Albucasis: Founder of Catgut

Ali Osman Arslan1, Selim Benek2, Fatma Dilek Diramali3, Murat Diramali3, Ferda Tonyalı2

1Department of Medical Genetics, Abant Izzet Baysal University School of Medicine, Bolu, Turkey
2Department of Pathology, Abant Izzet Baysal University School of Medicine, Bolu, Turkey
3Department of History of Medicine and Ethics, Ankara University Faculty of Medicine, Ankara, Turkey
4Department of Anatomy, Abant Izzet Baysal University School of Medicine, Bolu, Turkey

Abstract

The famous Muslim medical scholar who was raised in Al-Andalus, Albucasis, was born in El-Zahra near the province of Córdoba and lived between 930-1013 AD. Although he is known as Albucasis, Abu'l-Qasim or Al-Zahrawi in the West, his real name was Abu al-Qasim Khalaf Ibn Al-Abbas Al-Zahrawi. He is regarded as the father of Muslim surgeons. In Europe and Anatolia, Al-Zahrawi had a large influence on the renaissance movement that took shape on Muslim scholars and their wisdom. He also studied theology and the time's science fields. The 30 chapter treatise which made Al-Zahrawi famous was Kitab al-Tasrif. The most important part of the treatise Chapter 30 was about surgery and became a primary source for doctors for centuries in Europe.

Keywords: Albucasis, Al-Zahrawi, Catgut, Golden Islamic Age

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Introduction

Known as the father of surgeons, Al-Zahrawi, contributed to advancement of surgery and it becoming a science by itself. His real name was Abu al-Qasim Khalaf Ibn Al-Abbas Al-Zahrawi and he is also known as Albucasis (1, 2). He received education in Córdoba University which was rich in science and culture. There, Zahrawi developed new methods while performing surgeries and discovered medical instruments. In Renaissance in Europe, those medical and surgical instruments became the primary source. Zahrawi first worked with Abd Al-Rahman III who was the caliph of Al-Andalus Moors, and then worked as a palace doctor as the rulers' personal physician at the time of Al-Hakam II (2-4).

Al-Zahrawi used his unique chemicals for sterilization which were shown to have anti-bacterial properties in our age and he used henbane for anesthesia (3-6).

Contribution to Surgery

Al-Zahrawi worked on lung inflammations and managed to cure it by splitting the chest with surgery and cauterizing them. The first one to achieve dropping of kidney stones and removing them with surgery is again, Al-Zahrawi. He was the lead at eye, ear, nose, and dental surgeries and the first one to perform hernia repair surgery. Using a hook to remove polyps, he used his own method and performed a successful tracheostomy surgery on one of his servants (7-9). The surgery of ligaturing blood vessels that made the French surgeon Paré famous was performed by Al-Zahrawi six centuries before him using candle wax and alcohol to stop the bleeding (7).

He thought several kinds of sutures on abdominal wounds and found first medical string to dissolve in the body named catgut on intestinal surgeries. He discovered and used the metallic syringe to inject medication into the bladder first time (8, 9). He carried out work on tooth extraction, feeding the tooth root and on dentures. He made progress on gynecological diseases with new methods and instruments especially on breech births (7-9).

Treatise of Al-Tasrif

It was the treatise that made Al-Zahrawi famous and it was used as a primary source in medicine. The full name of the treatise was Kitab Al-Tasrif Leman Ajiz an Al-Taalif. It was consisted of two volumes and totally 900 pages long with 30 chapters, gives explanations on evaluating the illness for treatment, usage of medicine, nutrition and health. In the treatise, methods of using powders to stop bleedings and medical dressings, treatment on hydrocephalus and gynecomastia on men were mentioned. Besides the surgery, there were works on pharmacology in the book (10-13).

The 30th chapter which was about surgery was translated into Latin by Gerard de Cremona and was used as a textbook on medical faculties (13).
Discussion

Al-Zahrawi was the leading figure on surgery centuries ago and was the precursor on many medical literatures and developments. His works were claimed by European surgeons that came after him.

There are many Muslim scholars and there should be more researches on them. With that, Islamic Medicine History will gain more recognition.

References


