

When the art popularized orthopaedic science

Francesco Tonelli

Surgery Unit, Department of Clinical Physiopathology
University of Florence, Florence, Italy

Address for correspondence:

Francesco Tonelli, MD
Surgery Unit, Department of Clinical Physiopathology
University of Florence
Viale Morgagni, 85 – 50134 Florence, Italy

First, miniatures and wash drawings on the manuscripts parchment, then printing of the engravings greatly contributed to spread surgical knowledge in the Western world. Also in this case the farsightedness of Lorenzo de' Medici made possible one year before his death on 1492 (a year that coincided with the discovery of the New World) the acquisition of a unique medical volume. The prince Lorenzo sent to Crete a loyal messenger, the humanist Giano Lascaris, who purchased the book collection, that for several centuries had been protected in the hospital of Costantinopoli annexed to the Church of the Forty Martyrs. The book got to Crete by chance in the hands of the Siena physician Niccolò di Giacomo. The collection encompasses ancient Greek texts written by Hippocrates, Galeno, Sorano of Efeso, Apollonio of Cizio, Oribasio, Paolo of Egina, Rufo of Efeso and Palladio. The books were mainly dedicated to orthopaedic science, with a meticulous description of bones, joints and muscles anatomy, of signs and symptoms of fractures and luxations, of fracture setting and bandaging. The perfect Greek calligraphy was the work of an erudite mecenate from Costantinopoli, named Niceta. Around 900 a.C. Niceta discovered the memories of the ancient Greek surgical science and assembled the writings in a sole corpus, securing also a full series of illustrations on the procedures used to cure wounds, luxations and fractures. The figures are of exquisite byzantine manufacture, typical of ikons and mosaics of those times. The most important figures are depicted within an elegant architecture made of two columns with Corinthian capitals that connect polychrome arches and trabeations. Stained and embroidered curtains are fixed to the architectonic structure and drawn to make possible to the viewer to observe the surgical operation. The byzantine painter is unknown, but he certainly knew anatomy, as testified by the fact that both physicians and patients are represented totally naked, to favor a better demonstration of the fixation of the appendicular skeleton. Everything happens in a deep silence, without pathos and apparently with no pain. This optimistic representation could serve to encourage the physicians to use advanced surgical techniques.

In 1534 another member of the Medici Family, nephew of Lorenzo de' Medici, the Cardinal Niccolò Ridolfi, decided to carry on the illuminated educational program of his uncle. He inherited the Codice of Niceta and commissioned a reproduction of the illustrations to a famous painter, Francesco de' Rossi, named il Salviati, while the Florentine Doctor Guido Guidi translated the text into Latin. Dr. Guidi was sent by Cardinal Ridolfi to the Court of the King of France, Francesco I, bringing with himself two rare manuscripts of the Medicine collections (these are now exposed at the *Bibliothèque Nationale de Paris*). In Paris Guidi became *medicin ordinaire du roi* and lecturer at the *Collège Royal*. His teaching encompassed head



Figure 1 - REDUCTION OF A FRACTURE

(Collection of Greek Surgeons manuscripts by Niceta of Byzantium – Xth Century). Biblioteca Medicea Laurenziana, Florence, Italy.

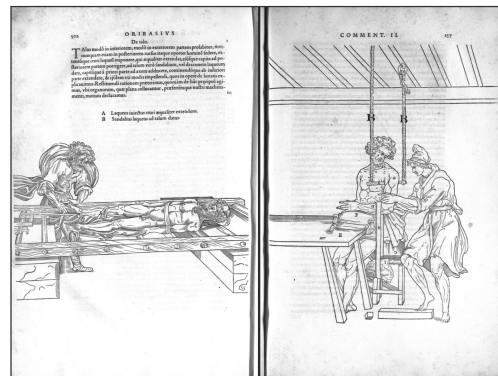


Figure 2 - REDUCTION OF A LEG FRACTURE

(De Chirurgia e Graeco in Latinum conversa by Guido Guidi -1544). Biblioteca Nazionale, Florence, Italy.

wounds following the Hippocratic dictates (*De vulneribus capitis*), including precious watercolor illustrations. In 1544 Guidi integrated his book and other translated parts of the Codice of Niceta. The figures are of the highest quality with a study of the perspective and a real participation of the patient to the pain. The paintings are referred to great artists, probably the same Florentine paintings active in Fontainebleau.

Guidi was living in Paris at the Hotel Petit-Nesle, a meeting point for artists, including Benvenuto Cellini, who supervised the printing of the book made by Pierre Gaultier. The text was rapidly distributed within Europe, making possible to educate generations of physicians.