## Medicine in Stamps Ambroise Paré (1510-1590): The Gentle Surgeon

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recorded medical history, both prestige and power resided in those healers who prognosticated, gave advice, and used medicines and potions. They were called physicians, an elite group that was schooled in the classics and literate in Latin and Greek. If there were a need for blood-letting or other interventions, the barber would, under their orders, perform these procedures.

Barbers had little formal schooling, and offered both hair-grooming and surgical services. Theirs was a lowly art, and they learned their trade by being apprentices. In medieval France, there existed another group of surgical artisans within the Collège de Saint Côme. The members of this organisation were better

educated, and they donned university gowns and carried out academic ceremonies, hoping to attain the status enjoyed by physicians who belonged in the prestigious Faculté de Médecine. As the physicians came to rely more and more on the barbers to carry out surgical procedures, the brothers of St. Côme saw this as an invasion of their territory and tried to suppress such activities. This resulted in constant rivalry between all

three factions, which lasted for over two hundred years. In the beginning of the 16th century, the Faculté de Médecine formally recognised the role of barbers, and required them to attend lectures and pass an examination, after which they would be admitted to the Collège de Saint Côme. They were now called barber-surgeons.

It was within this contentious environment that the Frenchman Ambroise Paré emerged to become one of the greatest figures in medical history. Born in 1510 in Laval, France, he had little education, and trained as a barber-surgeon, first under a chaplain, and then under his father. Paré later worked for three years at Hôtel Dieu, a dismal Parisian hospital where he participated in autopsies. Legend has it that it was so cold on the wards of Hôtel Dieu that during one winter, Paré had to amputate the frozen nose-tips of four patients.

Wound Healing and Haemorrhage Control: Paré gained most of his surgical experience in the battlefield. The 16th century was a time of great turbulence in Europe. Not only was France at war with its neighbours, there was also great unrest within its own walls, the Protestants fighting against the ruling Catholics. What made the fighting all the more horrific was the use of gunpowder. Although



gunpowder had been in existence for a while, primitive canons were not invented until the 14<sup>th</sup> century. Neither Hippocrates nor Galen had encountered gunshot wounds, so physicians could not rely on past teachings, but had to rationalise and work out a treatment for this new war injury.

The teaching of the day was that gunpowder wounds were poisoned and had to be cauterised, just as poisoned

wounds from snakebites were traditionally treated with cauterisation. Boiling oil was used to cauterise these injuries because gunpowder wounds were deep and penetrating. When Paré first began his work in the battlefields, he faithfully followed this method. However, there were so many casualties that he soon ran out of oil, and was forced to use a wound dressing made from eggs, oil of roses and turpentine. History records these words in his journal:

"At last I wanted oil, and was constrained instead thereof, to apply a digestive of yolkes of egges, oil of Roses, and Turpentine. In the night I could not sleepe in quiet, fearing some default in not cauterising, that I should find those to whom I had not used the burning oil dead impoisoned; which made me rise very early to visit them, where beyond my expectation I found those to whom I had applied my digestive medicine, to feele little paine, and their wounds without inflammation or tumor, having rested reasonable well in the night: the others to whom was used the said boiling oil, I found them feverish, with great pain and swelling about the edges of their wounds. And then I resolved with my selfe never so cruelly to burne poore men wounded with gunshot... See then how I have learned to dresse wounds made with gunshot, not by bookes."

Paré published his observations in his first book, The Method of Treating Wounds Made by Arquebuses and Other Firearms, Darts and Such; Also on Combustion Made Especially by Cannon Powder. He also distinguished himself in bringing back the lost art of using ligatures to achieve haemostasis. Many of the casualties in the battlefield needed amputations of limbs. These operations often ended in death due to uncontrolled haemorrhage, infection and shock. The surgeons of Paré's day often relied on cauterisation with red hot irons to stem the bleeding. However, cauterisation, in addition to being extremely painful, destroyed the flaps of skin used to cover the amputation site. This resulted in infection and often led to death. Paré successfully demonstrated that the use of ligature effectively controlled hemorrhage, improved the survival rate, and resulted in better healing at the site of the stump.

Paré's contributions: Surgery has historically concerned itself with four primary goals - the control of haemorrhage, pain, infection, and shock. In an age that preceded the discovery of antisepsis and anesthesia, the barber-surgeon, Paré, was already successful in achieving, in good measure, these objectives. His techniques were not necessarily original, but simple and effective, and he preserved his observations in several books, written in French, the only language he knew. In addition to his first book on treating gunshot wounds, he wrote Complete Works of Ambroise Paré, Councilor and Premier Surgeon of the King, Apologie and Treatise, and 10 Books of Surgery with the Magazine of the Instruments Necessary for It. His work spanned five French monarchies - Francois I, Henri II, Charles IX, Henri III and Henri IV, and was subsequently translated into many languages.

Paré served the reigning kings well and was promoted to the position of premier-surgeon. This promotion led to the recognition that the barbersurgeon was a skillful professional who could manage some conditions better than the physician. With his example and quiet astute observations, Paré had single-handedly transformed the surgeon's art from one of derision and butchery to that of respect and awe.

A man of compassion: Far more important than his battlefield contributions and quest for truth is Paré's legacy of gentleness and kindness. Putting the patients first, he was more interested in alleviating their suffering than in the disease process itself. His determination and skills restored health in seemingly hopeless cases, and for those who were truly beyond cure, he offered comfort. Although he was a personal surgeon to the king, he treated the common soldier with the same respect. While many wealthy amputees were able to procure, at great prices, beautiful devices which allowed some movement, Paré devised simple but functional wooden legs for the poor. As a tribute to his caring and humility, he earned the title "The Gentle Surgeon," and this deeply religious man is often credited as saying, "Je le pensay, Dieu le guarit" (I dressed him, and God healed him).

Examples abound regarding this surgeon's compassion. During a battlefield retreat, Paré came upon a badly wounded soldier whose comrades were about to bury him in a grave to avoid his falling into the hands of the enemy. He took mercy on the soldier and personally nursed him back to health. In yet another battle when Paris was under siege by Henri IV, Paré successfully urged the Archbishop to heed the plight of the starving poor: "Monseigneur, these poor people whom you see about you are dying of the cruel rage of hunger, and demanding pity of you. For God's sake, Monsieur, give it (bread) to them."

That same year, 1590, Paré died. He was 80 years old, and was buried in the same small church of St. André des Arts where he had married his wife Jeanne. Some 200 years later, city elders demolished the church, and scattered his bones among the many thousands interred in the catacombs. No one had thought to preserve the remains of this great man, a gentleman doctor, and our father of surgery.

## REFERENCES

Materials for this essay were excerpted or adapted from the following sources: Logan Clendening. Source Book of Medical History, 1942; Lois N. Magner. A History of Medicine, 1992; Sherwin B. Nuland. Doctors: The Biography of Medicine, 1995; Agatha Young. Scalpel: Men Who Made Surgery, 1956.