

HISTÓRIA

History

AMBROISE PARÉ – THE “FATHER OF SURGERY”

Ambroise Paré – O “Pai da Cirurgia”

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He was born in French, at Bourg-Hersent, near Laval, in 1517. Paré had a long life till 1590. In his family the profession of barber-surgeon profession was very popular: his brother and his bother-in-law were barber-surgeon. In his very early life started to learn this craft and for a long time he cured patients. He became the best French surgeon, the “father of Surgery, the Court Surgeon to Four Kings of France”, in the sixteenth century.

Paré became barber-surgeon at the Hôtel-Dieu, Paris, surgeon in the army of Francis I (1536-38), re-enlisted on the reopening of hostilities (1542-44) and in 1545 began the study of anatomy at Paris, under François-Jacques Dubois (Sylvius). He was appointed field-surgeon and (1552) became surgeon to King Henry II, in 1554 member of the Collège de St-Cosme, exempt from taxation, and in 1563 first surgeon and chamberlain to King Charles IX. In this time was the religious fight between the Catholics and Protestants. By a legend Paré was a Huguenot and was spared during the St. Bartholomew’s night (1572) by direct command of the King.

His pioneer work was chiefly in the department of military surgery. His importance in the development of modern surgery may be compared with that of his contemporary, Andreas Vesalius in the development of modern anatomy.

The chief services rendered by Paré are a reform in the treatment of gunshot wounds and the revival of the practice of ligating arteries after amputation. From the time of Giovanni Vigo (c. 1460-1520), surgeon-in-ordinary to Pope Julius II, gunshot wounds were classified as contused, burned, and poisoned, and the last-named, on the supposition that all gunshot wounds were poisoned by powder, were cauterized with red-hot iron or hot oil.

On one occasion, after a battle, Paré, not having sufficient oil, applied ointment and bandaged the wounds, and observed that the healing process proceeded more favourably under this treatment. His observations, published in 1545, gave the impetus to a rational reform of the whole system of dealing with wounds, and did away with the theory of poisoned gunshot wounds.

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In alchemy, like the highest science, starting with the middle Ages, some alchemists increasingly came to view these metaphysical aspects as the true foundation of alchemy; and chemical substances, physical states, and material processes as mere metaphors for spiritual entities. The best known goals of the alchemists were the transmutation of common metals into gold or silver the creation of a “panacea or the elixir of life,” a remedy that supposedly would cure all diseases and prolong life indefinitely; and the discovery of a universal solvent.

The European alchemists invested much effort on the search for the “philosopher’s stone”, a legendary substance that was believed to be an essential ingredient for either or both of those goals. The philosopher’s stone was believed to mystically amplify the user’s knowledge of alchemy so much that anything was attainable. Alchemists enjoyed prestige and support through the centuries, though not for their pursuit of those goals, nor the mystic and philosophical speculation that dominates their literature.

Paracelsus, who based the modern toxicology with his alchemist theories, formulated tree laws: 1. the dose make poison, 2. the specificity of toxic effects of individual chemicals, specificity due to the unique chemical structure of the agent and the laws of biology that govern the response. 3. human are animals and therefore the study of animals can provide useful insight into effects in human. The poison preparation of extracts and liquors, and so on (it seems that the preparation of *aqua vitae*, the “water of life”, was a fairly popular “experiment” among European alchemists; see also the article on Aquavit, a liquor whose name means “water of life”).

In 1565, Ambroise Paré described an experiment to test the properties of the Bezoars Stone. At the time, the Bezoar stone was deemed to be able to cure the effects of any poison, but Paré believed this was impossible. It happened that a cook at Paré’s court was caught stealing fine silver cutlery. In his shame, the cook agreed to be poisoned. He then used the Bezoars stone to no great avail as he died in agony days after. Paré had proved that the

Bezoars stone could not cure all poisons as was commonly believed at the time.

In all departments of surgery we find Paré as an independent observer and thinker; but his advanced notions encountered strong opposition from part of the Paris faculty of medicine.

He is considered the father of modern surgery due to some of his revolutionary treatment methods in medicine. He also made a foray in to the dental sciences. He described proper methods for extracting teeth and incising of the gums to help a tooth erupt. He also endorsed replacement of missing teeth with implants made of bone and ivory. He has one of the best and earliest written case reports of successful tooth transplantation. A princess had a maxillary anterior (upper front) tooth extracted. This would just not do. A princess could not go around missing a front tooth! So, a tooth was taken from one of her maids, and placed into the princess’ socket. After some healing time, she was able to use this new tooth with ease and just as well as if it was her own (Asbell, 1988). Sometimes Paré extracted a good tooth, so in that minute he replaced the good tooth. This was the beginning of the auto implantation with very good reason.

Transplantation of teeth from one person to another became commonplace in Europe from the 1500’s until the early 1800’s. Teeth were bought from poor people, taken by force from these people, or obtained from “resurrections”, which got teeth from the dead. This practice eventually lost favour for many reasons.

After the extraction Paré bleed freely the wound to eliminate the “morbid humor”. Than he pressed the alveolus on both sides with his fingers. So the wound could recovering “per primam”

Caries was treated by Paré with a method of cauterization with acid, but he no mentioned to filling the cavity. In several other respects Paré was ahead of his time. He suspected that flies carried disease, experimented with artificial limbs and eyes, and used astringent red wine as an antiseptic. His *Method of Treating Gunshot Wounds* (1545) became an important textbook, and his works were widely translated.



One Hunting for Teeth: Plate 12 of *Los Caprichos*, first edition, 1799
Francisco de Goya y Lucientes (Spanish, 1746–1828)



Ambroise Paré



Paré curing

Suggested readings

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