Charles Barrett Lockwood: victim of an occupational hazard of surgeons

This year marks the centenary of the death of Charles Barrett Lockwood, surgeon on the staff of St Bartholomew's Hospital, London. In October 1914, he pricked his finger while operating on a patient with peritonitis following rupture of a gangrenous appendix. Septicaemia followed, and he died 5 weeks later.

Over the centuries, anatomists, pathologists and surgeons, together with their students and apprentices, were all too familiar with the deadly danger of an accidental cut or scratch while performing an autopsy or operation, especially if the case was septic.

I can still remember as a schoolboy (with the precocious idea that one day I would like to become a doctor), reading in the newspaper in 1936, of the death of Henry Philbrick Nelson at the age of 34 years. He was a brilliant young surgeon and anatomist who had already made important advances in our knowledge of the segmental anatomy of the lungs and who had introduced effective postural drainage of the chest in patients with bronchiectasis. By now he was already on the staff of the London Hospital.

While operating on a non-infected case, Nelson pierced the glove of his left hand with the diathermy needle. Thinking nothing of this trivial injury, he went on to change the dressings of some infected cases. A virulent streptococcal infection followed and spread in spite of several surgical debridements. Eventually, his left arm was amputated, but he died on 24 June from overwhelming sepsis. The tragedy was that, that very same year, 1936, was to see the introduction of sulphanilamide, highly effective against the streptococcus, and which heralded the beginning of the 'antibiotic era'.

Professor Harold Ellis *is Emeritus Professor of Surgery, Guy's, King's and St Thomas' School of Biomedical Sciences, London SE1 1UL*

Charles Barrett Lockwood was born in 1856 at Stockton-on-Tees, the son of a ship builder. After leaving the local grammar school, he spent time with a surgical practice in Stockton, where he saw a good deal of surgery and performed minor operations himself. In 1874, he entered St Bartholomew's Medical School as a student and remained attached to that institution for the rest of his life.

Lockwood qualified with the Membership of the Royal College of Surgeons diploma in 1878 and obtained his Fellowship 3 years later. His long association with the Department of Anatomy at Bart's began immediately after serving as house surgeon in 1880, leaving the dissecting room on his appointment as surgical registrar in 1891. He was promoted to assistant surgeon the following year. He was promoted to full surgeon in 1903 and served in this capacity until he resigned, because of failing health, in 1912, when he was elected consulting surgeon.

In the medical school, Lockwood taught not only on general surgery but also on descriptive and surgical anatomy. As well as this, he gave the first classes to be held in the school on the infant subject of bacteriology. Most unusually for a surgeon in those days, he worked on this subject in a small laboratory which was fitted up for him at the old Royal Northern Hospital. His lectures attracted large audiences because of their originality.

A keen anatomist, Lockwood examined in this subject in the Fellowship of the Royal College of Surgeons, and gave Hunterian lectures on the development and descent of the testis, on the development of the organs of respiration and circulation and on the morbid anatomy of hernia. His wide interests in anatomy resulted in his name being attached to 'Lockwood's suspensory ligament' of the globe of the eye, described in an extensive paper on the orbital contents, which he published in the *Journal of Anatomy* in 1886. Not surprisingly, Lockwood was one of the founder members of the Anatomical Society of Great Britain and Ireland in 1887.

Lockwood's interest in bacteriology had a practical value; he was largely responsible for the introduction in his hospital practice of modern aseptic surgery to replace the early antiseptic Listerian technique. Indeed, Lockwood was one of the first to use surgical gloves in London. The early sterilized cotton gloves were soon replaced by ones made of rubber. He published a report on aseptic surgery in the *British Medical Journal* in 1890 and this was followed by his book *Aseptic Surgery* which was published in 1896, probably his most important contribution to surgery in this period of transition from the old 'septic' days. Even today it is difficult to understand the battle that had to be fought over several decades before surgeons accepted Joseph Lister's clear demonstration of the bacteriological basis of wound infection.

Lockwood was a shy man, who attempted to cover his shyness by an air of cynicism and a sarcastic manner, which did not endear him to his colleagues. In spite of this, he was elected to the Council of the Royal College of Surgeons in 1908 and served on it until the time of his death. As a surgeon he was careful, neat and safe, although slow; this in the days when speed in operative technique was thought to be a virtue – perhaps dating back to preanaesthetic times!

Towards the end of his life, Lockwood suffered greatly from neuritis and began to feel the strain of performing major surgery. For this reason, he resigned from the surgical staff at St Bartholomew's in 1912, although he continued to do some private practice. His sad fate following an operation on a patient with peritonitis from a perforated gangrenous appendicitis is described above. There is an old wives tale that you may have heard, that 'doctors die of their specialty' – Lockwood published a book entitled *Appendicitis: its Pathology and Surgery* in 1901. BJHM

Conflict of interest: none.