J. Biol. Res. 2005 n. I - Vol. LXXX - Rubbettino - Soveria Mannelli

Gaetano Corrado. A Pioneer in Ophthalmology, Forensic Medicine and... Paleopathology

Luca Ventura¹, Adele Ranieri¹, Gaetano Miranda², Gino Fornaciari³

¹ Department of Pathology, City Hospital, L'Aquila, Italy; ² Department of Environmental Sciences, University of L'Aquila, Italy; ³ Department of Oncology, Section of History of Medicine and Paleopathology, University of Pisa, Italy.

KEY WORDS: history of paleopathology, Gaetano Corrado, Cagliari mummy.

Abstract

Gaetano Corrado was born in Paglieta (central Italy) in 1858 and, after dealing with ophthalmology, became professor of forensic medicine at the Universities of Cagliari (1894) and Naples (1895). Forensic attitudes allowed him to carry out an extremely detailed study of the Cagliari mummy. After careful anthropological analyses he ascribed the mummy to a 50-60 year-old female, disproving the public rumour of a murdered pregnant woman. In analogy with other studies, he pointed out the role of acari in mummification process. By using a conservative anatomic approach, he paid attention to gross and histological identification of organs, as well as microbiologic and chemical analysis. His great talent was also expressed in anatomy, anthropology, rehabilitation of war cripples, public works planning and research for energy production. He died in Naples at the age of 76. We believe that his contributions, although done without a real paleopathological awareness, should not be forgotten.

The history of italian paleopathology is not well known, despite the numerous publications appeared since the dawns of last century (Fulcheri, 2001). As in other fields of medicine, the studies are often ignored because written in Italian and published on local journals, but many of them preceded the authoritative works of english researchers. The contribution of italian authors to this discipline, moreover based on important collections, should not be neglected (Fulcheri, 2001). Aim of the present study is to add further knowledge to the topic, by reappraising an important author of the past.

Gaetano Corrado (Fig. 1) was born in 1858 in Paglieta (Chieti province, central Italy), where his father Giuseppe, coming

from Calabria, established his family. In the center of this small town near the Adriatic sea and Sangro river the palace of the Corrado family is still visible today. Here, a plate remembers Gaetano Corrado while the road behind the palace is dedicated to him.

The first years of his career were devoted to ophthalmology. He took the Medicine Doctor degree at the University of



Fig. 1 - Gaetano Corrado (Paglieta, august 13th 1858 – Naples, february 4th 1935).

Naples on July 19th 1884 discussing a thesis on the opthalmetrograph, an original instrument for objective measurement of ocular refraction and fundus examination. Subsequently patented and developed by Salmoiraghi it represents the forerunner of modern refractometers (Corrado, 1971). In the same year he became assistant of Professor Castorano and in 1886 went to Paris to improve his skills in three different hospitals.

Back to Italy, in 1887 he became assistant of Professor Luigi De Crecchio, the recognized father of experimental forensic medicine. Since 1894 he was professor in Cagliari, where he established the Institute of Legal Medicine, and full professor in Naples in 1901 (Corrado, 1971).

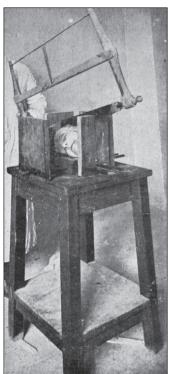
His forensic attitude allowed him to carry out, in such a distant time, an extremely valid and detailed study of the Cagliari mummy (Corrado, 1899) (Fig. 2). After a careful anthropologic analysis he stated that the mummy belonged to a 50-60 year-old female, disproving the public rumour of a murdered pregnant woman. He noticed skin lesions and high

Gaetano Corrado. A Pioneer in Ophthalmology, Forensic Medicine and... Paleopathology



Fig. 2 - Coverpage of the Cagliari mummy study.

gastrointestinal antimony levels, ascribed to the use of vescicants and emetic tartrate for a presumed pneumonia. Such findings allowed him to date back the mummy to the beginning of XIX century. In analogy with the studies on the mummies from Ferentillo and Venzone, he pointed out the role of acari in the mummification process. By using a fairly conservative anatomic approach, he paid great attention to gross and histologic identification of organs, quoting the works of Czermak (1852) and Maddox (1887), as well as to microbiologic and chemical analysis of abdominal contents. He was also interested in foeto-neonatal anatomy and anthropology, writing scientific papers about age assessment



methods and dental growth, reporting rare malformations and developing instruments for the measurement and gross section of cadavers (Fig. 3). Actually engaged in the rehabilitation of invalids and war cripples, his most clever creation is represented by the "piedattrezzi" (foottools). These special devices, exposed at the London Exhibition in 1918, were designed to restore those who suffered war mutilations to agricultural labour (Corrado, 1971) (Fig. 4). His social committment resulted evident during the I World War, when he was

Fig. 3 - Instrument to section frozen anatomic specimens.

volunteer in Naples Military Hospital with the degree of Major. Since 1919 he became Lieutenant Colonel, Medical Corps, and Director of the Institute for rehabilitation of invalids and war cripples, in Naples.

His great talent was also expressed in public works planning and researching new ways of energy production. In the years 1925-1928 he planned urbanistic projects to connect the different parts of Naples by a subway system. In the following period he realized research projects for the energy production using natural gas, as well as sea waves and wind. Member of many scientific and academic organizations, he

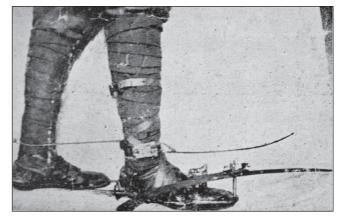


Fig. 4 - An example of the "piedattrezzi" (foot-tools): a slipper-fixed sickle.

was Master of the Medicine Faculty in Naples twice. He wrote 55 scientific papers, but many others were lost during the II World War, and died in Naples at the age of 76. We believe that the contributions of Gaetano Corrado in anatomy, anthropology and mummiology, although effected without a real awareness of paleopathologic sciences, should not be forgotten.

Acknowledgments

The Authors are fully indebted with the staff of the Biblioteca Provinciale "A. C. De Meis" in Chieti for their skillful assistance in retrieving references, with Prof. Antonio Vocino for historical data, and with Mr. Panfilo Ranieri for scouting in Paglieta.

Literature Cited

- Corrado G. 1899. Ricerche su di una mummia rinvenuta a Cagliari e considerazioni sulla causa della mummificazione. Atti della Reale Accademia Corrado G. 1971. Prof. Gaetano Corrado 1858-1935. Bologna: La Perseveranza.
- Czermak J. 1852. Beschreibung und mikroskopische Untersuchung zweier ägyptischer Mumien. Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften Wien 9: 427-469.
- Fulcheri E. 2001. Su alcune ricerche di Giuseppe Bini: esempi di percorsi culturali tra anatomia patologica e storia. Pathologica 93: 244-247. Medico-Chirurgica di Napoli 53: 467-503.
- Maddox RL. 1887. On the different tissues found in the Muscle of a Mummy. Journal of the Royal Microscopical Society Part 4: 537-544.