Matthew Baillie: pioneer of systematic pathology

This year is the 250th anniversary of the birth of Matthew Baillie, whose textbook *Morbid Anatomy of the Human Body*, published in 1793, and its accompanying atlas, published 6 years later, constituted the first textbook which dealt exclusively with system-based pathology. This adopted a new and convenient method of describing pathology according to the organs involved rather than according to symptoms, as Giovanni Morgagni (1682–1771) of Padua had adopted in his *De Sedibus et Causis Morborum* (On the sites and causes of disease). This, published in 1760, was rightly regarded as the first textbook which correlated symptoms in life with the appearance of the viscera at autopsy.

Baillie was born in the little town of Stotts, in Lanarkshire, Scotland on 27 October 1761. His father was the local minister, who later became Professor of Divinity in the University of Glasgow. Matthew's mother was Dorothea Hunter, the sister of the Hunter brothers John, surgeon of St George's Hospital, and William, a distinguished London obstetrician. The Hunter brothers taught at their famous anatomy school in Windmill Street. William, in particular, was to have a considerable influence on his nephew's career.

At the age of 13 years, young Matthew was enrolled in the University of Glasgow to study Latin and Greek. In 1779, now aged 18 years, he gained an exhibition to Balliol College, Oxford, where he continued his classical studies. A year later he moved to London and took up abode with his uncle William Hunter to attend his anatomical lectures and dissection classes. By now, the Hunter brothers had disagreed and parted, but Matthew also attended his uncle John's surgical lectures at St George's. Soon Baillie found himself assisting with the teaching at the Windmill Street school.

After William Hunter's death in 1783, Baillie, now all of 22 years of age, took over the anatomical lectures and supervision of the dissection classes, and these duties he continued for the next 15 years. Meantime he continued his medical studies at St George's and in 1786 obtained his Oxford DM.

The following year he was appointed physician at St George's, a position he held for the next 13 years. It was at St George's that, as he states in his memoirs, he: 'embraced the opportunity of examining the morbid appearances after death'. This in addition to his extensive studies of the pathology revealed in his dissection classes and in the large collection of specimens in the Windmill Street school.

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Baillie became a highly successful and busy consultant physician. At the height of his practice he worked from six in the morning to eleven at night. Among his famous patients were Lord Byron (for whom he prescribed a brace for his club foot), Edward Gibbon, the historian, whose massive hydrocele must have communicated with his ascites, William Pitt, Sir Walter Scott, the author, and Richard Sheridan, the dramatist. He was appointed physician to King George III and attended him and many members of the Royal family, including Queen Caroline, the estranged wife of George IV.

We turn now to Baillie's great contribution to pathology, his *Morbid Anatomy of the Human Body*. This is a beautifully written little book, of 314 pages, and I have a facsimile copy of it in front of me as I write. In the preface Baillie states:

'There are some diseases which consist only in morbid actions, but which do not produce any changes in the structure of parts; these do not admit of anatomical enquiry after death. There are other diseases, however, where alteration in the structure take place and these become the proper subject of anatomical examination ... this will lay the foundation of our inquiry into the diseases themselves, so that we shall add to our knowledge of the pathology of the body and perhaps also to our knowledge of remedies'.

Between 1799 and 1802, the book was followed by the publication of an atlas of engravings of pathological appearances in 10 fascicules. The majority of the splendid figures were drawn by William Clift, John Hunter's loyal assistant, who became the first conservator of the Hunterian Museum at the Royal College of Surgeons. The most famous of these, reproduced in many textbooks, is that of the lung in emphysema, believed to be that of Dr Samuel Johnson.

Over half a century ago, when I was writing my DM thesis on intra-abdominal adhesions, I came across the first description of this condition that I could find in the English language – it was in Baillie's book:

'When there has been inflammation of the peritonaeum [sic] either generally or partially, sufficient to have thrown out coagulable lymph, and the patient has survived the disease, the coagulable lymph is changed into a fine transparent membrane, which is the membrane of adhesions... It does not shew [sic] many vessels large enough to admit the red globules of the blood, but it shows its vascularity upon slight degrees of inflammation or by using fine injection'.

One and a half centuries later, the bulk of my thesis was to demonstrate, by modern techniques, the vascular nature of adhesions, first described by Baillie.

Baillie died in 1823 after a short illness, having continued in active practice till shortly before his death. A remarkable medical scientist, who pioneered the modern teaching of pathology. BJHM

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