James Jackson
an American Physician in London, 1799-1800

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Summary

James Jackson (1777 - 1867) was a prominent physician in Massachusetts during the first half of the nineteenth century. Early in his career, he had traveled to London to complete his medical studies. A search of libraries and archives on both sides of the Atlantic has uncovered hitherto unpublished and little known information about his experiences on his journey and while abroad (1799-1800). Présentation of this material not only serves to supplément what is already known about Jackson but in addition heightens our understanding and awareness of contemporary medical issues of his day.

Résumé

James Jackson (1777-1867) était un éminent docteur de la première moitié du XIXe siècle au Massachusetts. Au début de sa carrière il était allé compléter ses études à Londres. Des recherches dans les bibliothèques et archives des deux côtés de l'Atlantique ont révélé des détails et documents de son voyage et séjour à l'étranger (1799-1800) inconnus ou inédits jusqu'à présent. Ce matériel complète ce que nous connaissions de Jackson et élargit nos connaissances de certaines issues médicales de cette époque.

During the late eighteenth and nineteenth centuries, American doctors would occasionally risk the hazards of long and at times dangerous journeys at sea in order to further their studies in Europe. An examination of personal correspondence, medical notes, and other existing documents related to these trips can often provide informative glimpses of medical education, medical personalities, and medical practices of the day (1,2).

One physician for whom records are available from such a venture is James Jackson of Massachusetts (1777-1867). Medical case descriptions written by him during a ten month stay in London from 1799 to 1800, documents attesting to his studies there, correspondence during that period between him and his mentor Dr Edward August Holyoke of Salem, Massachusetts, about medical subjects and issues then of interest on both side of the Atlantic, and other related material, will be examined and described, some of it for the first time.

Jackson graduated from Harvard College in 1796. Although he attended a few lectures in medicine during his senior year there, his medical career did not begin in earnest until 1797 when he became a pupil and apprentice of the above mentioned Dr Holyoke, the founder and first president of the State Medical Society and a teacher sought after by many aspiring doctors. Two years later, Jackson traveled to England to further his medical studies. In 1801, following his return, he married Elizabeth Cabot of Beverly, Massachusetts and settled into a successful medical practice in Boston. During these years, he wrote extensively, played a leading role in founding Harvard Medical School and the Mas-

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J. Jackson, an American Physician in London, Vesalius, VI, 1.1 -10,2000

sachusetts General Hospital, and in 1812 succeeded the well-known Dr Benjamin Waterhouse as Hersey Professor of the Theory and Practice of Medicine at Harvard. Additional details about his life and work are recorded elsewhere (3).

The journey and arrival

Jackson sailed from Massachusetts in October, 1799, on the Thomas Russell, a vessel under the command of his brother Henry, returning to Boston in September, 1800, aboard the Superb. The war then taking place between England and France, and the undeclared naval war and poor relations at the time between France and America, made travel across the Atlantic more than usually hazardous, as Jackson later recalled about his own ocean voyage to England:

... I will tell you that at that time the French were capturing our ships on the open sea, and that we were destined to go up the English Channel where we were exposed to their cruisers. Each man knew what the fate of those thus taken he might be made a prisoner and put into a French prison, unless indeed we

should any of us have been split into the sea, an act then not uncommon on the part of our French friends... (3, p.208)

Shortly after his arrival in London, Jackson found lodgings in the house of a hatmaker at 21 St Saviour's Church Yard (3,4), close to the southern end of the old London Bridge (fig. 1). St Saviour's Church has since been renamed Southwark Cathedral. Jackson's lodging house, however, is no longer in existence, most likely having been torn down along with many other surrounding buildings during the construction of the new London Bridge in the 1820s and early 1830s.

In all likelihood, Jackson chose these rooms because of their proximity to St Thomas's Hospital and Guy's Hospital (fig. 1). An old print (fig.2) shows a courtyard of St Thomas's Hospital, probably appearing much as it looked when he was in London. The hospital has since moved. A plaque on the wall of the present London Bridge Post Office on Borough High Street marks where it stood from 1225 to 1865 before being relocated across the River Thames from the Houses of Parliament. Guy's Hospital has remained at its original location through the years, although greatly expanded since receiving its first patients in 1725. The present entranceway and court on St Thomas Street are immediately recognizable in a print from the period that Jackson attended lectures there (fig.3), with the statue of the hospital's founder, the bookseller Thomas Guy, seen standing in the courtyard as it still does today. Histories of the two hospitals provide further details about how they were organized and how they changed in appearance over the years (5,6,7).

Medical instruction taken in London

Two entry books of pupils and dressers at St Thomas's Hospital from the late eighteenth and early nineteenth centuries (8a, 8b) reveal that on
December 2, 1799, Jackson was listed as a "dresser" to Dr George Chandler, as seen (fig. 4) in a page from one of these registers (8b). A third register from this period (8c) records that on April 17, 1800, Jackson paid £5.15.6 (five and a half guineas) to take a course at St Thomas's Hospital on the practice of medicine for surgical students. His attendance certificate for this course, signed on July 30, 1800, by George Whitfield, apothecary to the hospital, confirms that "Mr. James Jackson hath diligently attended the Medical Practice during the time of his being Surgeons Dresser of this Hospital" (9). "Dressers" functioned as surgeon's assistants. On payment of fifty pounds to a specific surgeon for a year of supervision and instruction, a "dresser" was allowed to carry his surgeon's surgical instruments and dressings on the wards of the hospital, was permitted to assist him at an operation or watch him at work, and was entrusted with responsibility for certain admissions and minor procedures (10, p.14). A more complete account of the life and duties of a "dresser" is presented in Parson's History of St Thomas's Hospital (6).

Other existing certificates attest that Jackson also received instruction in midwifery and deliveries, diseases of teeth, chemistry, and therapeutics and materia medica (9). These courses, and others like them, were often advertised in London's newspapers, providing an important source of instruction for students as well as a way for entrepreneurial physicians to earn additional income (11). The following are two examples of such advertisements:

Lectures on midwifery
Dr Lowder's and Dr Haighton's lectures on midwifery comprehending the diseases of women and children, will begin at the Theatre of Guy's hospital on Thursday, October 3, at 8 in the morning. Their evening course, at their Theatre, No 24 St Saviour's, Southwark, will begin on Tuesday, October 8, at 5 in the afternoon. (Times, Sept 13, 1799).

Theatre, St Thomas's Hospital
Mr Astley Cooper will begin his course of lectures on the principles and practice of
surgery on the 1st of November, at 8 o'clock in the evening. (Times, Sept 14, 1799)

Jackson's medical notes (12), correspondence (4) and a certificate of attendance (9) indicate that he attended lectures given by the doctors named in both these advertisements.

In a handwritten letter of recommendation, Dr William Woodville of the Smallpox and Inoculation Hospital of London wrote that Jackson had received the following instruction from him (9):

London, July 11, 1800
This is to certify that Mr. James Jackson attended these hospitals as my pupil whereby he had frequent opportunities of fully knowing the proper treatment of patients in the inoculated and casual smallpox, and also the cowpox for which disease several were inoculated by him, entirely under his direction. I believe him to be well qualified to practice as an inoculator (sic/ Wm Woodville

Woodville, a contemporary and a rival of William Jenner, was an accomplished botanist and the head of the London Smallpox Hospital. His role in the investigation of smallpox vaccination and the results he obtained, at times controversial, have been reviewed elsewhere (13, 14, 15).

Letters across the Atlantic

The length of time it took a letter to travel by sailing ship across the Atlantic was at the mercies of the tides, weather, availability of a ship, and the state of the embargo in the ongoing war between England and France. Those letters written by Jackson and Holyoke that have survived now provide us with a firsthand glimpse of medical practice of the day and document some of Jackson's activities and experiences.

On November 18, 1799, following a twenty-one day voyage across the ocean, and having been in London for barely a week, Jackson wrote to Holyoke (4) that "as soon as I get fixed at the hospital I shall attend to your lancets. I think I may have an opportunity to send them (to) you by my brother". After extending his compliments and thanks to Holyoke's family "for their many kind attentions and civilities" during his apprenticeship in Salem, Jackson concluded his letter in the formal manner of the day - "I am most respectfully sir, your pupil and obedient servant".

In his letter dated January 14, 1800 (12), Holyoke commented that practice had been slow since Jackson's departure a few weeks earlier and that "you (Jackson) would have had but a poor opportunity of seeing practice...if you had continued here". Always the teacher, he discussed at length current obstetrical practices, particularly the use of the forceps, and asked Jackson to find out "whether the long eared forceps described by Smellie (William Smellie 1697 - 1763) are ever made use of nowadays. I remember to have attempted formerly to deliver with them, but without success, and have never used them this thirty years". Perhaps taking this opportunity to engage his pupil, Holyoke, then seventy-two years old, added that "you will naturally for your own information make those enquiries; I shall be glad to learn the result of them. I shall hope to hear from you by the first ships in the spring, and shall wish to be acquainted with anything new in the medical line especially". The letter was signed "Your friend and servant, E.A. Holyoke".

On March 18, 1800, having already been four months in London, Jackson wrote of his plans to be there eight months longer, indicating that "beyond that time I find that it will not be in my power to stay. If I considered only my professional improvement, I know not how long I might remain" (4). It turned out that he actually left sooner than this, arriving back in Boston in September, 1800 (3, p. 219). To what extent this decision was governed by financial concerns, family matters, a desire to start practice as soon as possible, a waiting fiancée, or for other reasons, is not clear from his correspon-
dence or his biography. However, John Collins Warren, a friend of his college days who had arrived in London during the summer of 1799 and was studying medicine there at the same time and at the same hospitals as Jackson (16), later wrote that "having made a matrimonial engagement, and having at the same time the expectation of being the first to carry the vaccine fluid to America, he (Jackson) left us; came home, got his degree, and, by the aid of a large circle of friends, launched immediately into practice" (16, p.275).

In his letter of March 18 (4), Jackson also described some of the responsibilities he faced at the hospital where "I have again been 'taking in', as we term it. I have between twenty and thirty new patients, and a much better collection of cases than my last. I have quite enough to do, am continually making mistakes, as you will readily imagine, and thereby learn to do right the next time". Like a proud novice of any era might have said, he noted that he was now attending "to the practice of midwifery, and have twice delivered women myself".

Replying to his mentor's earlier enquiry about Smellie's long eared forceps, Jackson explained (4) that "Dr H. (Haighton) says they (the forceps) were somewhat improved by Doctor Lowder... but that he has met only one case where he thought of using them". In discussing other medical news of the day from London, Jackson carefully added, "I hardly know enough of old practice to say what part of that which I see is new - and I am taught here as I was by you to adopt new proposals with the utmost caution".

This detailed letter also contained the first in a series of interesting exchanges with Holyoke about the Perkins metallic tractors (rods) an invention that had been patented and introduced into medical practice by Dr Elisha Perkins of Plainfield, Connecticut, during the last decade of the eighteenth century (17, 18, 19). Benjamin Perkins, his son, was in London at the same time as Jackson, having been sent there by his father to demonstrate and promote this new form of therapy. Said to have beneficial effects by reason of its influence on magnetic and electric
forces within the body, the heated controversy that the use of this instrument had provoked in Connecticut was now being repeated in London. As Jackson explained to his mentor (4),

*Dr Haygarth has lately published a pamphlet upon the metallic tractors - I will send it to you by the Minerva if I can get it in season. Dr H's experiments seem to prove their efficacy to depend on their operation upon the imagination. In answer Perkins adduces some successful cases of their efficacy on infants, on patients in epilepsy, and on horses. How well those cases are substantiated I am not competent to determine.*

After referring to several patients whom he and Holyoke had cared for together in Salem, Jackson concluded his letter almost apologetically: "I have increased my letter to a length which I did not intend - I hope you will excuse the garrulity of a young man".

Less than two weeks later, on March 29, 1800 (12), Jackson told Holyoke that he was sending to him Haygarth's pamphlet about the metallic tractors of Perkins, and mentioned that although he had not yet met the inventor's son, "a friend of mine promises soon to make us acquainted". Whether such an introduction ever took place is not known.

Elsewhere in this same letter (12), Jackson described the way in which "digitalis is given by some very sensible (English) practitioners... they begin with doses of from one to two grains of the powder, and repeat it every six or eight hours, increasing the dose if necessary till they produce nausea, when they stop... such and many other uses of the digitalis have long since been proposed". In an indication that his future would be in medicine rather than surgery, Jackson assured his mentor that with the coming of warm weather it would no longer be possible to dissect and that he would "then begin to attend to physic... the subject has never been out of my mind".

A few days later, on April 5, Jackson apologized to Holyoke (4) for not having obtained Haygarth's pamphlet in time to send along with his previous letter but that he now had a copy for him. He added that although "Perkins had answered this pamphlet... I am told that the Editors of the Medical and Chirurgical Review think as I do, that it would be difficult for him to give such proof (of the tractors' benefits) as would be satisfactory".

At about this time, Jackson seemed to be preparing for his return to Boston. On July 12, 1800, John Collins Warren wrote to his father Dr John Warren, an American patriot during the Revolutionary War and the professor of surgery at Harvard, requesting that he assist his friend Jackson "in the execution of his designs for knowledge", noting that "he (Jackson) can render himself serviceable to you" (20). The ties between the Warren family and Jackson continued for many years and in 1815, Jackson delivered the eulogy at the senior Warren's funeral service (3, p. 285).

The final transatlantic letter that Holyoke sent to Jackson was in August, 1800 (12), although by the time it reached London, Jackson had already departed. Once more, Holyoke discussed the controversial metallic tractors of Perkins, observing that "there is no more virtue in the metallic tractors than in the wooden ones". In a chatty and almost gossipy manner, he wrote about cases of "scarlatina anginosa" he had heard about, the 100 degree temperature being experienced that summer, the birth of twin boys to his daughter, and the interest being shown in the forthcoming presidential election (Thomas Jefferson-Aaron Burr).

Unaware that Jackson would not be in London when his letter arrived there, Holyoke also requested a favor, to "procure for me a good pair of spectacles", describing in detail the style and prescription he wanted (12). The letter was sent back across the ocean, finally reaching Jackson in Boston in early October shortly after he had
started his practice. He replied almost immediately on October 15, 1800 (4), offering to contact his friend John Pickering, then in London as the private secretary to the American ambassador to England (3, p. 194), for the eyeglasses. In addition, Jackson mentioned some of the initial difficulties being experienced with the vaccination material he had brought with him from England and re-emphasized what he had written earlier about the Perkins metallic tractors (4), that his (Haygarth's) object was not simply to prove that the metallic tractors had no specific power; but to go further and show that the imagination had more influence in the production and in the cure of disorders than has hitherto been supposed.

Jackson's medical notes

Several handwritten pages of Jackson's medical notes survive from his stay in London (12). Two of the cases he described had been presented at a lecture given by the innovative and well-known surgeon Astley Cooper, 1) a woman with a fifteen pound mass in her upper thigh with bony material in its center, and 2) a pupil at St Thomas's who had punctured his finger with a needle while performing an autopsy and had died soon after the accident. Also summarized by Jackson were remarks made by Astley Cooper about having been personally afflicted with an inflammation in which "he had himself been in the utmost hazard... his knees were so affected that a complete ankylosis took place for a time. Remedy to be relied on only is plentiful evacuation, particularly purging, with calomel especially".

Elsewhere in these notes, Jackson gave a detailed account of a former seaman with depressed fractures of both parietal bones of the skull whom he saw and examined regularly (12): He appeared nearly insensible, and altogether without understanding. When the injured part was pressed he would express some pain. He would sometimes appear to wish for food or drink by smacking his lips, and would eat or drink when food or liquid was put into his mouth.... He did not speak at all, did not appear to hear anything, and when his eyelids were raised (for he usually kept these closed) his eyes were so turned up that the pupil could not be seen. There was a constant motion of his fingers...

Three days after admission to the hospital, Jackson wrote that Mr Cline operated to relieve pressure on the patient's brain. Following the surgery, in which trephining was performed and pieces of bone removed, "the motion of his fingers had stopped... his eyes were no longer turned up when the eyelids were raised... As he was carried from the theatre I remarked him to half open his eyes and immediately shut them again".

On the following day, Jackson noted that the patient "keeps his eyes open like other people... he speaks and answers rationally to questions... and appears slowly to recollect things, but not everything perfectly. He could tell his name, and where he came from, but could not recollect the
The name of his ship... It was found that he was a Welshman, and to a fellow countryman he could talk more fully. On May 14, 15 and 16, it was observed that the patient "grows daily better... he sleeps tolerably well and has a good appetite." Several weeks later, on July 5, Jackson commented - "Has continued well, wound healing kindly. When he takes much liquor is intoxicated and quite outrageous".

**Discussion**

For the most part, the letters that Jackson and Holyoke exchanged with each other were about medically related subjects that were then of current interest. For example, in the previously cited letter of March 29, 1800 (12), Jackson had described how the appearance of nausea in patients receiving digitalis served to help doctors in determining how much of the drug to give. When Jackson wrote this, it had only been fifteen years since the publication of William Withering's famous monograph on digitalis - *An Account of the Foxglove and Some of its Medical Uses.* It is perhaps noteworthy to also recall that in 1954 two well-known Boston cardiologists were still writing that "it is customary to digitalize to mild toxicity to assure full therapeutic action" (21, p.29).

The story of the Perkins metallic tractors has been told often (17,18,19). However, the discussions about the device between Jackson and Holyoke are of additional significance in showing that physicians of this period on both sides of the Atlantic were beginning to pay attention to the placebo effect and the importance of control subjects when considering new therapies. Haygarth, the author of the pamphlet sent by Jackson to his mentor and referred to frequently in their letters, performed an experiment placing either metallic or wooden tractors on patients who did not know which was being used (22), while a recent review by Kaptchuk (23) traced the history of blind assessment and placebo controls in medicine back to the late eighteenth century, a time not far removed from that of Jackson and Holyoke.

John Collins Warren revisited London many years after he and Jackson had been there together as students. In a letter dated August 8, 1837 (9), Warren described for his friend some of what he saw on "a sort of pilgrimage to our ancient haunts. By myself I slowly measured my way on foot over the new London Bridge and found everything changed, so that with some difficulty could I discover St Thomas' Street; but looking to the right, I espied the old St Saviour's Church". When visiting St Saviour's Church Yard, Warren observed that part of the church was in ruins but "still beautiful," and described himself as feeling moved when thinking back over the thousand years of its existence and how "I associated it with our former labours". Nostalgically he added that "Cox the bookseller's shop has gone... (and) in vain I look for my landlady Mrs Cubbidge, the cork cutter's wife." At St Thomas's Hospital, Warren wrote that he "tried to find the old lecture room but it was no more. Great changes had taken place. A new lecture room has been built, far from the other; a new museum and new wards; and still greater changes are contemplated. Guys was less changedaltho' there are new wards, a new museum-splendid dissecting and lecture rooms."

The letters of John Collins Warren cited in this article (9, 20) reflect the close and longstanding professional and personal ties that existed between him and Jackson(3), ties that in later years were acknowledged in the dedication to Warren's biography - "To James Jackson, M.D., for fifty years the faithful friend and adviser of Dr Warren" (16). This friendship began during their years together as students and continued until Warren's last illness in 1856, for which he was attended by Jackson (16, p. 275). In the intervening years, they had both played important roles in reorganizing the Massachusetts Medical Society, in strengthening the Harvard Medical School when it moved from Cambridge to Boston, in founding the Massachusetts General Hospital, and in many other endeavors (3).
The names of several prominent London doctors e.g. Astley Cooper, William Babington, Henry Cline, William Woodville, appear in Jackson's medical notes (12) or are found on the certificates he received for attending their lectures and courses (9). To the list of those from whom Jackson received instruction can now be added the name of George Chandler, identified, as noted earlier, as the surgeon for whom he served as a "dresser". As far as can be determined, this association between the two men does not appear to have been mentioned in previous accounts about Jackson or in his correspondence.

Who was Chandler? In brief, he had been elected a surgeon at St Thomas's Hospital in 1783 (5, p.243), and was active in the Royal College of Surgeons of England as a warden, master, and examiner (24, pp.275,313). He was described as "a fairsurgeon...though he was not much of an anatomist" (25, p. 47), and as one who "made rather hasty decisions in some cases" (26, p. 199). He was also damned with faint praise by Astley Cooper as "a good tempered man, but wanted firmness and knowledge... He was remarkably rapid in common operations. He was always the same, and if he had lived five hundred years, would have always remained so" (27, p.302).

The writing ability shown by Jackson in his early correspondence and medical notes continued into the years that followed as attested by the fifteen contributions he made to the New England Journal of Medicine and Surgery between 1812 and 1823, and by the several books and monographs he authored (3). Indeed, no less a bibliophile than William Osier is quoted as saying that "James Jackson's Letters to a Young Physician, 1856, are still worth reading and worth republishing" (28, p. 320).

On returning from England, Jackson had apparently hoped to be the first in the United States to use the new method of smallpox vaccination he had recently learned (16, p. 275). He missed out on this opportunity, by a few months, to Benjamin Waterhouse (3, pp.227-8). In addition, in a letter to his friend John Pickering on November 13, 1800, Jackson wrote that the vaccination material he had brought back with him from London had failed, but knowing that "Dr (Thomas) Manning of Ipswich had received matter from his brother whom we saw in London... I went secretly to Ipswich determined to pay any price for a supply... The Doctor gave all I asked and refused all compensation" (3, p. 222).

More detailed discussions about Jackson's role in the vaccination movement in Massachusetts may be found in other publications (3, 29). Despite problems and rivalries in the medical community concerning the use and development of smallpox vaccination (29), Jackson became well-known for his knowledge of the subject and to his credit did much to advance the procedure as an important health measure. In 1808, he was appointed by the Massachusetts Medical Society as part of a commission "to inquire into the present state of the evidence respecting the prophylactic power of the cowpock, and to report such measures as they may find to be expedient for establishing the practice (of vaccination) on a safe foundation" (30, p.89). The full fifty page report was published that same year (30). Clearly, Jackson's training in England with Woodville had stood him in good stead.

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Biography

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