Special Article

France, the Fundament, and the Rise of Surgery

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This article describes events in 17th and 18th century France that resulted in the elevation of surgery from a lowly status to one of parity with medicine. Changes in the education and organization of surgeons are described, and the nature and significance of the successful operation for fistula-in-ano on Louis XIV is considered in some detail.

The history of surgery in early modern Europe is a tale of upward mobility, representing the beginning transformation of a barbarous art dominated by illiterate and semi-literate practitioners into a disciplined science comprising well-educated and respected members of the medical profession. France was the center of this metamorphosis during the 17th and 18th centuries. Developments there contributed most substantially to the elevation of surgery generally and, although specialization lay in the remote future, surgery of the colon and rectum played an important role in the improvement of surgery.

In the second half of the 17th century, the Holy Roman Empire, always questionably Holy and Roman, was clearly not an Empire, but a constitutional phantom. Germany was a nest of petty states devastated by the recently concluded Thirty Years War. Austria and Brandenburg were rapidly developing toward the new Hapsburg monarchy and the Hohenzollern Kingdom of Prussia. In England, following the Civil War and Cromwell’s Puritan Republic, Charles II frolicked as the royal embodiment of the Restoration. Circumstances were ideal for the grandiose reign of Louis XIV in France as they were for the critical events that would transform surgery and the surgical profession.

Surgeons of the time were organized into guilds that always included barbers, and often included apothecaries, grocers, bathkeepers, wig-makers, and public executioners. Barbers had acquired title to the practice of surgery during the 11th century, when it was decreed that monks would shave their faces and heads and be bled regularly. From an early date, however, some individuals who were not ordinary barbers performed surgical operations, and two distinctive ranks evolved within the fraternity: the barber-surgeons and the surgeon-barbers. Firm, impenetrable lines existed between medicine and surgery, and medicine was clearly dominant. Thus, physicians took an oath not to demean themselves by performing surgical treatment, but the Faculty of Medicine claimed exclusive control of the teaching of so-called surgical theory.

Surgery in Seventeenth Century France

The condition of French surgery in late 17th century was, to some extent, worse than it had been at the beginning of the century. The main difficulty lay in the conflict between the barbers and the University of Paris Faculty of Medicine. It was a long-standing problem, originating in the 13th century, when the surgeons of Paris formed an independent Fraternity, the Guild of Surgeon Barbers, under the patronage of Saint-Côme. Among the founders, Jean Pitard, especially, recognized that education was the way to make surgeons more than empirics, and it was pursuit of this goal that eventually led to a confrontation with the Faculty of Medicine. The surgeons of Saint-Côme secured independence from the barbers and permission to copy the three traditional university degrees. Their later attempt to become a separate faculty failed, however, and in 1656, caught in a cross-fire of Medical Faculty hostility and competition from the barber-surgeons, the College of Saint-Côme merged with the Guild


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of Barber-Surgeons. The Parlement of Paris thereupon designated all surgeons as barber-surgeons and declared them subservient to the Faculty of Medicine. After three centuries, the surgeons of Saint-Côme were back where they started. The scholar-surgeons later obtained the right to wear the long robe, but they remained servile to the Faculty. Guy Patin expressed well the general satisfaction of physicians: “Behold then the surgeons of Saint-Côme humbled and their house handed over to the surgeon-barbers, who are totally submissive to us.”

One consequence of the scientific awakening during the Renaissance was the rapid development of anatomy. The 17th century scientific revolution witnessed the birth of modern physiology and the application of natural sciences in medicine. The explosive growth of new ideas and the development of new methodologies and techniques notwithstanding, it became increasingly apparent that the teaching provided by the medical faculties was static, decadent, and inadequate. Consequently, new lay and independent teaching and research organizations were founded at the urging of royal counselors to compensate for the insufficiencies of the universities.

Anatomy and surgery were always poorly taught disciplines in the French universities: most faculties taught these subjects primarily to remove them from the rival teaching of the surgeons. Not surprisingly, then, the institutions outside the universities played the more important role in improving anatomical and surgical teaching and, concomitantly, the quality of surgery. The Jardin du Roi was one of the most influential of those institutions (Fig. 1).

The Jardin du Roi was officially organized in 1655 as a botanical center, but it soon extended its activities to all natural sciences. It became important in the history of surgery in 1672, when Louis XIV established public demonstrations of anatomy and surgery. His proclamation said, “open doors, and gratuitously, in order to facilitate for students of surgery the means of perfecting themselves in an art always regarded as one of the most necessary in the state.” Instructors at the Jardin were permitted to perform surgical operations, dissections, and anatomical demonstrations with “complete freedom.” Not only were “subjects suitable for this purpose” to be provided, but rights to the first cadaver from the public executioner gave the Jardin priority over the Faculty of Medicine. Pierre Dionis was the first demonstrator in anatomy and surgery at the Jardin du Roi (Fig. 2). To supplement his demonstrations, Dionis published a treatise on anatomy, and his famous Cours d’opérations de chirurgie, démonstrées au Jardin Royal went through