John Clarke was one of ten licentiates in midwifery created by the College of Physicians in the late eighteenth century to regularise the growing involvement of medical men in obstetrics. He was an excellent clinician and a popular teacher. His publications included original observations about puerperal fever, nausea and other complications of pregnancy and the management of labour. He opposed the attitude of the College that prevented its Fellows from practising midwifery and he stridently criticised the College’s neglect of the diseases of children. Part one of his book on the diseases of children contained the first exact description of tetany. Part two was never published because of his early death.

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Childbirth was traditionally under the control of women with no formal qualifications. During the eighteenth century medical men gradually became more involved. Initially, as they were only called to difficult births, their presence was associated with unfavourable outcomes. Therefore women were reluctant to accept them during labour. However, as more male doctors became involved in childbirth, their presence and influence seemed to improve results. This increase in the number of ‘men-midwives’ coincided with a general surfeit of medical men and raised prejudice against them. It was felt that their access to families during pregnancies would give them an unfair advantage if they later wanted to act as physicians. In 1771 the College revised its statutes and effectively banned from the fellowship anyone who had practised as an apothecary or obstetrician or as a tradesman. However, the College, recognising that there were distinguished and knowledgeable practitioners in midwifery, issued special licences limited to obstetrics between 1783 and 1800. John Clarke was one of ten people licensed in this way. He made several important original clinical observations and his relationship with the College says much about the regulation of the medical profession at that time.

Clarke was born in Wellingborough in Northamptonshire on 19 December 1760, the eldest son of a surgeon, also called John. In 1772 the family moved to London, and in 1779 he began to study medicine there. He was proud to list John Hunter among his teachers and his comprehensive manuscript ‘Notes taken from Mr Hunter’s Lectures on Surgery, 1781’ is now in the library of The Royal College of Surgeons of England. This is the only existing version of these lectures signed and dated by John Hunter himself.

Midwifery in the eighteenth century was very different from that of today. Clarke wrote poignantly ‘there is scarcely an individual who has not to lament the loss of some dear relative or connexion in childbed’. The problem was not so much the mechanics of labour, but the subsequent infection. However, at that time medical science was ignorant of the precise nature of infectious disease.

Puerperal fever

Clarke’s first publication, dedicated to his teachers Dr Osborn and Dr Denman, was about puerperal fever. This infection had been known to occur sporadically since the time of Hippocrates but, by the middle of the eighteenth century, frightening epidemics arose in both France and Britain with the introduction of lying-in hospitals. This was before the days of hospital league tables, but Clarke remarked that when, in 1761, a small private lying-in hospital in London had experienced a ‘very fatal’ epidemic ‘they sometimes buried two women in one coffin to conceal their bad success’.

Although it took almost another century to identify the causal agent, it was already accepted in Clarke’s time that puerperal fever could be transmitted by close contact. He observed that puerperal fever could also arise ‘where there had not been any communication with infected persons’. Seven years later, in 1795, Alexander Gordon demonstrated that attendants could spread the disease. We now know that the streptococcus can be transmitted from patient to patient by attendants carrying the germ on
their bodies and clothes. If puerperal fever appeared among Clarke's patients, 'he was induced to destroy his entire wardrobe, and no case of the kind occurred to him afterwards'. Clarke made several other significant observations about puerperal fever. For example, the streptococcus also causes cellulitis and he mentioned two instances of inflammation following accidental injury to the hand of someone performing an autopsy after puerperal sepsis. He also noted an association between an epidemic of puerperal fever and ulcerous sore throat.

**Professional life**

Many warm contemporary comments about John Clarke give us a picture of his personality. He quickly established a thriving obstetric practice in London. He was energetic, acutely perceptive and efficient, gentle and kind, stressing the importance of considering the wishes of individual patients when planning clinical care. He deplored any roughness or insensitivity during consultations and he emphasised the importance of obtaining consent before internal examinations. Similarly, he would obtain permission from the family before performing an autopsy: 'leave was obtained to inspect the body…and the parts involved in the disease were removed, for the purpose of more accurately examining them'. In keeping with the usual practice of that period, he accumulated a personal collection of pathological specimens, some of which were particularly esteemed. They passed to St George's Hospital after his death.

Throughout his life, Clarke displayed a generous disposition and a lively social conscience, being especially aware of the importance of social deprivation as a cause of ill health. At that time many lying-in hospitals restricted admission to married women, not only because their benefactors were against anything that encouraged vice, but also because hospital managers knew that this lowered death rates. Destitute women who had no support from their families were more susceptible to infection and death. Clarke felt that they were the very people most in need of care; therefore at the Store Street Lying-in Hospital, where he was physician, he supported the admission of unmarried women if it was their first pregnancy.

**Academic activities**

Clarke was an active member of several medical societies including the Lyceum Medicum Londinense, of which he was joint president in 1787, and The Medical and Chirurgical Society of London (now the Royal Society of Medicine) of which he was vice-president in 1814. His publications included two papers in 'Philosophical Transactions' and seven in 'The Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge'. These publications contained several original observations.

For example, in 1791, Clarke reported a case of ectopic pregnancy which ended fatally at seven weeks gestation due to haemorrhage. He recorded that the patient had suffered from nausea due to the pregnancy and made the point that 'sickness of pregnancy depends on the general process going on, and not on the affection of any particular part, at any rate, it has no connection with the residence of the foetus in the uterus'. Another paper described an ectopic pregnancy ending in a fruitless labour at full-term. From this case, Clarke deduced that the onset of labour was not due to the presence of a foetus in the uterus. This observation was made in 1793 and even today medical science is remarkably ignorant about the precise changes that initiate labour.

In the same year he wrote a book for medical students about the management of pregnancy and labour, and his reputation was enhanced by the excellence of his lectures on midwifery. His teaching skills reached a wider audience when, in 1803, he became the author of a successful textbook, 'The London Practice of Midwifery'. Further editions were published in 1808 and 1811. He included a significant section on the diseases of children, even though paediatrics did not become a separate specialty until the second half of the nineteenth century.

**Difficult cases**

Clarke's opinion was sought in difficult cases. William Godwin gave a vivid account of contemporary obstetric practice in memoirs of his wife, Mary Wollstonecraft. There is a harrowing description of the eleven days in 1797 culminating in her...
death due to a retained placenta. On the sixth day John Clarke was called in to give his opinion, but sadly infection had become established, therefore he could do little. Although the mother died, happily the baby, also called Mary, survived; and when she was sixteen years old, she eloped to the continent with the poet Percy Shelley. Mary Shelley is probably best remembered now as the novelist who created Frankenstein. In spite of the miserable outcome, Godwin was clearly grateful for the obstetrician's help and when he published a collection of his late wife's writings he presented a copy to Clarke with the inscription, 'John Clarke, 1798, from the editor'.

**Dispute with the College**

In later years John's younger brother, Charles Mansfield Clarke, gradually took over his obstetric practice, leaving him to concentrate on the diseases of women and children. Financial independence meant that he was able to take what we would now call partial early retirement: half the year was spent working in London and the other half relaxing in the country, mainly in Staffordshire. However, he retained his active life style, seeing patients in and around Tamworth if their own doctors were unavailable and encouraging the medical establishment of the time to pay more attention to the special needs of women and children. He particularly criticised the bye-law of the College that prohibited Fellows from practising midwifery. He felt that this prevented 'men of the best education and the highest attainments in learning,' from enlarging the knowledge of the diseases of women and children.

The College was anxious to prevent unlicensed practice. The general licence of the College allowed Fellows to practise physic in London, but the licence in midwifery was limited to the obstetric art. Clarke's move from obstetrics to gynaecology and paediatrics led him into a dispute with the College. It seems that when Clarke had been admitted to the licence in midwifery in 1787 (after an examination conducted in Latin) he was assured that he would remain eligible to take the general licence later, but a subsequent surreptitious change in the regulations meant that when he applied for the general licence, the College refused to examine him. He wrote formally to the President and Fellows complaining about the poor quality of the College's communication and asking to be allowed to practise as a physician. However, the College refused to bend its new rules and circulated a reminder about a statute which imposed a penalty of £5 on any Fellow who consulted with an illicit practitioner. Matthew Baillie, who had been a friend since they had been medical students together and was by then one of the most eminent physicians in the country, was fined £5 for consulting with Clarke.

The College's obstinate attitude was matched by provocative acts by Clarke, who insisted on describing himself as a teacher of both midwifery and the practice of medicine. From a strictly legal view, he probably was practising beyond the limits of his licence but eventually the College's legal advisor, Sir Vicary Gibbs, ended the protracted quarrel by warning that persisting against such a distinguished practitioner would cause ridicule.

After their reconciliation Clarke received a rare honour for a licentiate when he was invited to read a paper at the College. This was a clinical description of six cases where women had suffered neurological problems after childbirth. Half a century before endocrinology emerged as a medical discipline, his observations accurately anticipated the protective effect of low doses of oestrogen against arterial disease.

In 1815 Clarke published volume one of his book on the diseases of children. In it he gave the first exact description of tetany, correctly describing it as a convulsive disorder and distinguishing the associated spasm of the muscles of the larynx from other disorders such as asthma. His masterful clinical account paved the way for the elucidation, a century later, of hypocalcaemia as its cause. Sadly, the promised second volume was never published because his life was cut short at only 54 years of age, almost certainly by cancer of the stomach. He was buried in the Parish Church of Tamworth, where there is a most impressive memorial in white marble by Chantrey.

In his relatively short life this pioneer of midwifery accomplished much. Who knows what further contributions to medicine, especially to the establishment of paediatrics as a separate specialty, he might have made had he lived for longer?

**References**

5. The Register Book of christenings, marriages and burials, in the parish of Wellingborough, in the County of Northampton: commencing March 26th, 1702. Northamptonshire Record Office 350P/647.
12. Nisbet W. *Authentic memoirs of the most eminent physicians and...*


14 Unus Quorum. *Nugae Canorae; or, Epitaphian Mementos (in stone-cutters verse) of the Medici family of modern times*. London: Callow and Wilson, 1827:27.

15 Clarke J. Commentaries on some of the most important diseases of children. London: Longman, Hurst, Rees, Orme and Brown, 1815.


29 M.D. testimonial for John Waldron. The Muniments, University of St Andrews, 1804.