

Thomas Addison: physician and clinical observer

This year marks the 150th anniversary of the death of Thomas Addison, a brilliant clinician after whom two diseases are named – Addison's (or pernicious) anaemia and Addison's disease. Keen young would-be medical researchers of today might be forgiven if they believe that their labours require expensive equipment in a sophisticated laboratory. It is salutary for them to be reminded that close clinical study may lead to remarkable advances – think of Richard Doll's work on the association of smoking and lung cancer and of Dennis Burkitt's research on a peculiar tumour in children in tropical Africa.

In 1855 Addison published a slim, beautifully produced monograph of 39 pages, illustrated with 11 large colour plates, entitled 'Disease of the Supra-renal capsules'. Briefly in the preface he notes the discovery of another new disease, of idiopathic anaemia. This is a general anaemia, ending fatally, with no organic lesion to be found at autopsy. While investigating this disease, Addison, to use his own phrase, 'stumbled upon' a condition of anaemia, prostration, debility and a peculiar pigmentation of the skin 'in connection with a diseased condition of the suprarenal capsules', caused by either tuberculosis or, in other cases, atrophy of these glands.

This was the first example of what was later to be called an endocrine disease. It is likely that the novelist Jane Austen died of this condition. Addison's original specimens, paintings and a wax model showing the classical pigmentation can be seen today in the Gordon Museum at Guy's Hospital.

Thomas Addison was born in 1795 in Long Benton, near Newcastle-upon-Tyne and was brought up in Cumberland, where his father was a successful farmer. Thomas was a bright scholar, went to a grammar school in Newcastle and became fluent in

Latin. In 1812 he entered the Newcastle medical school and qualified MD 3 years later, with a thesis entitled 'De Syphilide et Hydrargyrum' (Syphilis and Mercury). After qualification, Addison obtained the appointment of house surgeon to the Locke Hospital (for venereal disease) in London.

In 1817 Addison enlisted as a pupil at Guy's Hospital and obtained his Licentiate of the Royal College of Physicians 2 years later (he was elected Fellow of the Royal College of Physicians in 1838). In 1824, he was appointed assistant physician at Guy's, the vacancy having been created by the promotion of Richard Bright (of Bright's disease of the kidney fame) to full physician. In 1837 Addison, in turn, was appointed full physician and, at the same time, joint lecturer in medicine with Bright.

Addison was a rather lonely man, melancholy and subject to fits of depression.

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He did not marry till he was 50 years old, his wife was a widow with two children, but there were no more offspring. Early in 1860 he retired from the staff, suffering from gallstones and jaundice, and with 'threatened disease of the brain'. He died in Brighton on 29 June 1860.

In his early career, Addison was interested in skin diseases. He got the Guy's wax modeller, Joseph Townes, to execute superb moulages of a wide variety of dermatological conditions; these are still used for teaching in the Gordon Museum. Addison never had a large private practice. He devoted his energies to his teaching of students at Guy's and to his careful studies in the post-mortem room. Outside of Guy's Hospital he was little known. No obituary followed his death in either the

Lancet or the *British Medical Journal*. He was never elected to any office at the Royal College of Physicians. His fame during his life was as a brilliant clinical teacher at Guy's. His one-time pupil, Sir Samuel Wilkes, wrote:

'As a teacher it is difficult to conceive better. His lectures were of a very superior order, extempore, coached in good language, which amounted sometimes to real eloquence. The clinical lectures were most excellent ... arguing from both positive and negative reasons, he placed the diagnosis on a sure foundation'.

Addison made other important contributions, relating among others to fatty liver and to lung disease. In 1839, together with Richard Bright, he published *Elements of Practical medicine*. Most of this was written by Addison. In it, under the heading of 'Inflammation of the caecum and appendix vermiformis', is an excellent description of the clinical features of inflammation of the appendix, followed by either general peritonitis or local abscess formation and 'from numerous dissections it is proved that the faecal abscess thus formed in the right iliac region arises, in a large majority of cases, from disease set up in the appendix caeci'. Unfortunately, this clear

account was ignored and the condition became termed 'perityphlitis' – inflammation of, and surrounding, the caecum. Progress was held up for decades until the clear writings of Reginald Fitz, Professor of Pathological Anatomy at Harvard, in 1886, showed quite clearly that abscesses in the right iliac fossa were in the main caused by inflammation of the appendix and not the caecum, which opened up the rational treatment of this common condition.

Outside his own hospital, Thomas Addison was neglected in his lifetime. Today he is regarded as one of the greatest among the famous names in clinical medicine. **BJHM**

Conflict of interest: none.

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