Sir John Pringle, father of British military medicine

The lot of a British soldier in the early 18th century was a sorry one indeed. Apart from the danger of being killed or mutilated by enemy shot and shell, he lived in primitive conditions of sanitation in overcrowded barracks, was fed on a poor diet and often drank water that was little less than a bacteriological culture medium. The death rate from infectious and deficiency diseases, especially in troops serving in the tropics, far exceeded the casualties from enemy action.

This year marks the 200th anniversary of the birth, on 10 April 1707, of John Pringle, widely and rightly regarded as the father of modern military medicine in this country.

Pringle was a Scot and was educated at the universities of St. Andrew's and Edinburgh. At first he intended to enter business, and went to Amsterdam to study commerce. However, he visited Leyden, heard a lecture by the great Boerhaave, and promptly entered into the study of medicine under that renowned teacher of bedside practice. He graduated MD in 1730, did his postgraduate studies in Paris, then settled down as a physician in Edinburgh.

The outbreak of the war of Austrian succession soon saw Pringle appointed by the commander in chief, the Earl of Stair, to be physician in charge of the military hospital in Flanders. Pringle served throughout the campaign and was present at the battle of Dettingen in 1743, when King George II commanded the British forces – the last time a king was so to do. Interestingly, it was also the last time a Sergeant-surgeon, on that occasion John Ranby (1703–73), accompanied his master into battle.

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

After a short break from active duty, Pringle was recalled to military duty at the time of the Jacobite rising of 1745 under the young pretender, Charles Edward Stuart, and was present at the battle of Culloden.

Pringle then settled into medical practice in London with great success, but still served as physician to the Army. He put his by now considerable practical experience of medicine under the primitive conditions of warfare to great use and this was reinforced by his systematic observations and research. He taught that good sanitation was essential to preserve the health of the troops in the field.

In 1752 he published his monumental 'Observations on Diseases of the Army' which was used widely in Europe. Camp sites should be on high ground away from marshes; indiscriminate fouling of the ground by troops must be penalized; latrines covered daily with earth; a camp on fouled ground must be abandoned when an outbreak of dysentery occurs; the sick must be dispersed and free ventilation established to prevent typhus. Warm clothing, good shoes and at least a blanket per man were essential in cold wet weather. Overcrowding of patients must be avoided.

Pringle publicized the work of Captain James Cook, who, in his famous 3-year voyage through all climatic conditions, lost only one member of his crew and avoided scurvy by the use of the plant sweetwort, together with rigid attention to cleanliness.

In his memoire on typhus, or jail fever, communicated to the Royal Society in 1753, Pringle showed that this was no different from what was called hospital fever – all these studies on fevers, of course, took place long before the discovery of their bacterial nature.

Pringle was well ahead of his time. In his first overseas campaign he proposed to the French commander, through the offices of his commander in chief, the Earl of Stair, that the military hospitals of both sides of the combatants should be regarded as neutral and mutually protected – a revolutionary concept, but one that was rigidly observed throughout the campaign. This was the first awakening of the concept that was to develop into the International Red Cross a century later.

Sadly, there was little of curative value that Pringle, or indeed anyone else, could do for his sick soldiers. Bleeding and sweating were prescribed for the inflammatory diseases and dysentery, together with emetics, including antimony and ipecacuanha. Peruvian bark was given for fevers but, of course, was only helpful in malaria. Leeches were applied to swollen joints. During convalescence of the patient, Pringle – undoubtedly a humanitarian – recommended that there should be a free issue of spirits, a regulation intended to bring the Army in line with the Navy.

Pringle received numerous honours. He was appointed a baronet in 1766, appointed President of the Royal Society in 1772 (after many years as a Fellow and then as Council member) and became physician to George III in 1774.

Pringle died following an apoplectic stroke on 18 January 1782; there is a monument to his memory in Westminster Abbey. **BJHM**

Conflict of interest: none.