

JOURNEY OF THE SCALPEL

Dr. Sarah Khalid Khan

I love thee, bloodstain'd, faithful friend!
As warrior loves his sword or shield;
For how on thee did I depend
When foes of Life were in the field!

To My Spring-Lancet. Snodgrass, 1841

The art and science of surgery has been around since humans existed. Whether it was pulling out a splinter in the days of the Neanderthal or the finely honed elegant laparoscopic procedures of today, surgery has been performed in some form or in its entirety since time immemorial. Every art requires an instrument and every artist depends on it for his wellbeing and for the perseverance as well as of his art. A writer needs his pen, a painter requires his brush and a surgeon calls upon his scalpel.

Over time as quills progressed to refined rollerball pens, the blade or scalpel of the surgeon also evolved. Many names, known and unknown, have played the part of helping in the evolution of the art and equipment of surgery. Some of the known ones include another gem among the Muslim scientists, Abū al-Qāsim Khalaf ibn al-'Abbās az-Zahrāwī, latinised as Abulcasis.

Because of his immense contributions to the field of surgery, he is known as the father of surgery and considered one of the greatest surgeons in history. The pages of ancient script with pictures that is shown in the image are from Al-Zahrawi's book, Al-Tasrif, a medical encyclopaedia of thirty volumes. This particular book was translated into several different languages, including Latin, German and French only to become a standard reference book for centuries to come throughout Europe.

Looking at the given image, one can appreciate the intricacy of the instruments shown. All these instruments and many others were designed, drawn and constructed by this Andalusian. At the time it was the first book on surgery with illustrations ever published. The detail of the imagery allowed people like Fuat Sezgin, an orientalist to reproduce 200 of Zahrawi's instruments as a tribute to his valuable contributions.

Zahrawi's Al-Tasrif also includes sections on cauterization which he admired as a cure for many conditions. He also elaborates on surgery and orthopaedics, both challenging fields at the time. Besides that he also commented on pharmacology and therapeutics, and also wrote about paediatric and geriatric care, much like the Arab scientists before him

But his contribution to medical science was not limited to surgical instruments. He also described surgical procedures that are still carried out the way he described. Some of them include the procedures done for varicose veins and delivering a dead

fetus through forceps delivery. He was also the first one to describe ectopic pregnancy in those days. He was also the first one to assess the hereditary nature of haemophilia.

It is certainly pertinent to applaud this man's endless contributions. At a time when the Christian west was adamant on abandoning surgery from all schools of medicine and physician practice, it was Zahrawi in the Islamic east who exalted the science and art of surgery and laid the foundation of the formidable canon of medical science it is today. Thus Zahrawi's mark on medicine made the world celebrate his contributions in 2013, a millennium after his death in 1013.

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