only be alleviated from outside the area. This paper traces the use of State funds to support a medical service, from the first payments under the new Poor Law until the outbreak of war in 1939.*

*Improvement was at first very slow but a turning point came with the establishment in 1913 of the Highlands and Islands Medical Service Committee. The committee was given a free hand to expand or retain its annual grant as it saw fit; the way in which the money was used to develop first a comprehensive primary care service and then the nucleus of an integrated hospital service is revealed in the annual reports. The success of this local scheme may have made easier the later introduction of a national health service.*

**Résumé**

*Les Highlands et les Iles écossaises occupent une grande étendue du pays et ces zones sont très faiblement peuplées. Une suite de désastres naturels et de calamités engendrées par l'homme a contribué au fait qu'au début du 19e siècle, la région était dans la misère. Peu à peu on a constaté que le degré de privation sociale était trop important pour les efforts personnels des habitants et que cette situation ne pouvait être allégée que par des efforts extérieurs. Cet article retrace l'utilisation des fonds de l'état pour l'instauration et l'entretien d'un service médical depuis les premiers versements aux termes des lois sur l'assistance publique jusqu'au moment ou éclata la guerre en 1939.*

*Au début, l'amélioration fut très lente, mais la situa tion fut améliorée par l'établissement en 1913 du comité de service médical des Highlands et des Iles. Le comité avait le pouvoir d'augmenter ou de diminuer sa subvention annuelle selon son propre jugement. Dans les rapports de gestion, on peut examiner l'histoire de l'utilisation de cet argent. En premier lieu, il a servi à développer un service compréhensif de premier soins et ensuite le début d'un service d'hospitalisation intégré. Le succès de ce projet régional a peut-être facilité l'introduction de la sécurité sociale plus tard.*

Although England, with an area of 50,000 square miles, is considerably largerthan Scotland (30,000), in physical extent, especially if one includes the outlying island groups, it is the lesser. There are also profound differences in population density. These are indicated on the map; England at about the turn of the century had approximately 700 inhabitants per square mile. The comparable figure for the whole of Scotland is 150. The population of the Highlands and Islands which, for the purpose of this paper, comprise the counties of Sutherland,

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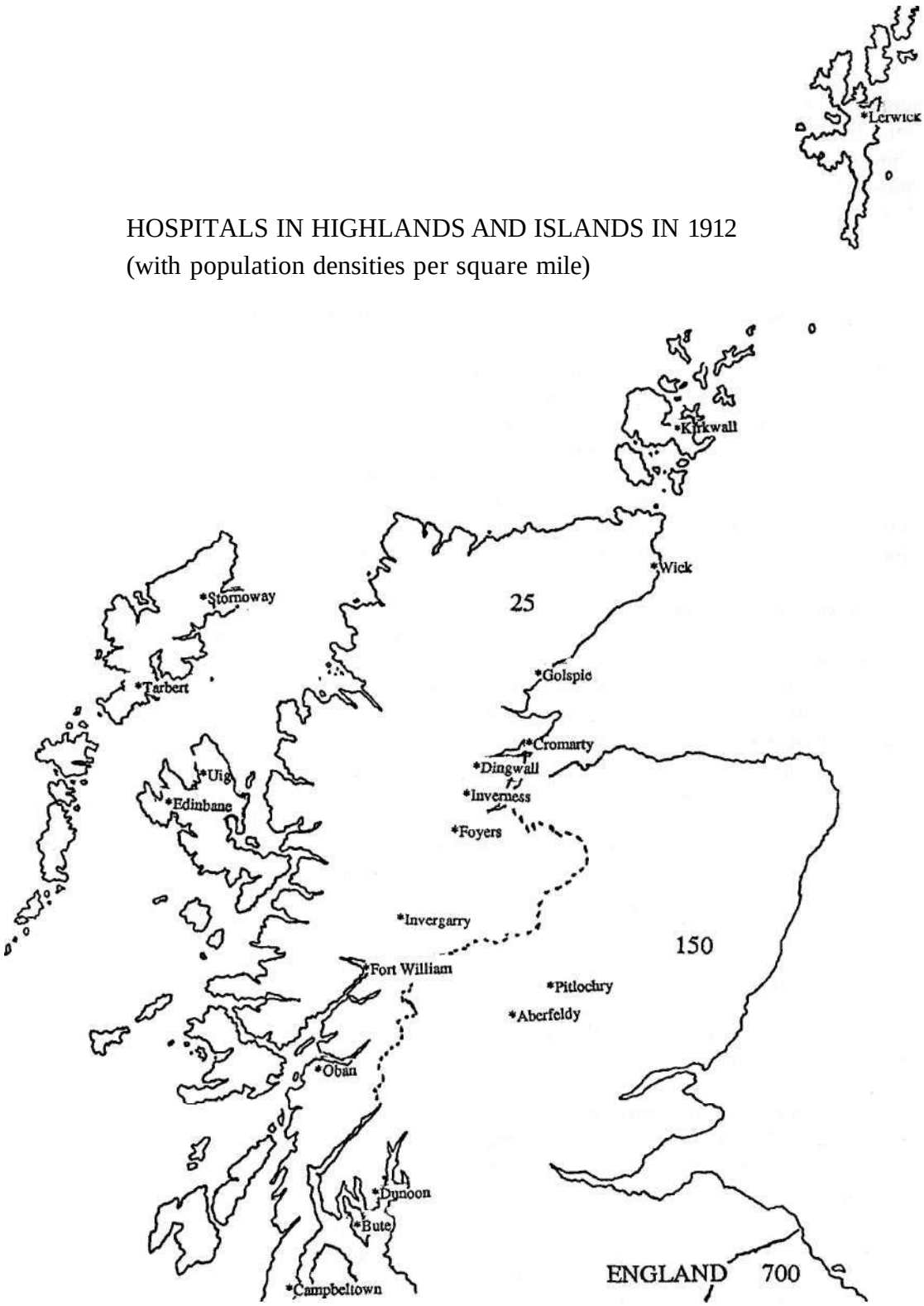
HOSPITALS IN HIGHLANDS AND ISLANDS IN 1912
(with population densities per square mile)



Caithness, Ross and Cromarty and Inverness with parts of Argyle and Perthshire (i.e. the land to the left of the dotted line on the map) has dropped steadily over the last century and a half, but in 1900 was about 350,000 giving a density of less than 25 per square mile - indeed the Registrar General who counted heads per acre to the nearest whole head, could not accept that the Highlands were populated at all !

It is now exactly 150 years since the passing of the Poor Law (Scotland) Amendment Act 1845 and this measure constitutes the first meaningful Government involvement in the provision of medical care. There were important differences between this Scottish and the comparable English Act of 1834. Firstly the *able bodied* Scot had no legal entitlement to poor relief; more importantly the provision of outdoor relief (outwith the poorhouses) was given far more prominence - indeed it was actively discouraged in England. Parochial Councils were compelled to provide medical attendance to the immates of poorhouses where these existed but they were also enabled to subscribe to local hospitals and enjoined to provide "medicines, medical attendance, nutritious diet, cordials and clothing for such poor in such manner and to such extent as may seem equitable and expedient". Interestingly enough no definition was given of "the poor".

It will be shown that the somewhat permissive phraseology of the 1845 Act was used to provide at least a rudimentary medical presence in the more remote parishes of the Highlands; meanwhile it is worth noting the inception in 1848 of the Medical Relief Grant. This was an additional sum of £ 10,000 provided centrally and distributed annually to participating parishes, which had to match the grant from their own resources. It was given on a per capita basis of up to two pence per parishoner but on a sliding scale based on population density - probably the first occasion on which the special medical needs of the remoter areas were formally recognised.

Consideration of medical care cannot be divorced from that of the prevailing economic conditions. Thus one should note that by 1845 the profitable and labour-intensive kelping industry had been all but extinguished ; there was a harvest failure in 1836 whilst in 1847 the same potato blight which decimated Ireland brought famine conditions to the Highlands. Throughout the period and for the next thirty years there continued the devastation of the Clearances. The enforced emigration of a substantial proportion of the able bodied demonstrably skewed the age profile of the population which in any case declined by about 25 % in the period under review.

Attention was drawn to the parlous state of the medical services in the Northern counties in 1852 by the Royal College of Physicians of Edinburgh. They published a survey (1) based on a questionnaire addressed to parish ministers, doctors and others; replies were received from 155 (out of 170) parishes. Of these, 62 were deemed to be adequately supplied with doctors, 52 partially and 41 (i.e. population of 34,366) not at all. The replies to the questionnaire (which are still in the possession of the College) are extensively quoted by Collacott (2) in a wide ranging survey of Highland medical history. The ministerforWalls (Shetland), for example, wrote:

*"There is a kind of despair, or rather apathy among the people as if the hopeless condition in which they are left in regard to competent medical aid were necessarily their lot'.*

The medical comments were from a different viewpoint:

*"The special hardship incident to my situation is the poverty of the people and the many applications for medical relief which, although unremunerated, cannot in many cases be refused".*

*"Owing to the miserable and inadequate remuneration I cannot afford after supporting a wife and ten of a family, even to insure my life or make any provision for myself or them.*

*As my family increased I was obliged to give up a medical periodical I can scarcely afford to give my family the common rudiments of education".*

The forthright conclusion of the committee was that no improvement in the social state of the people would be brought about within the present generation as would enable them to provide medical aid for themselves; if relief were to be given "it must be from without". Both the requirement for external (State) funding and the need to extend relief to some not covered by the Poor Law provisions were clearly demonstrated but the report was ahead of its time and appears to have elicited little comment and no action.

It is hardly surprising that any improvement in medical provision was modest. In 1851 the *Medical*D/recfory lists 73 names of practitioners with addresses in the Highlands and Islands; by 1883 there are 103 - but there are 121 parishes paying to their doctors sums which vary from £2 to £172 annually. The average sum paid in Sutherland for example was about £60 yet, as we shall see, this constituted a major part of the doctor's income. Hospital provision was similarly scanty - the Belford Hospital in Fort William was founded in 1865 and there were already hospitals in Orkney (1836) and Inverness (1800) but most of the small highland hospitals were built towards the end of the century.

There were many reasons for the growth in the 1880's of political awareness in Westminster of the plight of the northern counties; the Royal Commission which resulted did not mince words and reported "a state of misery, of wrong doing and of patient long suffering without parallel in the history of our country". (3) The Crofter's Holding Act of 1886 which followed and which in effect gave the crofter a permanent lease of his land has been called the Magna Carta of the Highlands and proved to be the measure which provided the social stability upon which a framework of medical care could be built.

The last quarter of the century which saw the building of a number of small hospitals (Dingwall 1873, Stornoway 1896, Lerwick 1900) was also enlivened by the reports of the County Medical Officers of Health. These reports suffered from the disadvantage that the morbidity and mortality of the Highlands was perforce compared with that of the more crowded and industrialised south and, of course, at a time when direct personal medical attention did little to affect the figures; thus the MOH for Ross and Cromarty stated "much has been said as to the filthy and squalid state of many of the houses of our highland fishing and crofting population. No doubt aesthetically such accusations are well founded but when brought to the test of hard statistics the fact remains that in such habitations there exist more than usually healthy men and women". With that he quoted an annual death rate of 13.9 per 1000 against that for England and Wales of 14.5. Reliance therefore tended to be placed on anecdotal evidence, reserving as the main statistical weapon the percentage of uncertified deaths. This figure which in many cases was over 50 % (80 % in Loch Broom as late as 1908) was used to suggest that no medical attendance was available (or utilised) during the final illness. Whatever the true signifiance of these figures they at least presented a contrast to those for mainland Scotland which hovered around the 2 % mark.

A major survey into the application of Poor Law Medical Relief in Scotland was carried out in 1904. (4) By this time the treasury grant of £10,000 had doubled to £ 20,000 but this extra amount was used in the main to provide nursing care in the larger poorhouses; by this time also the percentage of participating parishes had risen from 50 % to over 90 % so the amount available to the smaller parishes had actually diminished. The report, although comprehensive could do little more than point out the special circumstances of the Highlands and Islands.

The same point was made in the report of the Royal Commission which in 1909 considered the workings of the Poor Law as a whole. (5) It found space to state that medical attendance in many of the smaller (northern) parishes was "deplorably insufficient". Many of these parishes were unable to maintain a doctor at all, in the small island parishes medical officers were constantly changing; the jobs seemed to attract those without sufficient capital to purchase a practice further south and one can gain the impression that there was a high proportion of women doctors, some of whom were said to come for the summer but to migrate south during the highland winter. Be that as it may, the job of the highland doctor was no sinecure - the report quotes one area of Lewis where from Europie in Ness to Mealshader in Uig there is a single road of 72 miles linking 40 villages with a total population of 13,000 and served by two doctors who do their rounds in a gig or on foot. Many of the houses were said to be more worthy of a kaffir kraal than a section of Great Britain.

With constant repetition, the message that the Highlands and Islands were different finally got through in 1912 when the Asquith Government set up a commission under the chairmanship of Sir John Dewar specificaly to report on the Medical Services of the Highlands and Islands. The Dewar report (6) with its associated minutes of evidence (7) was not only of profound importance to the health care of the north, it gives also a fascinating and comprehensive picture of the state of medical practice at the turn of the century. Admittedly there is an element of special pleading - many of those being interviewed stood to gain and it did their case no harm to emphasise the more arduous or bizarre aspects to their jobs, but this serves merely to add spice to the document.

The committee conducted interviews throughout the area with witnesses who had previously been circulated with questionnaires. Such was the interest in the enquiry that 87 of 102 doctors responded. Detailed evidence was taken as to the sources of income of the practitioners and it is quite clear that the payments by parish councils for the care of paupers formed the biggest single contribution. It is equally clear that these payments bore little relationship to the number of paupers on the roll - one payment as large as £12 per pauper per year was reported and this compared with a figure of a few shillings down south. The payment was therefore set in order to attract a doctor into the parish and was perhaps a tacit recognition that there were large numbers of crofters and their dependants on the borderline of pauperdom, many of whom could not or would not pay the doctor's fee. Many doctors claimed 30 % of bad debts, Dr Mackay of Lochcarron reckoned that in his practice the figure was nearer to 75 %.

The fee for a visit was not large - a sum of half a crown (12.5 p) could be afforded by many, but the doctor was constrained to charge mileage at a rate of about a shilling (5p) a mile; when many homes were ten or more miles from the surgery, this could add up. Dr Mackenzie of Badenoch said his furthest patient was twenty miles away, nine miles of the journey being by footpath. Whilst the doctor who served Rhenigadale in North Harris pointed out that the path there was so narrow that one had to walk sideways - on the north side there is a sheer drop to the sea. The mileage charge could, of course, be shared between several patients or levied on the one patient who could pay. There is a rathertouching anecdote of a practitioner who went to visit the local landowner but who found himself giving ten or more free consultations at the roadside as well.

Then as now a major concern of the profession was the possibility of being subjected to frivolous calls if there were any form of capitation payment and most insisted that there should be some deterrent charge at the time of consultation. One man with experience of the club system was asked :

*"How did you assume it was a trivial call ?*
*"I didn't assume anything, I simply went to calls in rotation.*
*"What did you say when you arrived ?*
*" I did not say anything, I thought a lot".*

Any form of complacency met with a savage response from the committee who seemed to have a clear idea of what they wanted witnesses to say; thus Mr Donald Smith Inspector of Poor forthe parishes of Lochs and Barvas was pilloried:

*"The general effect of this paper you have put in would be to suggest there is no medical problem whatever in Lewis. You say that people are invariably able to pay the doctor's fee and that the district was never so well supplied with doctors and nurses...*
*"Does that really represent your mind ? ...*
*"Should this committee report that there is no medical question requiring to be solved ?*
*" If that is not your view, what is it ?*
*"Is it not a fact that a year or two ago your rates were in such a condition that you were not able to pay either the paupers or the medical officer ?*
*"You are quite likely to be again in the same position of having no money eitherto let your doctor live or to provide food for your paupers ?*
*"So there is some room for improvement in your medical services!*

His answers were monosyllabic.

Any lack of awareness amongst the doctors themselves was similarly exposed. Dr Victor Ross of Garynahine had 4462 patients, the furthest 30 miles from his home and several hundred on the island of Bernera where there was no wheeled traffic at all. He was asked whether he had more work in the parish than he had time to do and replied that he had had only two messages in a fortnight. He was never hard worked save for three months of the year - forthe other nine months there was just enough to keep him going. He was obviously a therapeutic nihilist:

*"Wouldyou be glad to have some more work to do ? Yes.*
*"There is material for work if the conditions were favourable ? Yes, you could make a great amount of work.*
*"And useful work ? I don't say it is useful, you could make it".*

There were not many calls for additional doctors despite what seems to us to be a heavy case load; some doctors' houses were inconveniently sited on the edge of a practice and the need for cars was obvious but the loudest call was for additional trained nurses. The few that were in post were very highly regarded both by the doctors and by the populace. Many appeared to be working with only the lightest of medical direction. Much of the midwifery was performed by local women who had undergone only a few months training but many of the deliveries were conducted by village wives whose efforts did not receive the same approval from the doctors. DrTolmie of South Harris did not mince matters :

*"Are there two maternity nurses in your district ?... Yes. I don't know the qualifications of the one in the middle of the island. I asked her and she said she did not know what the Highlands and Islands Committee had to do with her qualifications. The other is an old crofter's wife and goodness knows how she came to be a nurse; she cannot read and she cannot write. She is great on that ointment called Zam-buk. When speaking of Iodoform she says lofferdum..."*
*"Is there a house in Harris with people under the same roof as the cattle ? Yes, I was going to a house where somebody was sick and I was met by a calf... It was a calf that answered the door."*
*"Is this still going on ? No, there was a party staying with this woman and they had a row and she pulled the house down."*

The Dewar Report was followed commendably quickly by the Highlands and Islands (Medi-

cal Service) Grant Act 1913 which set up a fund of £42,000 "forthe purpose of improving medical services including nursing". The disbursements from this fund are detailed in the annual reports of the Scottish Board of Health. Little happened during the first World War and by 1922 the balance of the fund stood at £173,000; there had been no capital expenditure but some £44,000 had been paid out for doctors' travel expenses, £2,000 on accommodation and smaller sums on sickness and holiday relief. (8)

By 1923/4 it was believed that the situation as regards general practitioner services had been largely remedied. Not only was there provision for a doctor's attendance in the most inaccessible mainland districts and remotest islands, but fees were so reduced that no person who required medical advice or treatment need hesitate on financial grounds. Furthermore there were being attracted into the Highlands and Islands practitioners of a very satisfactory class, mostly young men equipped with up to date medical teaching. A ceiling was now placed on doctor's mileage payments but the continued rise in other expenditure meant that the fund overspent by £12,000 in this year. The balance was now £130,000. (9)

The following year a decision was made to improve the hospital services. Ideas about hospital provision had changed since 1913 - then the call was for a two or four bed hospital in every parish, the need for which was illustrated by Dr Mackenzie of Uist who had had to operate in a hut on a case of strangulated hernia where a clerk gave chloroform and light was obtained from a tallow candle held by a neighbouring crofter who fainted during the proceedings. Now there was a tendency towards centralisation and specialisation. The map indicates by dots the hospitals which were in place in 1912. A surprising number of these survive and one of the more far sighted decisions of the board was to set up specialist services in the more isolated hospitals. By 1924/5 there were general surgeons attached to hospitals in Lerwick, Kirkwall and Lewis. Wick was shortly to follow. Modern operating theatres were built and at the same time steps were taken to provide centralised laboratory services at Inverness. An ENT surgeon was installed here and he was given pastoral oversight of the region.

One hospital will serve as an example of the impact of these changes; the Lewis Hospital in Stornoway was built in 1896. It had 12 beds originally but was enlarged to 20 beds in 1915. A general surgeon was appointed in 1924, his basic salary paid by the fund and the table shows the dramatic effect this appointment had on the work of the hospital. The numbers of outpatients, of admissions and of operations all rise precipitately whilst the mortality rate stays constant or, if anything, declines. The fund was also used to build a theatre, Xray room outpatient suite and laboratory together with a boiler house and nurses accommodation. (10)

| | 1899 | 1915 | 1923 | 1929 |
|---|---|---|---|---|
| Admissions | 77 | 56 | 183 | 596 |
| Outpatients | 2 | 0 | 7 | 1690 |
| Operations | 26 | ? | 60 | 551 |
| Deaths | 5 | 5 | 11 | 23 |

*Activity data from Lewis Hospital, Stornoway*

Successive annual reports reveal the continued development of the hospital service and a continued decline in the financial position of the fund. In 1929, by which time the Board of Health had become the Department of Health for Scotland, the Highlands and Islands Additional Grant Act was passed. Little was to come from this new source until the existing surplus was exhausted, but it did enable some expansion to be continued despite the world financial crisis. In 1931 a surgeon was employed at Caithness. It is interesting that his salary was paid in part by the County Council and also that he was nominated by the Professor of Surgery at Aberdeen; (11) he had a limited tour of duty and his "prospects in relation to the University and Infirmary were not to be diminished." By the mid 1930s there is mention of an air ambulance service (the first in Argyll in 1933). Money continued to be spent on hospital extensions and in 1935, (in Shetland) on wireless communication. The balance that year from a total grant of £80,000 was £3-15-3 (£3.76) !

This survey did not extend beyond 1939 in which year there were surgeons at Wick, Thurso, Fort William, Lerwick, Kirkwall, Stornoway and Golspie, an anaesthetist at Fort William and developing specialist services at the base hospital in Inverness. It is, however, more appropriate to close with a comment from the report of the Cathcart committee which studied the working of the Scottish health service as a whole. (12) After mentioning the interdependence of a hospital service and a transport system (a problem which is still with us today) this remarkably upbeat report concludes :

*"On the evidence before us the Fund has brought great benefits to the people of the Highlands and Islands, is administered in an atmosphere of sympathy and understanding between the central department and the doctors and nurses and other parties and to the satisfaction of all concerned... Our study of the service was primarily directed to the peculiar conditions of the Highlands and Islands but we found that it had a wider bearing and we suggest that further study may provide valuable pointers for consideration of the larger issue of the future of medical services in Scotland as a whole".*

Herein, I believe, lies the justification for my subtitle.

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**Biography**

*Theauthor, who is now retired, worked for eight years as general surgeon at the Lewis Hospital in Stornoway. 1ste of Lewis*

# *Impact littéraire de la campagne de propagande antivénérienne du tournant du siècle*

J. Goens

**Résumé**

*La perception littéraire des maladies vénériennes au XIXème siècle a été radicalement modifiée par la vaste campagne de prophylaxie qui a débuté à la fin de celui-ci. A des écrivains présentant une vision romantique de la syphilis associée à la fierté initiatique et au génie de l'exaltation, a succédé une génération angoissée par l'obsession et la phobie qu'a générées alors le discours antivénérien. Les éléments moteurs de cette campagne étaient l'attention extrême à des statistiques surévaluées et la considération excessive de la transmission indirecte; mais également des concepts mythiques tels la parasyphilis ou diathèse syphilitique, le "génie syphilitique" et surtout Thérédosyphilis". Sous le couvert d'une prophylaxie sanitaire préconisée parles syphiligraphes, la campagne antivénérienne s'est avérée principalement une prophylaxie morale ne lésinant sur aucun moyen dissuasif, engendrant entre autre une véritable littérature de propagande antivénérienne. Après la première guerre mondiale, la crainte d'une dégénérescence de la race amoindrie par le dépeuplement va intensifier la propagande. Sa nature protectionniste, xénophobe, intolérante va se développer considérablement dans la littérature militante de l'entre deux-guerres pour se fondre dans les thèmes qui ont marqué le discours politique de l'époque hitlérienne. Les Alliés et la pénicilline ont heureusement mis un terme à cette rhétorique devenue délirante.*

**Summary**

*The literary perception of venereal diseases in the XIXth century was radically modified by the big prophylactic campaign that began at its end. After writers presented a romantic vision of syphilis associated initially with pride and exaltation, came a generation distressed by the obsession and the phobia that the antivenereal reaction then generated. The moving elements of this campaign, were the extreme attention to overvalued statistics and excessive consideration of indirect transmission; but also such mythical concepts as parasyphilis, syphilitic diathesis, "le genie syphilitique" and especially "heredosyphilis". This antivenereal campaign, appearing as a sanitary prophylaxis invented by the syphiligraphes, rapidly changed to a moral prophylaxis, using intensively dissuasive methods and generating among others a true propaganda literature. After World War I, the fear of a degeneration of the race, weakened by depopulation, caused an intensification of the propaganda. Its protectionist, xenophobic and intolerant nature then grew considerably in the militant literature to merge into the themes that have characterized the political speech of the Hitlerian period. The Allies and penicillin fortunately put an end to this delirious rhetoric.*

La littérature française du XIXème siècle constitue un véritable âge d'or culturel pour les maladies vénériennes, en particulier la syphilis qui devient, avec la tuberculose, le mal romantique par excellence. Elle y est source de fierté et d'exaltation plutôt que de honte et d'angoisse chez des écrivains aussi divers que Balzac ("Une magnifique maladie"), Gautier ("Une vérole splendide"), Flaubert ("Sache mon cher que j'ai gobé sept chancres (...) il reste une légère induration mais c'est la cicatrice du brave"), Baudelaire ("Le jour où le jeune écrivain corrige sa première épreuve il est fier comme un écolier qui vient de gagner sa première vérole") ou Maupassant ("J'ai la vérole ! enfin ! la vraie").

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Mais cette insouciance romantique ne durera pas et la littérature de la fin du XIXème siècle est imprégnée au contraire d'une phobie obsessionnelle des maladies vénériennes, qui transparaît par exemple chez les protagonistes des romans de J.K. Huysmans. André, dans "En ménage" (1881 ), n'éprouve pas, après s'être fait déniaiser par une prostituée, la fierté initiatique de Baudelaire, mais la crainte d'avoir attrapé "un incurable mal". Des Esseintes, dans "A rebours" (1884), transforme au cours d'un cauchemar la vision d'une fleur de sa serre en une créature horrible qu'il perçoit comme l'image de la grande vérole. André Gide, entraîné au bordel par son ami Pierre Louys n'éprouve pas comme celui-ci une fascination des prostituées et de la syphilis mais plutôt le dégoût, la honte et la crainte de s'être fait "poivrer" ("Si le grain ne meurt", 1919). Louys et Gide représentent bien ce contraste de génération entre les parias romantiques fiers de leur vérole, et la nouvelle jeunesse du tournant du siècle, honteuse d'être "pourrie" ou "avariée".

Angoisse, phobie, obsession sont les nouveaux sentiments face aux maladies vénériennes, engendrés par une vaste campagne de propagande prophylactique qui n'a cessé de s'intensifier, de la fin du XIXème siècle à la deuxième guerre mondiale.

Cette campagne s'est développée alors par la concordance, d'une part, de l'influence croissante des préoccupations sanitaires d'une nouvelle spécialité médicale, la syphiligraphie; d'autre part, des préoccupations morales et fantasmatiques des classes dirigeantes. Les éléments moteurs de cette campagne sont l'attention extrême des syphiligraphes à des statistiques qui se sont rétrospectivement avérées avoir été surévaluées et la considération excessive de la transmission indirecte non vénérienne en réalité exceptionnelle; mais elle repose également sur des concepts mythiques totalement chimériques, véritable médicalisation des fantasmes socio-culturels de certains milieux. Tout d'abord les termes alors utilisés de "parasyphilis" et de "diathèse syphilitique" rendent la syphilis responsable de toutes les anomalies, en particulier neurologiques et congénitales, gouvernant toute la pathologie en raison de son polymorphisme et de sa non-spécificité.

Le mythe du "génie syphilitique" attribue à l'atteinte cérébrale par le tréponème une stimulation intellectuelle exaltée, frénétique et décadente, associée culturellement au romantisme ou à l'art moderne, suivie d'une dégradation dans la folie et dans la mort, à la lumière des exemples de Maupassant et de Nietzsche. Ce mythe trouvera plus tard son plein développement littéraire dans "Docteur Faustus" (1947) de Thomas Mann.

Enfin, et surtout, il y le mythe hallucinant de "l'hérédosyphilis". Le corps médical lui-même, dont certaines sommités influentes comme Alfred Fournier, Sigmund Freud et bien d'autres, est alors persuadé de la transmissibilité héréditaire de la maladie de père en fils qui se manifeste pas des signes dégénératifs, constituant le tableau de "l'avorton syphilitique", physiquement chétif et mentalement débile, porteur de "mauvais gènes". En réalité, la syphilis, comme d'autres maladies infectieuses, est transmissible congénitalement d'une mère infectée à son foetus par voie transplacentaire. Plusieurs fantasmes socio-culturels sont associés à cette notion d'hérédosyphilis. Elle est le rappel des péchés des générations antérieures, la persistance de la faute à travers la descendance, sans rédemption possible. Elle constitue une forme de vengeance sociale, déjà implicite dans la trame romanesque de "Nana" (1879) d'Emile Zola, suivant laquelle le peuple, par l'intermédiaire des prostituées, communique aux hommes des classes supérieures un poison qu'ils transmettent à leur descendance. Cette transmission héréditaire signifie la dégénérescence et la mort non seulement de l'individu, de la famille et du patrimoine, mais aussi de la lignée, de la race et de la civilisation.

La combinaison des mythes de l'hérédosyphilis et du génie syphilitique connaît alors un grand succès culturel. Elle prend une ampleur dramatique intense chez Ibsen ("Les revenants", 1881), sert de métaphore de sa vision de la société irlandaise chez Joyce ("Gens de Dublin", 1914 ; "Ulysse", 1922), est source de noirceur et de cruauté chez Faulkner ("Sanctuaire", 1931), fait son apparition dans le roman policier chez Ellery Queen ("La tragédie de Y", 1933). C'est donc un des thèmes littéraires majeurs du tournant du siècle.

Ce thème est amplifié de façon délirante par Léon Daudet, qui dénonce ("Devant la douleur", 1915) les méfaits de l'hérédosyphilis qu'il considère comme la source de toutes les dégénérescences culturelles par la "syphilisation" de la civilisation occidentale, inéluctable pour lui depuis son irruption à la Renaissance. Quand on sait que Léon Daudet, réactionnaire, antisémite et anti-républicain était le fils d'Alphonse Daudet, célèbre et aimable conteur, mais surtout atteint d'un tabès syphilitique dont il a décrit l'évolution dans des carnets bouleversants d'émotion ("La Doulou"), où il montre tout son courage "devant la douleur", on croit rêver. Cependant Léon Daudet se considérait dès lors sans doute lui-même comme hérédosyphilitique et aurait donc pleinement assumé cette vision délirante, puisqu'il s'y serait inclus ("L'hérédo", 1917).

La campagne antivénérienne va se concrétiser en France par la création en 1901 de la Société de Prophylaxie Sanitaire et Morale et a pour but, sous le couvert d'une lutte antivénérienne, l'épuration des moeurs par l'éducation sexuelle moralisatrice des jeunes gens afin de préserver le patrimoine familial. Elle préconise la chasteté prénuptiale, le mariage précoce et la fidélité conjugale. Le but de la propagande est donc essentiellement dissuasif, insistant sur les descriptions ou les images horribles dans les brochures, affiches et conférences diffusées, et va créer un climat de terreur obsessionnelle.

Un aspect particulier de cette propagande est la littérature prophylactique, sous forme de romans ou de pièces de théâtre, dont le point central est souvent la confrontation entre un jeune homme victime du mal parce qu'il ne savait pas ou ne voulait pas savoir et une autorité médicale, amicale ou paternelle qui ne se prive pas de donner des conseils qui se veulent exemplaires et dissuasifs, mais qui sont plutôt anxiogènes et destructeurs.

Un des premiers exemples de cette littérature fut en 1891, le roman "L'infamant" de Paul Verola où un jeune homme contaminé se souvient avec horreur de la section des syphilitiques de l'hôpital où son père l'avait emmené pour l'éduquer. Dans "Les mancenilles" d'André Couvreur (1900), destiné à la vente aux seuls lecteurs masculins, la méfiance des femmes teintée de misogynie de la propagande apparaît pleinement puisque Paris y est comparé à un mancenillier et les femmes vectrices en sont les mancenilles, fruits vénéneux responsables de la désagrégation morale et physique des jeunes gens.

Au théâtre, il faut mentionner la célèbre pièce d'Eugène Brieux, "Les avariés" (1901 ), dédiée à Alfred Fournier et illustrant de façon presque systématique tous les grands thèmes de la propagande prophylactique.

Le climat de phobie vénérienne atteint un tel degré au début du siècle que certaines oeuvres littéraires sont encore plus angoissantes et pessimistes que les textes de propagande et ont contribué semblablement à terroriser les lecteurs, tels "Bubu de Montparnasse" (1901) de Charles-Louis Philippe ou encore "Vénus ou les deux risques" (1901) de Michel Corday, où le protagoniste atteint envisage même le suicide.

Les écrivains témoignent de ce traumatisme. Stefan Zweig se souvient : "sans cesse on avertissait la jeunesse du danger qu'elle courait (...), c'est pourquoi il n'est pas surprenant que

beaucoup de jeunes gens aient saisi un revolver dès que le diagnostic avait été établi, car ils trouvaient insupportable le sentiment d'être suspect à eux-mêmes et à leurs plus proches parents en tant qu'incurables" ("Le monde d'hier", pub. 1944).

August Strindberg, atteint de psoriasis, fit certifier par son médecin que sa maladie n'était pas de nature syphilitique. Arthur Schnitzler, tout comme le protagoniste de "L'infamant", avait dû subir de la part de son père médecin la vision horrifiante des images d'un atlas de syphiligraphie après que celui-ci ait pris connaissance de sa liaison avec une demi-mondaine en violant le secret de son journal ("Une jeunesse viennoise", 1915-1917).

Après l'aversion dissuasive des jeunes gens, le mariage précoce et la fidélité conjugale est l'autre grand thème de la littérature de propagande prophylactique. Plusieurs écrivains tels Ibsen dans "Les revenants" (1881) ou Tolstoï dans "La sonate de Kreutzer" (1889), soulignent cependant qu'un mariage précoce est souvent hâtif et sans amour et mène précisément à l'infidélité que l'on désire éviter qui, comme l'illustre Hemingway dans la nouvelle "Une lectrice écrit" (pub. 1933), entraîne la contamination du conjoint, souvent l'épouse innocente. Karen Blixen relate dans "Out of Africa" (pub.1937) comment elle en fut elle-même victime car elle avait été mariée sans passion à son cousin, le Comte Blixen. Ils s'installent au Kenya où le comte délaissait sa femme pour les plaisirs de la chasse. Alors qu'ils ne se parlaient presque plus, elle ressentit les premiers signes d'une syphilis active que son mari lui avait ramenée de ses escapades.

Les syphiligraphes dès lors déconseillent le mariage des syphilitiques et préconisent un délai de quelques mois à quelques années après traitement, cette incertitude ne manquant pas d'être inquiétante pour les patients, surtout si un mariage prévu doit être retardé.

Le jeune baronnet de la nouvelle "La troisième génération" (1894) de Conan Doyle est victime de cette attitude. En visite prénuptiale chez son médecin, celui-ci lui diagnostique une hérédosyphilis en provenance du grand-père, un dandy débauché. Devant l'injustice d'être victime des fautes de son aïeul, la honte d'être pourri et la maladresse du médecin qui exige de lui la rupture du mariage, le jeune homme se jette sous un fiacre. La fréquence de l'option suicidaire montre bien le désarroi total de cette génération.

La situation allait cependant encore s'aggraver après la première guerre mondiale. La diffusion de la syphilis par les mouvements de troupes fait craindre qu'après tant de jeunes gens morts au combat ou tués par la grippe espagnole, la race diminuée en nombre et amoindrie ne soit dégénérée par le tréponème et qu'il ne reste plus que des fous et des "hérédos". Le terme de péril vénérien utilisé alors indique bien que c'est la sauvegarde de la civilisation et de l'humanité qui est en jeu.

La propagande va donc encore s'intensifier en utilisant activement les médias : presse, radio, théâtre et surtout cinéma. La génération de l'entre-deux guerres sera dès lors encore plus marquée que celle d'avant-guerre. Julien Green a remarquablement exprimé dans ses souvenirs de jeunesse (pub. 1974) cette terreur vénérienne.

Les militaires, tels un protagoniste de "Reflets dans un oeil d'or" de Carson Me Cullers (1941) sont alors l'une des cibles principales. Les étudiants en Médecine, au contact même des horreurs syphilitiques, ne sont pas les moins traumatisés, comme Michel Doutreval dans "Corps et âmes" (1943) de Maxence Van der Meersch ou plus encore l'apprenti médecin des "Hommes en blanc" (1947) d'André Soubiran, terrorisé par la vision du film de propagande "Le baiser qui tue" (1927) et par son stage dans un dispensaire antivénérien.

Même les médecins, à l'instar du Docteur Rinaldi dans "L'adieu aux armes" (1929) d'Ernest Hemingway n'échappent pas à cette phobie.

Cependant, le thème obsessionnel de la syphilisation dégénérative de la race a pour corollaire une dérive politique de la propagande antivénérienne dans les années 1930 avec des romans comme "Le crime" (1937) de Louise Hervieu ou "La vie d'un hérédo" (1939) de Jean Moyë. Ce contexte raciste apparaissait déjà dans "Les Mancenilles" (1900) où l'une des "mancenilles" vénéneuses, Frida, est celle "dont le lit devenait l'émonctoire de tous les personnages de couleur du quartier, amenant des quatre coins du monde leurs vices et leurs maladies peut-être !".

Dans "Prostituée" (1908) Victor Margueritte considérait que la syphilisation de l'espèce humaine est inéluctable car liée au développement de la civilisation et des voyages. Le concept sous-jacent est que toute ouverture est potentiellement vectrice de syphilis puisque le mode de transmission repose sur la communication interhumaine. Tout ce qui est libre et ouvert vers l'extérieur, comme la ville (le "mancenillier"), les voyages, les contacts inter-raciaux et inter-sociaux, le cosmopolitisme, la connaissance d'autrui, est dangereux car potentiellement contaminateur avec tout ce que cela sous-entend d'intolérance, de racisme et de xénophobie. Par contre, tout ce qui est clos et contrôlé, isolé de l'extérieur comme la famille fidèle et unie, les structures rurales, la patrie autarcique, la race non mélangée, protège contre le mal. La décadence du monde occidental est dès lors attribuée à sa syphilisation qui non seulement décime la population mais peuple en outre l'Europe "d'Hérédos", de fous et de dégénérés. Dès lors, les syphilitiques, au même titre que les juifs et les "métèques" auxquels ils sont assimilés, sont jugés responsables de cette décrépitude, boucs émissaires du malaise ambiant.

Dès 1933, le psychiatre autrichien, Wilhelm Reich, relevant l'amalgame des obsessions sexuelles et politiques cristallisées dans les perpétuelles attaques contre la syphilis que recèle "Mein kampf" d'Adolphe Hitler, déclarait "La peur irrationnelle de la syphilis était une des principales sources de l'attitude politique du national-socialisme et de son antisémitisme".

Dans "L'hérédo" (1917), Léon Daudet préconisait déjà de lutter contre Thérédisme" en faisant triompher la raison sur l'instinct, le "héros" sur "l'hérédo". Dans "Le crime" (1937) Louise Hervieu souhaite "que ce ne soit pas la fin d'un monde mais le commencement d'une autre race !". A l'aube de la deuxième guerre mondiale, certains attendent donc le "héros" qui va arrêter la dégénérescence de la race et purifier, régénérer celle-ci par une renatalisation et un retour à la rusticité et à l'innocence.

Pour Louise Hervieu et les autres littérateurs de propagande, Pétain fut ce héros et ils soulignent le rôle de la lutte antivénérienne, devenue sous le régime de Vichy une véritable dictature de la prophylaxie, dans l'oeuvre de relèvement et de régénération de la France, après celle accomplie chez eux par ceux qu'ils appelent "leurs vainqueurs" et qui annonce l'avènement d'un monde nouveau purifié du mal vénérien.

La propagande antisyphilitique avait donc dangereusement dévié de la prophylaxie sanitaire et morale vers la dictature de la prophylaxie et de "liberté, égalité, fraternité" vers "travail, famille, patrie". Il était grand temps que les mythes s'écroulent car ils prenaient des proportions délirantes.

Celui de "l'hérédo" et de la dégénérescence de la race sera détruit par la découverte de la curabilité de la syphilis par la Pénicilline aux Etat-Unis en 1943 ; celui du "héros" et du monde nouveau par les Alliés en 1944-1945. Ces années ont donc marqué à tous égards la fin de la grande peur d'alors.

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# *Announcement of ISHM e-mail*

The ISHM has now an e-mail listserver. All those interested in the History of Medicine, especially members of the Society, are encouraged to subscribe to the list. To subscribe send the following command to majordomo@creighton.edu : subscribe ishm
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An e-mail listserver is a large central computer that distributes e-mail to all members on given lists. In this case the listserver (e-mail address : majordomo ©creighton.edu) is located at Creighton University in Omaha, Nebraska, USA, and the list is one specifically set up for the ISHM.

Anybody who has access to e-mail (through any of the various companies who, in each country, offer the service) can become a subscriber by sending to the listserve the above command. Subscription is free and membership of the ISHM is not necessary.

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*For further information, contact Plinio Prioreschi (e-mail address: plinio@creighton.edu).*

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# *Places the medical historian should visit*
# *Endroits a visiter par les historiens de la medecine*

*When you visit a strange city it is not always easy to find the way to sites of medical historical interest, or even to learn whether there are any. How often has one regretted not knowing where to go, and learned about what you have missed after your return home. To help minimise this risk we have asked a number of members to contribute urban itineraries to cover short visits of one or two days in towns throughout the world.*

*If you would like to offer a short medical historical itinerary for your own town we should be happy to consider it for publication in the series.*

*Lorsque l'on visite une ville qui n'est pas la sienne, il n'est pas toujours facile de repérer ce qui est susceptible d'intéresser l'historien de la médecine. Combien de fois ne l'a-t-on pas regretté et surtout d'apprendre, à son retour, ce qu'on a manqué. Afin de pallier cette difficulté, nous avons demandé à plusieurs membres de notre Société de proposer un itinéraire médico-historique d'un ou deux jours, chacun dans sa ville.*

*Si vous disposez d'un itinéraire d'une ville - la vôtre ou une autre - susceptible d'intéresser nos lecteurs, n 'hésitez pas à nous l'envoyer, nous serons heureux de le publier dans cette série.*

## *JERUSALEM*

Jerusalem is one of the most ancient cities in the world. It was founded some 5.000 years ago and became the capital of the united Kingdom of Israel 3.000 years ago in the reign of King David.

**Mikveh**

The most ancient site for the medical historian is a mikveh (Jewish bath for ritual hygiene) located in the basement of a 2.000 years old "Burnt House" in the Jewish quarter of the Old City.

**Museum of the History of Medicine**

The Museum of the History of Medicine, which is located in the medical library building in Hadassa Medical School Hospital, Ein Karem, contains several ancient Jewish medical manuscripts as well as instruments.

The second attraction of the Hadassah Hospital is the **"Chagall Windows",** twelve stained windows created in France by Marc Chagall in 1962.

**Italian Hospital**

The Italian Hospital is one of the most imposing buildings in the New City. Its square belltower and octagonal church can be seen from afar. It was built between 1912 and 1919 in 16th century Italian Renaissance style. The nurses were Italian nuns. It can be visited by permission of the Ministry of Education maintenance division.

*At the corner of the Prophets and Shivtei Israel Streets*

**St Louis (French) Hospital**

St Louis (French) Hospital is named after the French King Louis IX, who participated in the 12th Crusade in 1270. It was founded in 1851 in the Christian Quarter.

The present three-storey building was opened in 1881. The nurses are nuns of the order of St Joseph. The chiselled stone decorations are in the late French Renaissance and Baroque styles. The hospital can be visited by permission of the hospital administration.

*At the corner of Tsanhanim and Shivtei Israel Streets*

**Rothschild Hospital**

The Rothschild Hospital was originally established in the Jewish quarter of the Old City in 1835 and moved to its present site in 1888.

The red roofed three-storey building has decorated gables above its windows and was built with funds provided by Baron Jacob de Rothschild and the Alliance Israelite Universelle.

*27, Street of the Prophets*

**English Hospital**

The English Hospital was set up in competition with the Rothschild Hospital and was built in 1896 as the hospital of the Anglican mission, which moved here from the Old City.

Around the courtyard, with its pine and carob trees, is a single-storey stone building in the form of a horseshoe. The entrance to the hospital is through an archway; in the center is a two-storey section which houses the clinics.

*The Prophets Street*

**Augusta Victoria Hospital**

The pointed square tower of the Augusta Victoria Hospital with its gray slate roof is a landmark of Jerusalem. The building is named after the wife of Kaiser Wilhelm II of Germany, who built it in 1898.

After the British conquest of Jerusalem it became the residence of the British High Commissioner and was used as a British military hospital during World War II. Today it accomodates an Arab hospital supported by the World Lutheran Organization.

*The Mount of Olives*

**Harry Friedenwald Collection**

Anyone interested in medical history should visit the Harry Friedenwald Collection, at the National University Library. This consists of a unique collection of books, incunabula and manuscripts around the theme "Jews and Medicine". This is housed within the Edelstein Collection, which deals with the history of science, including in particular the history of alchemy, of chemistry and of dyeing.

*Givat Ram Campus*

**Israel Medical Association**

The Israel Medical Association has a medical library but the best medical historical library is in Hadassah, Ein Kerem.

*Strauss and the Prophets streets*

*Michael V. Shterenshis, M.D.*
*The Hebrew University of Jerusalem*
*10/15 Shivat Zion Street*
*Rishon-LeZion 75321, Israel*

Vesalius, II, 2, 134 -135, 1996

# *Symposium Report*

## ***35th International Congress on the History of** Medicine*
## ***Kos, 31 Auguste - 8 September 1996***
*A personnal memory*

First a few details. The 35th International Congress on the History of Medicine was held at the Kypriotis Village Hotel on the island of Kos between 2nd and 7th September 1996 following the First International Medical Olympiad. The Congress was held under the auspices of the Ministry of Foreign Affairs of the Hellenic Republic, nine other Government Ministries and the Municipality of Kos. The organiser was the International Hippocratic Foundation of Kos on behalf of the Hellenic Society for the History and Philosophy of Medical Sciences, and their committee was under the able leadership of Prof. Spyros Marketos. The President of the Hellenic Republic, Constantine Stefanopoulos, had graciously consented to be High Patron. The International Society for The History of Medicine,'who had called the Congress, was celebrating its seventy fifth anniversary and the last year of the memorable presidency of Dr John Cule.

Medical historians from all over the world, representing many different disciplines gathered to present the results of their researches, to learn of the works of others and most importantly, to meet friends.

The very full programme used three lecture halls concurrently. Almost two hundred and thirty papers were offered and synopses published in the Abstracts, although as is becoming increasingly common on these occasions, several speakers failed to appear without any reason being given.

As was to be expected the main theme was Hippocratic medicine. There were papers on the works and life of Hippocrates himself, and on other contemporary Mediterranean medical themes. These were wide ranging and included such topics as the Library at Alexandria, the medical culture of the ancient Thracians, and healing in the thermo-mineral baths in Israel and Jordan in classical antiquity. Several speakers then went on to describe how Hippocratic Medicine had spread to their own countries and what effects it had had on local practice both in antiquity and today. We were brought back to the twentieth century and our own medical practice when several speakers discussed the current relevance of the Hippocratic Oath and whether subscribing to it was possible or even desirable in modern medicine. Discussions about this and many other topics lasted well into the night at local tavernas.

There were several other themes explored in the papers, such as the role of women in health sciences and the history of hospitals. As usual, excellent presentations stood on their own and fitted into no category. A fascinating poster session made sure we continued our education when we had to stretch our legs.

Because we were in Kos there was practical medical history to be experienced. A plaque commemorating the Medical Olympiad was unveiled by Professor Marketos and Dr Cule at the foot of Hippocrate's plane tree which grows supported by a metal gantry just beside the partially excavated agora. Following this, the Hippocratic Oath was declaimed in the original dialect by actors wearing copies of ancient dress. This gave the opportunity to indulge the imagination - a necessity in medical history. It really did put one's own medical efforts into perspective and make one understand that *Ars* really was *longa* and *Vita brevis.*

There were visits to the Asclepion made cheaper by the free bus passes with which we were all generously issued, where it was quite difficult without a guide to work out the sequence of the healing process. Many took a day trip to Rhodes to marvel at the building works and power of the Knights of St John and to admire the mediaeval hospital.

Each International Congress is different and has a flavour of its own. This was truly Mediterranean. We were grateful to enjoy the Greek hospitality, their beautiful island, excellent weather, the friendship of like minded people from all over the world and the opportunity to deepen our understanding of the roots of Western Medicine.

*J.M. Ford*
*Ton bridge, Great Britain*

## *Satellite International Congress of the ISHM From Athens to Jerusalem 9-11 September 1996*

Following the conclusion of the 35th International Congress of the History of Medicine, a number of Congress participants flew from Kos to Israel via Athens to attend a satellite symposium entitled (with apologies to Tertullian) "From Athens to Jerusalem". The symposium, which met from 9 to 11 September at the Givat Ram Campus of the Hebrew University of Jerusalem, was organised jointly by the Israel Society of the History of Medicine and Science and the Harry Freidenwald Chair of the History of Medicine underthe sponsorship of the Hebrew University. It attracted some seventy participants, including a number of scholars from Europe and North America.

The theme of the symposium was 'Medicine in Hellenized Jewish Lore and Early Christian Literature'. The communications included a broad range of topics that dealt with the relations between Greek medicine and Jewish and early Christian cultures of the Second Temple period. The first session featured keynote addresses by Wesley D.Smith ('Rufus of Samaria, Second-Century Hippocratic Commentator'), Heinrich von Staden ('Philo's Version of the body and Its Greek Predecessors'), and Gary B. Ferngren ('Early Christian Views of the Demonic Aetiology of Disease'). Subsequent sessions dealt with Babylonian Medicine, Biblical and Talmudic Medicine, Greek and Hebrew Medical Data, Healing Narratives in Hebrew and Early Christian Leterature, Hebrew Medieval Manuscripts, Medical Ethics and Varia.

A full social programme was arranged forthe participants. A reception on Monday evening was followed by a distinguished guest lecture by Professor Shalom Rosenberg of the Hebrew University. On Tuesday afternoon a tour of the Old City featured a visit to the Wailing Wall and a walk along the Via Dolorosa to the Church of the Holy Sepulchre. That evening informal receptions were arranged for small groups in private homes in Jerusalem. A gala banquet concluded the Symposium on Wednesday. Some of those in attendance were able to take advantage of pre- and post-conference tours in the Galilee and to Masada and the Dead Sea.

Several of the communications will be published in a volume that will be forthcoming from Brill, while others will appear in the pages of Korot. Professor Samuel Kottek and his organising committee are to be congratulated for their energetic efforts, which were productive of a highly successful symposium.

*Gary B. Ferngren*
*Corvallis, Oregon, U.S.A.*

Vesalius, II, 2, 136 -137,1996

# Book Review

## Charcot, un grand médecin dans son siècle

par M. Bonduelle, T. Gelfand, C.G. Goetz

Editions Michalon, 18 rue du Dragon, F. 75006 Paris, 1996, 397 pages, 149 FF.

Depuis quelques années on assiste à un intérêt renouvelé pour Charcot, son oeuvre et la place qu'il a occupée dans le mouvement scientifique et médical de la deuxième moitié du XIXe siècle en France. Apres plusieurs livres récents, qui appartiennent plutôt au domaine de l'histoire romancée ou de la fiction (le dernier, publié en 1993, est celui de JeanThuillier"MonsieurCharcot de la Salpêtrière"), voici une biographie bien documentée, qui jette un regard neuf sur Charcot et qui prend le relais de l'ouvrage de Georges Guillain "J-M. Charcot,sa vie,son oeuvre", paru en 1955 et traduit en anglais en 1959.

Ce livre est le résultat de la collaboration de trois hommes : deux médecins, Michel Bonduelle, neurologue parisien, et Christopher G. Goetz, prof.de neurosciences à Chicago, et un historien prof, d'histoire de la médecine à Ottawa, Toby Gelfand. Il s'agit de l'édition française, établie sous la direction de l'auteur français, du livre intitulé "Charcot, constructing neurology", publié chez Oxford University Press (1995). Les trois auteurs se sont partagé les neuf chapitres qui permettent de suivre Charcot à travers les tranches importantes de sa vie et de sa carrière. Tout au long du livre, on sent une grande concertation entre les auteurs, ce qui donne une unité de ton et une cohérence à l'ensemble.

La traduction de l'américain est due à Marie Françoise Colomb en étroite collaboration avec les auteurs; la langue est souple et claire et, bien que riche de nombreuses notes et références, le livre est agréable à lire. Souvent devant une traduction, on se demande pourquoi on a modifié le titre; c'est le cas ici. Toutefois les deux titres reflètent bien les deux facettes du livre. En effet, il s'intéresse essentiellement au Charcot bâtisseur de la neurologie moderne, qui fit pour un temps de la Salpêtrière le centre mondial de cette discipline. En même temps, le livre situe bien sa trajectoire dans le courant du positivisme scientifique du XIXe siècle français. Le neurologue sera particulièrement intéressé par le chapitre IV, consacré à l'oeuvre de Charcot, et qui couvre la période de 1862 à 1876. La définition de la sclérose latérale amyotrophique ou "maladie de Charcot", illustre admirablement la méthode anatomo-clinique, associant description nosologique et observation anatomopathologique. On accompagne ensuite Charcot dans ses travaux sur l'ataxie locomotrice ou tabès dans laquelle il ajoute une contribution originale avec la description des arthropathies. L'individualisation de la sclérose en plaque et de la maladie de Parkinson est abordée ensuite de façon approfondie de même que le problème des localisations cérébrales.

L'hystérie qui vaudra à Charcot la célébrité mais aussi de violentes critiques, fait l'objet du chapitre suivant. Il est étonnant de s'apercevoir que le statut actuel de l'hystérie n'est guère différent de ce qu'il était pour Charcot au début de sa carrière et que la définition de l'hystérie reste aussi problématique. Le neurologue d'aujourd'hui est frappé par la similitude du discours concernant les rapports entre épilepsie et hystérie il y a un siècle, et les liens entre crise épileptique et non-épileptique tels qu'on les définit actuellement.

Le chapitre VII étudie de façon détaillée les divers éléments qui ont fait de Charcot la figure dominante de la médecine de son temps, et notamment la création pour lui de la Chaire de Clinique des maladies du système nerveux en 1882 et son élection à l'Académie des sciences l'année suivante .

Le neuvième et dernier chapitre retrace brièvement la fin de la vie de Charcot mais surtout il brosse un tableau très détaillé de la situation de la neurologie à la mort de Charcot, non seulement en France où la succession sera difficile, mais également en Grande Bretagne, aux Etats Unis et en Allemagne. On suit la dispersion des nombreux et brillants élèves du maître, qui, après lui, poursuivront son oeuvre de bâtisseur. Au niveau international, le livre ne rend peut-être pas tout à fait justice à la grande tradition allemande, particulièrement en ce qui concerne l'apport de l'anatomie, de la neuropathologie et de la physiologie à la neurologie naissante; c'est pourtant ce phénomène qui explique qu'à la génération suivante ce seront les universités allemande qui donneront le ton .

Ce livre souligne bien tous les aspects originaux de l'homme et de son oeuvre, sans verser dans l'hagiographie; ses faiblesses et ses erreurs sont discutées de façon tout aussi objective. L'exemple le plus frappant est celui de l'étiologie des maladies nerveuses, où Charcot privilégie "l'hérédité neuropathique" alors que la théorie de Pasteur sur les causes spécifiques des maladies microbiennes reçoit sa consécration officielle. C'est ainsi qu'il passera à côté du lien entre tabès et syphilis, que Erb parvient à faire sur des bases statistiques.

En conclusion, voici un livre passionnant, à recommander chaudement. Toute une époque prend vie; un grand nombre de noms familiers de l'examen neurologique et de la nosologie prennent un visage. Enfin, la documentation bibliographique très étendue donne de nombreuses pistes de lectures et de découvertes complémentaires.

*G. Aubert, Bruxelles*

## *The Task of Healing.*

### *Medicine, religion and gender in England and the Netherlands (1450 -1800)*

Edited by H. Marland and M. Pelling

Erasmus Publishing, Rotterdam, 1996, ISBN 90-5235-096-5

This volume is based on the first Anglo Dutch Wellcome Symposium on Medical Practice and Practitioners in these countries organised by Hilary Marland, with additional contributors. It contains 12 chapters dealing with the medical treatment of leprosy, book ownership, the changing relationship between surgeon and urban government, the role of the male medical practitioner, the relationship between religion and medicine, the practice of clerics, iconography of healing in XVII century sources, God-fearing...

The book contains more than 300 pages with a series of references, additional notes, a final index and a dozen black and white illustrations.The scientific quality is outstanding; the book is particulary interesting for historical, scholars. On the other hand some topics are interest of only to specialists because their concern is the medical history of a limited area for a limited time duration.

The reference to David Teniers and the other Flemish painters of the XVII century captured my attention because the painting is analyzed with a high degree of accuracy.

In conclusion, such books are necessary mainly for hyperspecialists in the domains reported above, but they can serve those who wish to build their knowledge of Medical History on a solid structure.

*T. Appelboom, Brussels*

Vesalius, 11, 2, 138 -143, 1996

# *Compte-rendu du Conseil d'Administration et de l'Assemblée Générale de la Société Internationale d'Histoire de la Médecine, Kos, 4 - 5 septembre 1996*

**Conseil d'Administration**
**sous la présidence du Dr Cule.**
Présents :
- Tous les membres du bureau, excepté le Prof. Schadewaldt, excusé.
- Les conseillers (non délégués nationaux) Prof. Sournia et M. R. Price, n'ayant pas droit au vote.
- Les délégués de 21 pays ou leur représentant.
- 4 pays (Allemagne, Belgique, Japon, Portugal) avaient donné une procuration.

Ceci représente 48 voix lors des votes.

**Assemblée Générale**
Présents :
90 membres originaires de 30 pays différents (sur les 49 pays présents au congrès)

**1. Approbation du procès-verbal du Conseil d'Administration précédent. (Paris, 24 juin 1995)**

Le procès-verbal, tel que repris de la p.57 à la p.62 de *Vesalius,* n°II,1, 1996 est approuvé à l'unanimité.

**2. Rapport de la commission de vérification de la validité des mandats des délégués nationaux.**

La commission ne formule aucune remarque

**3. Nouveaux délégués nationaux** :

| | |
|---|---|
| Chili : | Prof. R. Cruz Coke |
| France : | Prof. D. Wallach |
| Hongrie : | Dr. J. Honti |
| Mexique : | Prof. C. Viesca |
| Pays-Bas : | Prof. De Knecht-Van Eekelen |
| Portugal : | Prof. A. Ricon-Ferraz |
| Syrie : | Prof. A. Nasser Kaadan |
| Turquie : | Prof. I. Uzel |
| Uruguay : | Dr. P. Chiancone |

# *Minutes of the Administrative Council and the General Assembly of the International Society for the History of Medicine, Kos, 4-5 September 1996*

**Administrative council**
**under the presidency of Dr Cule.**
Present:
- All members of the Administrative Council with the exception of Prof. Schadewaldt, who sent his apologies.
- The Councillors Prof. Sournia and Mr Price, not being National Delegates, did not have the right to vote.
- National Delegates from 21 countries.
- Fourcountries (Belgium, Germany, Japan and Portugal) appointed substitutes.

There were 48 voters available

**General Assembly**
Present:
90 members from 30 countries out of the 49 countries present at the congress.

**1. Approval of the minutes of the preceding Administrative Council (Paris, 24 June 1995)**

The minutes as recorded on pages 57 to 62 of *Vesalius* nr 11,1, 1995 were approved.

**2. Report of the commission for the verification of the validity of the national delegates[1] mandates.**

The commission signified its approval

**3. New national delegates** :

| | |
|---|---|
| Chile : | Prof. R. Cruz Coke |
| France : | Prof. D. Wallach |
| Hungary : | Dr. J. Honti |
| Mexico : | Prof. C. Viesca |
| Netherlands : | Prof. De Knecht-Van Eekelen |
| Portugal : | Prof. A. Ricon-Ferraz |
| Syria : | Prof. A. Nasser Kaadan |
| Turkey : | Prof. I. Uzel |
| Uraguay : | Dr. P. Chiancone |

## 4. Presidential address

This year I shall spare you the ordeal of a long formal address in order to get down early to business. We have much work still to do if we are to consolidate the changes that have been introduced during the past four years and thus ensure the future viability of our society. A brief review of the present situation is necessary for the historical record.

The Society has taken bold steps to give itself "life between congresses". There is now on-going, all-the-year-round activity resulting from the advent of the twice yearly publication of our new journal *Vesalius.* This permits a continuing dialogue of the council with the membership between the meetings, which hitherto had taken place only every two years.

Such radical changes inevitably bring added costs. This has necessitated the proposal that this year the membership subscription should be increased to £30, to include the journal. It is our belief that this move will encourage an active membership and represents good value. The Society is entirely dependent upon its membership subscriptions and we have to balance our accounts. However, the Treasurers have been asked to consider the introduction of a Family Membership subscription, at a lesser fee than the total sum of the fees of its individual members, and receive only one copy of the journal.

In the interim period it is appropriate that we should thank the officers and members of the Belgian Society for the History of Medicine, who have generously borne the costs of this transition. And more than that, they have in the process, by reducing the publication of their own very successful journal *Acta Belgica Histohae Medicinae* to one issue a year, enabled us to use the experience of its editors in launching our own *Vesalius* in its present format. Without them it would not have been possible. In this we have had the particular help of Prof. Thierry Appelboom and our own General Secretary Jean-Pierre Tricot. I should particularly like to record our thanks to the Managing Editor Diana Gasparon, who has worked very hard and brought her own professional expertise to produce an elegant journal of such good quality.

La création d'un journal est une grande entreprise. Il me paraît opportun d'exprimer notre gratitude à la Société Belge et ses dirigeants pour son assistance dans cette affaire, non seulement financière, mais aussi l'assistance experte en réalisation. Nous pouvons maintenant échanger des idées entre les congrès biennaux !

The time has come for election of officers to some vacancies. Many of the holders of senior offices, such as those of the General Secretary and the Treasurers, are offering to remain in post and thus ensure stability. The nominations before you for filling the vacant offices are ones which I can strongly recommend to the membership.

It remains to thank the retiring officers for their work for the society and in particular I should like to thank Sue Weir, who has proved a strong, efficient and ever ready source of secretarial support. How well she has managed it, with all her other commitments and "still come up smiling", I shall not forget.

The International Society influences a world climate of opinion through its 64 member nations. During my four years in office, we have increased by the sixteen new member nations of Albania, Armenia, Azerbaijan, Bielorussia, Croatia, Georgia, Lattonia, Latvia, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, Tchequia, Ukraine and Uzbekistan and now number about 730 individual members; an increase of about 40 since 1992. We welcome all the new national delegates who have been able to attend this council meeting. J'accueille chaleureusement les nouveaux deleges nationaux qui sont ici pour la premiere fois.

As the time approaches for me to leave the office which has given me such pleasure and hand over the reins to Prof. Ynez Viole O'Neill, I should like to thank you all for your support as well as the enjoyment it has given me. And I look forward to offering my continued help as an active Immediate Past President and as Joint-Editor of the Journal *Vesalius,* if you so wish. Both should keep me busy.

## 5. Rapport du Secrétaire Général

Le secrétaire général insiste pour que les listes complètes (mises à jour) de tous les membres lui soient envoyées le plus rapidement possible par les délégués nationaux. Un nouvel annuaire, sous forme d'étiquettes, paraîtra à la fin de l'année 96 ou début de l'année 97. Les adresses e-mail connues seront mentionnées.

## 6. Rapport des Trésoriers

Le Prof. C. Burns fait son rapport de trésorier du Nouveau-Monde, suivi par le Prof. Van Hee pour l'autre partie du monde.
Au 15 août 96, la société dispose de 152.855 FB sur le compte courant et de 50.000 FF sur un compte de dépôt.
Les dépenses de la dernière année sont surtout dues au lancement de la revue *Vesalius.*
Suite au choix laissé l'année dernière aux membres de payer une cotisation avec ou sans abonnement à *Vesalius,* 2/3 des Américains ont payé la cotisation complète de 50 US$, 2/3 des autres pays ont préféré payer la cotisation réduite.
Il a été décidé d'envoyer la revue *Vesalius* individuellement à chaque membre ayant payé la cotisation complète, et ceci au départ de Bruxelles, immédiatement après la publication.
La cotisation de la SIHM reste fixée à **1**.500 FB (250 FF, 50 US$).

## 7. Election des nouveaux membres du bureau

Président : Prof. Y. Violé O'Neill (2000)
Secrétaire Général : Dr J.P. Tricot (2002)
Sec. Gén. adjoints : Dr A. Lellouch (2002)
Dr E. Lomax (2002)
Trésorier : Prof. R. Van Hee (2002)
Vice Président d'Honneur : Prof. S. Ammar
Vices Présidents : Prof. G. Ferngren (1997)
Prof. A. Musajo Somma (2000)
Conseillers : Prof. C. Sournia, Prof. S. Kottek
Dr R. Price, Dr Sakai, Dr Thearle
Prof. H. Schadewaldt

## 5. Report of the General Secretary

The General Secretary requested that national delegates should send him an uptodate list of their countries' membership as son as possible. A new membership directory will appear at the end of 1996 or the beginning of 1997, in which e-mail addresses may be included.

## 6. Report of the Treasurers

Prof. Chester Burns made his report as Treasurer for the New World and Prof. Robert Van Hee for the Old.
At the 5th of august 1996, the society held 152,855 BF on its current account and 50,000 FF on deposit.
The expenses for last year are due to the cost of the new journal *Vesalius.*
Following the choice offered last year for members to pay their membership subscription, with or without including *Vesalius,* 2/3 of the Americans paid the full new subscription of $US 50, 2/3 in other countries preferred to pay the lesser old subscription.
It has been decided to send the journal *Vesalius* individually to each member who has paid the full membership subscription direct from Brussels, immediately after publication.
The annual subscription remains fixed at 1,500 BF(50$US, 150 FF, £30)

## 7. Election of the new members of the Executive Committee

President: Prof. Y. Viole O'Neill (2000)
General Secretary : Dr J.P. Tricot (2002)
Associate Secretaries : Dr A. Lellouch (2002)
Dr E. Lomax (2002)
Treasurer: Prof. R. Van Hee (2002)
Honorary Vice-President: Prof. S. Ammar
Vices Presidents : Prof. G. Ferngren (1997)
Prof. A. Musajo Somma (2000)
Councillors : Prof. C. Sournia, Prof. S. Kottek
Dr R. Price, Dr Sakai, Dr Thearle
Prof. H. Schadewaldt

**8. Ratification des candidatures des nouveaux membres.**

**8 . Confirmation of new members' applications.**

Argentine - Argentina

Rossa A.M.

Brésil - Brazil

Rezende J.M., Rocha A.C.C., Ulysses M.

Canada

Oreopoulos D., Feindel W. H.

Chili - Chile

Ricardo C.C., Ulloa G.E.

Espagne - Spain

Gonzalez-Echeverria F.S.

Etats-Unis d'Amérique - United States of America

Bailey J.E., Estes J.W., Philis-Tsimikas A., Tsimikas S.

Finlande - Finland

Lindroos C.

France

Battin J., Truyen M.

Grande Bretagne - Great Britain

Crosfill M., Lazenby E., Rose E.M., Weir N.

Grèce - Greece

Anastassopoulov A., Bolovinos A., Christodoulov D., Drizis T., Kakafika-Taleb A., Kontopoulou T., Koumoura F., Managiotis S., Papadopoulos J., Picoula H., Ramoutsaki J., Taleb I.

Hongrie - Hongary

Boga B., Toth M.

Inde - India

Khan A.J.

Italie - Italy

Altobella L.

Norvège - Norway

Fyran D.

Roumanie - Romania

Dinu G., letcu I., Sanda G.

Russie - Russia

Lichterman B., Zhuravleva T.

Turquie - Turkey

Aksu A.F., Aksu M.F., Atag A., Namal A., Safak O.

**9. Les Congrès**

Glasgow - 1994 :

Certains regrets ont été émis parce que toutes les interventions n'ont pas été publiées . Les organisateurs ont répondu qu'il ont opté pour la publication de bons travaux. D'après eux, une publication exhaustive de toutes les interventions diminue la valeur scientifique des Actes.

Kos- 1996:

Le Professeur Marketos a été remercié et félicité pour la bonne tenue du congrès.
Les Actes seront publiés en 3 ou 4 volumes.
Environ 350 participants de 40 pays différents étient inscrits au congrès. 218 travaux ont été acceptés, soit pour communication orale, soit pour poster.
L'absence de trop d'auteurs a été regrettée.

Carthage- 1998 :

Le Prof. Mabrouk et le Prof. Ammar ont indiqué que 4 thèmes seront développés. Actuellement les organisateurs pensent à la Pharmacopée, la Médecine Arabo-Islamique, l'Ophtalmologie, la Médecine de Catastrophe. Un thème a été suggéré par l'Assemblée : l'enseignement de l'Histoire de la Médecine.

En ce qui concerne les congrès prochains, l'Assemblée a émis les voeux suivants :

- Prévoir un temps de discussion au cours des séances de congrès.
- Organiser des tables rondes concernant des sujets controversés.
- Organiser une session sur l'état actuel de (l'enseignement de ) l'histoire de la médecine de par le monde.

**9. The Congresses**

Glasgow- 1994 :

Some regret was expressed that all of the papers given at the Congress were not published. The Congress organisers responded that they had decided to include only the papers that were best suited for printed publication, it was felt that a blanket publication of all oral contributions diminished the scientific value of the Proceedings.

Kos - 1996 :

Prof. Marketos was thanked and congratulated on the success of the congress.
The Proceedings will be published in 3 or 4 volumes.
About 350 delegates from 49 countries attended. Altogether, some 218 contributions had been accepted : some oral and some poster. The absence, without apology, of a number of authors included in the printed programme was regretted.

Carthage - 1998 :

Prof. Mabrouk and Ammar announced that four themes had been proposed : The Pharmacopoeia; Arabo Islamic Medicine; Ophthalmology; Emergency Medicine. A furthertheme suggested by the General Assembly was "The teaching of the History of Medicine".

The following wishes were expressed in relation to future congreses.

- Arrangements for discussion periods during the meetings;
- Arrangements for "round table" seminars on controversial subjects;
- Arrangements for a session on the present state of teaching of the history of medicine throughout the world.

- Ne pas négliger les "héros de la médecine", à mentionner uniquement d'après leur importance au niveau mondial.
- Annoncer les congrès dans les principales revues médicales générales mondiales (et non uniquement dans celles d'histoire de la médecine).
- Une discussion a été engagée concernant la publication ou non de toutes les interventions présentées lors des congrès dans les Actes et à ce propos un concensus n'a pu être dégagé.
- Le comité scientifique du congrès a un grand rôle à jouer en ce qui concerne la sélection des travaux présentés.
- Afin d'éviter des absences d'orateurs prévus, il a été suggéré de n'insérer dans les programmes de congrès que les orateurs en règle des frais d'inscription.
- La proposition a été faite d'envoyer les "Abstracts" des congrès à tous les membres de la Société.

**10. *Vesalius***

La publication de la revue *Vesalius* a été reconnue comme un lien de communication indispensable entre tous les membres de la société et l'initiative sera poursuivie.

- Les éditeurs s'engagent à standardiser les références (méthode numérique) dans les prochains numéros.
- Il a été proposé d'envoyer un numéro de *Vesalius* à tous les titulaires des chaires d'Histoire de la Médecine.
- Le Past-Président John Cule continuera sa tâche de co-éditeur de *Vesalius* avec le Prof. Appelboom.

*Jean-Pierre Tricot*
*Secrétaire Général*

- It was felt that the "heroes of medicine" should not be neglected, together with their importance on the world stage.
- Congresses should be advertised in all the principal medical journals and not only in those specialising in the history of medicine.
- A discussion was held on whether or not all the papers offered at a congress should be included in the published Proceedings, but no firm concensus of opinion emerged.
- The scientific committee of each congress had an important role in the selection of submitted work.
- In order in future to avoid the absence of advertised speakers at congresses, it was suggested that organisers must insist on the rule that speakers must pay the congress fee before acceptance of their papers.
- The proposition was accepted that Congress "Abstracts" be sent to all members of the Society.

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**10. *Vesalius***

The publication of the journal *Vesalius* was acclaimed as an indispensable means of communication between members and should be continued.

- The editors agreed to change the present alphabetical method of reference to a numerical one.
- It was proposed that a copy of *Vesalius* be sent to the occupant of each chair of the history of medicine worldwide.
- The Immediate Past President Dr John Cule will continue his task, with Prof. Thierry Appelboom as joint editor of *Vesalius.*

*Jean-Pierre Tricot*
*General Secretary*

*English translation : John Cule*

# *Scientific Events*

**Mars 1997**

**9èmes Rencontres Scientifiques du Luxembourg**

Séminaire d'Etudes Anciennes du Centre Universitaire du Luxembourg (SEMANT)

Thème : "La thérapeutique dans l'Antiquité. Justifications, limites, performances"

Informations : Prof. Charles M. Ternes,
162A avenue de la Faïencerie
1511 Luxembourg
Grand Duché du Luxembourg

**26-27 avril 1997**

**Colloque international**

**"Judaïsme et Histoire de la Médecine"**

Musée de la Médecine de Bruxelles
Institut d'Etudes du Judaïsme

L'acharnement thérapeutique à travers la doctrine; Identité et psychanalyse; Mutaler genitalia - Droit romain et matrilinéarité juive; A propos du Maqâa fi'l-Jamaa (traité des relations sexuelles) de Moïse Maïmonide; Les médecins juifs arabes; Que deviennent les médecins juifs de Provence après leur conversion (1501 - 1625); etc.

Informations : D. Gasparon
Tél. : # 32-2-555.34.31
Fax.: # 32-2-555.34.71

**4-7 September 1997**

**"The Evolution and Palaeoepidemiology of Tuberculosis"**

The Department of Anthropology, Jozsef Attila University, Szeged, Hungary & the Laboratoire d'Anthropologie Biologique, Fac. de Medecine, Universite de la Mediterranee, Marseille, France.

Provisory Scientific Topics (Sesions) :

Evolutionary biology of mycobacterial pathogens; Biology and epidemiology of tuberculosis; Diagnosis of tuberculosis in past and present population; Paleopathology and paleoepidemiology of tuberculosis; Medical history of human tuberculosis; Sociological and anthropological approach of tuberculous infection; The evolution of Mycobacteria : ancient and recent aptterns.

Information : Dr. Gyorgy Palfi
Jozsef Attila University
Egyetem u. 2. P.O.B. 660.
H-6701 Szeged, Hungary
Tel/Fax: #36-62.45.43.14
E-mail : palfigy@bio.u-szeged.hu

**The second annual resident essay award**

This award will be presented at the AHA's annual dinner meeting held in conjunction with the American Society of Anesthesiologists October, 1997, annual meeting in San Diego, California. A1500-3000 word essay related to the history of anesthesia, pain management or critical care should be submitted to:

Doris K. Cope, MD
University of South Alabama
Department of Anesthesiology
2451 FillingimStreet/MSTN610
Mobile AL 36617 U.S.A.

The entrant must have written the essay either during his/her residency or within one year of completion of residency. Residents in any nation are eligible, but the essay MUST be submitted in English.

The recipient of the Resident Essay Award will receive a $500.00 honorarium and the manuscript will be presented at the spring 1998 meeting of the Anesthesia History Association and subsequently published in the Bulletin of Anesthesia History

Entries must be received on or before September 1,1997.

**Historical Medical Equipment Society**

The Historical Medical Equipment Society was founded in September 1996 to provide opportunitie for meetings to discuss medical instruments and equipment; to promote the study and development of medical equipment; to publish a newsletter, to arrage visits to museums and private collections. Membership is open to all.

For further information on membership and the meeting to be held in April 1997 write to :

The Secretary,
77 Carmarthen Avenue,
Portsmouth P06 2AG, Great Britain.
Fax. #44-1705 201479.
E-mail 101767.2756@compuserve.com.

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