Europe during Napoleon and after

The revolution, which towards the end of the eighteenth century swept away the 'ancien régime' in France, also brought about a complete change in medical and surgical education. The old 'Facultés de Médecine' and the Paris 'Collège de Chirurgie' dating from 1750 were abolished. 'Écoles de Santé', established in Paris, Montpellier and Strasbourg, were to take over and teach an integrated course, which meant that henceforth surgery was on a par with internal medicine. Great importance was attached to the observation and treatment of patients: 'Peu lire, beaucoup voir et beaucoup faire', was the maxim adopted by Antoine-François Fourcroy (1755–1809), one of the authors of the reformation.

The clinical teaching Paris took place, as of old, in the hospitals: in the Hôtel-Dieu, by far the largest with its 1500 beds, in La Charité and in a few others. For some time before the revolution, the Paris hospitals had been of very great significance for the teaching of surgery in particular. From 1780 on, Pierre-Joseph Desault (1744–95), who was chief surgeon at Hôtel-Dieu ever since 1784, has been making important alterations in the educational program for students of surgery. The facilities for clinic-attendance and operations were extended. Students were given their own responsibilities with respect to patient care, among other things, that of keeping clinical records. In clinical teaching, much emphasis was placed on the relationship between clinical signs and post-mortem findings: this ushered in a flourishing of pathological anatomy. Ancient humoralism was gradually being defeated by the morphological approach and had to abandon the field of serious science.

The educational reforms of Desault had considerable consequences for the functioning of the hospital. Previously, in accordance with the Christian ideal of the Middle Ages, it had mainly been a place where indigent patients could find shelter, food and elementary care, free of charge, but henceforth it became a centre for the study of disease and the training of doctors. A place, moreover, where seriously ill patients could receive medical treatment according to the latest views.

Napoleon's wars contributed greatly not only to the development of operative surgery, but also to medicine, since many famous internists like Laennec, Broussais, Récamier and Cruveilhier, who were foremost in French medicine in the post-Napoleonic era, had been military surgeons in their younger years. The eminently practical attitude of these former army doctors perhaps explains why pathological anatomy came to occupy such an important place in the French clinic. The
introduction of percussion and auscultation also meant a very important step forward in the development of French clinical medicine.

Prominent surgeons, among others Alfredo-Armand-Louis-Marie Velpeau (1795–1867), a farrier's son who himself had been working as a farrier until his seventeenth year, for their part liked to regard surgery as 'manual medicine' and labeled their textbooks of surgery *Médecine opératoire*.\(^{148}\)

After Napoleon's final downfall in 1815, Paris once again became a centre of medicine and surgery which attracted students from all over Europe and even from the United States of America.

In Germany, quite a different development had been taking place in the same period. There, the approach of medicine was philosophical rather than by means of the dissecting knife. Friedrich Schelling (1775–1854) taught in his natural philosophy that the entire cosmos was one immense, living being and that material nature, in view of the oneness of all, was not basically different from the mind. Thus it would be possible for the scrutinizing human mind to penetrate nature and arrive at true knowledge by a process of dynamic contemplation. It may be imagined that scientific medicine did not benefit much from such an approach.

Since no social revolutions, wars on her own territory, or new philosophy had occurred in Great-Britain, medicine in the British Isles continued for some time to bear the hall-mark of the eighteenth century. The main centres were London, Edinburgh, Glasgow and Dublin. In London, medical schools were connected with St. Bartholomew's, St. Thomas', Westminster, Guy's, St. George's, The London Hospital and the Middlesex. There were also private anatomy schools in that city, established in the eighteenth century for the study of surgery in particular. Some of these, like the one operated by William Hunter in Great Windmill Street, had attained a good reputation. The anatomy schools were abolished after 1824.\(^{149}\)

Edinburgh was the scene of the mastectomy described by Dr. John Brown (1819–62) in his classic story *Rab and his friends* (1863). This narrative was based on an actual occurrence. The operation took place in 1830, when the author was clinical clerk at the Minto Hospital in the Scottish capital. The surgeon was James Syme (1799–1870), one of the most accomplished surgeons in the whole of Europe. His daughter married Joseph Lister. The moving scene was enacted in a semi-circular, wooden amphitheatre, similar to the one in the old St. Thomas' Hospital in London, which now serves as a museum. The gallery was filled with students. Amongst the onlookers was the patient's husband James and his dog Rab.

Ailie stepped up on a seat, and laid herself on the table, as her friend the surgeon told her; arranged herself, gave a rapid look at James, shut her eyes, tested herself on me, and took my hand. The operation was at once begun; it was necessarily slow; and chloroform — one of God's best gifts to his suffering children — was then unknown. The surgeon did his work. The pale face showed its pain, but was still and silent. Rab's soul was working within him; he saw that something strange was going on, — blood flowing from his mistress, and she suffering; his ragged ear was up, and importunate; he growled and gave now and then a sharp impatient yelp; he would have liked to have done something to that man. But James had him firm, and gave him a glower from time to time and an intimation