Sir Frederick Hewitt, pioneer anaesthetist

This year marks the centenary of the death of Sir Frederick Hewitt in 1916. He was one of the pioneers of modern anaesthesia who did much to improve the equipment for the administration of anaesthetic drugs, to teach safe anaesthetic practice and to ensure that anaesthesia was administered by suitably qualified practitioners.

It is difficult for us to imagine surgery and midwifery in the pre-anaesthetic days. From the earliest times, attempts were made to assuage the agonies of trauma, midwifery and surgery. Large doses of alcohol, opium or laudanum (opium dissolved in alcohol) were used, and doctors dabbled in hypnotism. However, reliance was usually placed on the speed with which the surgeon could perform his tasks – thus amputation time was measured in minutes.

It was the study of the effects of the inhalation of various gases and vapours that initiated truly effective means of anaesthesia. First was nitrous oxide, whose analgesic effects were initially described by the chemist, Sir Humphrey Davy. He gave this agent the name 'laughing gas' and suggested in 1800 that it might be used to relieve the pain of surgery. This idea was not taken up until the gas was used by the dentist, Horace Wells, in Dartford, Connecticut, who used it for dental extractions in 1845.

William Morton, another dentist, used ether successfully at the Massachusetts General Hospital, Boston for a leg amputation in 1846, and the news of its success spread rapidly around the world. Professor JY Simpson, in Edinburgh, introduced the use of chloroform in midwifery in 1847. Its easy administration and the fact that it was not inflammable made this a popular anaesthetic agent.

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It was the next wave of pioneers who worked towards safer administration of these powerful drugs, improvement of equipment and training of anaesthetists. Among these, Frederick Hewitt played an important part.

Frederick William Hewitt was born in London in 1857. He was the eldest of six children of George Hewitt, an agricultural chemist. Frederick was educated at Merchant Taylors' School in London and then the Royal School of Mines before gaining a scholarship to Christ's College Cambridge in 1876 to study natural sciences, proceeding to St. George's Hospital for his clinical studies. He qualified Member of the Royal College of Surgeons in 1882, Bachelor of Medicine the following year and obtained his Doctor of Medicine in 1886.

Hewitt initially wished to practice medicine and opened rooms with his colleague Marmaduke Shields in Portman Square, London. However, a defect in his vision made Hewitt decide to take up anaesthetics and he was appointed anaesthetist to Charing Cross Hospital in 1884, to the Royal Dental Hospital the following year and to the London Hospital in 1886.

Hewitt published his first paper on the use of nitrous oxide in the *Lancet* of 1885. It was to be the first of many articles and lectures in which he described the technique of its safe administration and the value, in detailed experiments, of combining it with oxygen. Always concerned that medical students and doctors should receive proper training in this subject, Hewitt was prominent in persuading the General Medical Council that the study of anaesthesia should be included in the medical curriculum. He induced the government to introduce legislation to prevent the administration of anaesthetics by unqualified persons, although the outbreak of the First World War prevented its passage through Parliament.

Hewitt wrote three textbooks on anaesthesia, the most important of which, *Anaesthetics and their Administration*, was published in 1893. Its fifth edition was published in 1922, 6 years after his death.

On 24 June 1902, Frederick Hewitt was summoned urgently to Buckingham Palace. It was just 2 days before the coronation of King Edward VII, but the king was seriously ill with an appendix abscess. Frederick Treves, surgeon at the London Hospital and Serjeant surgeon to the King, had been summoned by Sir Francis Laking, the King's physician, and Lord Joseph Lister to deal with the emergency. Just after midday, the King, dressed in an old dressing gown, walked into the room at the Palace which had been prepared for the operation. Hewitt anaesthetized the patient and Treves explored the right iliac fossa. The patient was very obese and a long incision was necessary. A large abscess was located, opened, evacuated, washed out and drained with two large tubes. The cavity was packed with gauze. The whole procedure took about 40 minutes.

At that very time, a rehearsal for the coronation ceremony was being held at Westminster Abbey. The Bishop of London called for silence, announced the news and led the congregation in prayer for the Royal patient. The King made a smooth recovery. On 9 August, just 7 weeks after undergoing what, in those days, was a hazardous procedure, he went through the full ceremony of his delayed coronation. Hewitt received the Member of the Victorian Order for his service to the King and, in 1911 was knighted, the first anaesthetist to be so honoured.

From the time of his attendance on the King, Hewitt became in such demand that he gave up his appointments at Charing Cross and the Royal Dental and returned to his alma mater, St. George's, as physician anaesthetist.

Frederick Hewitt died of stomach cancer (then the commonest lethal cancer in the western world) in January 1916. His lifetime's work played a major part in establishing anaesthesia as a distinct specialty with its own training programme. **BJHM**

Conflict of interest: none.

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