

Sir William Jenner: distinguished physician who helped differentiate between typhus and typhoid

The first 70 years or so of the 19th century witnessed a remarkable group of clinical observers and teachers attached to the teaching hospitals in London. It is important to remember that these men were working with no knowledge of the bacterial origin and transmission of the bulk of the infectious diseases; moreover, with the use of the microscope in pathology then still in its infancy, reliance had to be placed on careful clinical observation followed, in the fatal cases, by meticulous naked-eye study of the dissected cadaver. One has to admire the considerable advances they made in this comparatively short period in the elucidation of many diseases.

One immediately thinks of Thomas Hodgkin (1798–1860) and his naked-eye description of his eponymous disease, of Richard Bright (1789–1858) and his studies of nephritis and discovery of proteinuria, of Thomas Addison (1793–1890) and his brilliant description, in the same slim monograph, of both pernicious anaemia and of the clinical features of disease of the suprarenal glands (in those days mostly tuberculous), and of Sir William Gull (1816–90), who identified myxoedema. All four of these physicians overlapped each other at Guy's Hospital.

Rather less well known, but well worth our remembrance, must be Sir William Jenner who, among other achievements, helped differentiate between typhoid fever and typhus. This year marks the 200th anniversary of his birth.

Jenner was born on 30 January 1815 in Chatham, Kent, the son of an innkeeper. Little is known of his early life, but at 16 years of age he came to London, became apprenticed to an apothecary in Marylebone and was enrolled as one of the early students at University College and its associated University College

Hospital. He qualified LSA (Licentiate of the Society of Apothecaries) in 1835 and immediately set himself up in practice in Marylebone.

Young Jenner obviously had boundless energy. In 1837 he passed his MRCS (Member of the Royal College of Surgeons), took up an appointment at the Royal Maternity Charity and in 1844 graduated Doctor of Medicine at London University. He now ceased general practice, worked as a pathologist at University College and, important to his further career, worked at the London Fever Hospital to study continued fevers.

At that time, two of the common fevers encountered in the slums of London (as in all the major cities) were typhus and typhoid and there was much debate about whether these represented two entities or were merely manifestations of the same disease. Of course, today we know that typhus is a Rickettsial infection transmitted by the louse, and typhoid and paratyphoid are caused by *Salmonella* spp, spread by faecal contamination of water. In those times, the spread of these and other infections was usually put down to a 'miasma', transmitted in the stinking air of the big towns.

It was William Wood Gerhard (1809–72), a physician in Philadelphia, who must be credited with making a clear clinical distinction between these two diseases in the 1840s, but his work seems to have been overlooked. Jenner, at the Fever Hospital, maintained careful records of nearly 1000 cases over 2 years and published the autopsy findings of 66 fatalities. In 1850 he published an important monograph 'On the identity or non-identity of typhoid and typhus fevers' which clearly established the clinical distinction between these two conditions.

This major work led to Jenner being appointed professor of pathological anatomy at University College and soon after as assistant physician to the hospital, becoming full physician in 1854. In 1852 he was appointed the first physician at the recent-

ly opened Hospital for Sick Children at Great Ormond Street, where he published important papers on rickets and on the treatment of diphtheria.

In 1862, Jenner was appointed physician extraordinary to Queen Victoria. He attended Prince Albert in his lethal attack of typhoid fever in 1861 and Edward the Prince of Wales in his fortunately non-lethal attack of the same disease in 1871.

Jenner was appointed professor of the principles and practice of medicine at University College in 1862, but resigned 5 years later because of the heavy demands made upon him by his extensive private practice, although he continued to attend and teach at University College Hospital until 1878. He was widely regarded for his broad experience of disease both in adults and children, and for his remarkable recall from his wide practice.

In his later years he drew together a life-time of clinical practice in two volumes: 'Lectures and essays on fevers and Diphtheria' in 1893, and 'Clinical essays on Rickets, Tuberculosis, Abdominal tumours and other subjects' in 1895. The topics speak for themselves to illustrate the breadth of Jenner's clinical expertise.

Jenner held many important public positions, including President of the Royal College of Physicians (1881–7), playing an important part in preparation of the Medical Act of 1886. Reflecting Jenner's interest on the preventative aspect of medicine, the Diploma of Public Health (DPH) was initiated under his auspices.

Jenner received numerous high honours. He was created a baronet in 1868 and a Knight Commander of the Order of the Bath (KCB) in 1872.

He died in 1898 in his retirement home at Bishop's Waltham in the Hampshire countryside and is buried there. A prime example of the best of the old-style Victorian physicians. **BJHM**

Conflict of interest: none.

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