

Sir Victor Horsley: pioneer neurosurgeon, physiologist and medical politician

This year marks the centenary of the death of Sir Victor Horsley in 1916, while he was serving as consultant surgeon to the British Expeditionary Force in Mesopotamia during the First World War. He was a remarkable man who pioneered neurosurgery in this country, carried out important physiological research on thyroid function and on cerebral localization, and was a dominant figure in medical politics in his time.

Victor Alexander Haden Horsley was born in 1857 in Kensington, London. His father was a well-known Victorian artist, John Calcott Horsley. On his mother's side of the family were several generations of eminent physicians. Horsley's childhood was mainly spent at the family country home in Cranbrook, Kent, where Victor attended the local grammar school. From 1874 to 1880, he was a student at University College Hospital medical school and, on qualifying, became house surgeon to John Marshall and then surgical registrar. In 1882 he was appointed assistant professor of pathology and was full professor from 1886 to 1896.

As well as this, Horsley was professor-superintendent at the Brown Institution, a veterinary hospital of the University of London and centre for advanced research in physiology and pathology. Here, Horsley worked on three lines of research – the prophylactic treatment of rabies (following Pasteur's work on treatment with dried extract of infected spinal cord into victims bitten by rabies animals), on thyroid function and on cerebral and spinal localization. Horsley's studies of thyroidectomised monkeys proved beyond doubt the function of this gland. In 1890 he advised that treatment of myxoedema should be by the subcutaneous

implantation of thyroid tissue from a sheep; this was soon overtaken by the oral administration of thyroid extract.

In 1885, Horsley was appointed assistant surgeon at University College Hospital and served as clinical professor of surgery between 1899 and 1906. In 1886 came his important appointment as the first neurosurgeon to the National Hospital for the Paralysed and Epileptic (as it was first called), in Queen Square, where he rapidly became a key figure in the newly developing speciality of neurosurgery in this country. His experiments on cerebral localization in monkeys had familiarized him with the surgery of the brain and spine and in the first year of his appointment he performed ten neurosurgical procedures with nine successes.

At Queen Square, Horsley performed the first removal of a spinal tumour, this in 1887. The patient was a retired army officer, who was admitted under the care of the neurologist, Sir William Gowers, with paraplegia, retention of urine and severe painful flexor spasms of the lower limbs. Gowers diagnosed clinically, in those days before the help of radiology, a spinal tumour compressing the spinal cord at the level of the fifth thoracic vertebra. Horsley was called into consultation and, realizing the obvious urgency of the condition, operated within 3 hours of seeing the patient. A laminectomy from the fourth to the sixth thoracic vertebra was performed and revealed no abnormality. The lamina of the third thoracic vertebra was now removed and revealed an almond-sized tumour which was indenting the spinal cord and which was entirely removed. The patient made a full recovery and died of other causes 20 years later. The pathology report on the specimen described it as a 'fibromyxoma'.

At Queen Square, Horsley also operated on patients with brain tumours, cerebral abscesses and focal epilepsy, and pioneered excision of the trigeminal ganglion in patients suffering from the agonies of trigeminal neuralgia ('tic douloureux').

Outside of his clinical work, Horsley was a man of wide interests, any of which would have occupied much of the energy of an average man. He was a lifetime teetotaler, played a leading part in the agitation against alcohol in this country and in 1907 published 'Alcohol and the Human Body' with coauthor Dr Mary Sturge. Horsley served as President of the Medical Defence Union, which would defend its members from unwarranted claims and complaints. However, it was up to the governing council of the Medical Defence Union as to whether a case should be supported. Overwhelming evidence showing that inappropriate conduct had occurred would lead to refusal to defend the medical practitioner in such cases.

Horsley served on the General Medical Council, was one of the leaders of the British Medical Association and was a strong supporter of women in the medical profession, at a time when such a view was certainly a minority one among his colleagues. Not surprisingly, he was an ardent supporter of votes for women.

Horsley was elected a Fellow of the Royal Society in 1886 and was knighted for his contribution to medicine in 1902. He married Eldred Bramwell in 1887 and they had two sons and a daughter.

At the outbreak of the First World War in 1914, Horsley volunteered to join the Royal Army Medical Corps and was posted as a surgeon to the British Military Hospital in Wimereux, France. In May 1915 he was sent to Egypt and in July of that year was appointed consultant surgeon to the Mediterranean expeditionary force. He fought with his usual vigour to improve conditions for the sick and wounded troops. While stationed at the British General Hospital at Amara, near Baghdad, he became suddenly desperately ill. Admitted at once to hospital, he died the same day, presumably of heat stroke, on 16 July 1916, 100 years ago. He was buried in the military cemetery at Amara. Truly a remarkable man. **BJHM**

Conflict of interest: none.

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