# Laura Ottini, Raffaele Palmirotta et al.

30. PÄÄBO S., Ancient DNA: extraction, characterization, molecular cloning, and enzymatic amplification. Proc. Natl. Acad. Sci. USA 1989; 86: 1939-1943.

31. HANDT O., KRINGS M., WARD R.H., PÄÄBO S., The retrieval of ancient human DNA sequences. Am. J. Hum. Genet.1996; 59:368-376.

32. ROLLO F., Il DNA nello studio dei resti umani antichi. Medical Books, Palermo, 1999.

Ringraziamenti:

Si ringraziano il Prof. Adriano La Regina e la Soprintendenza Archeologica di Roma per le fotografie dei reperti paleopatologici riprodotti nel presente lavoro.

Correspondence should be addressed to:

Laura Ottini, Dipartimento di Medicina Sperimentale e Patologia, Università degli Studi di Roma "La Sapienza". Viale R. Elena 324 – 00161 Roma, I.

MEDICINA NEI SECOLI ARTE E SCIENZA, 12/2 (2000) 329-338 Journal of History of Medicine

## Articoli/Articles

## THE MEDICAL COLLECTIONS OF THE BRITISH MUSEUM

#### RALPH JACKSON

Curator of Roman Britain Prehistory and Early Europe The British Museum London, UK

### **SUMMARY**

Most of the artifacts in the collections of the British Museum are related to the history of medicine.

Ralph Jackson offers an interesting description of the Greek and Roman medical objects and explains the way in which medical artefacts are related to different cultural contexts.

The collections of the British Museum are international in scope and of worldwide significance. For the sake of convenience they are curated by ten departments: Coins and Medals, Egyptian Antiquities, Ethnography, Greek and Roman Antiquities, Japanese Antiquities, Medieval and Later Antiquities, Oriental Antiquities, Prehistoric and Romano-British Antiquities, Prints and Drawings, and Western Asiatic Antiquities. Most of these departments have some artefacts relating to the history of medicine, especially if medicine is interpreted in its broadest sense, but on this occasion I shall concentrate on the Greek and Roman medical collections.

Because the British Museum is not a dedicated museum of medical history our approach is necessarily different to that of the more specialised museums. Both have their own particular advantages and disadvantages. Ultimately, though we are all united by a single challenge: how to represent accurately ancient or pre-modern medicine using its material remains.

The primary channel for communicating with our museum audience is through displays. The displays may be 'permanent'

Key words: British Museum - Medical collections - Greek and Roman Antiquities



Fig. 1 - A bronze cupping vessel from Corfu.

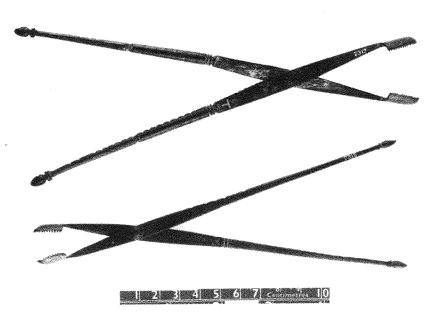


Fig. 2 - Two examples of the staphylagra, a bronze forceps used both for removing the uvula and crushing haemorrhoids.

or, more correctly, long-term (usually lasting at least 10 years) or temporary exhibitions of much shorter duration (usually about 4-6 months). Temporary special exhibitions give scope for combining the British Museum collections with those of other museums and institutions. That can enable us to focus on particular aspects of medicine or to cross boundaries to make comparison between the medical systems of different cultures. The displays in our 'permanent' galleries allow us to set medicine in its differing cultural contexts, whether by integrating medical artefacts with other material remains or by highlighting them in dedicated cases. This approach has been adopted in the Greek and Roman galleries, notably in the Gallery of Greek and Roman Life, and in the Gallery of Roman Britain.

Because medicine in antiquity had none of the clear-cut divisions that characterise healing systems today it is possible, indeed necessary, to display a diverse range of artifacts that played

their part in treating or preventing disease. Not all were intended exclusively for healing or health-preserving roles, and it is essential to differentiate the distinctively medical pieces from those of a quasi-medical nature.

As the cure for many diseases in antiquity was elusive and rarely predictable there was evidently a considerable investment in the prevention of illness and in a positive regimen for the maintenance of health. Dietetics, lifestyle and body care all had a role, but so, too, did religious ritual, and the power of belief was clearly of considerable significance in medicine. Patients suffering illness or injury, therefore, might exercise a choice between various healing strategies or a combination of them. Some of those strategies involved healing personnel, others depended on the healer gods (or the healing aspect of other gods) and their shrines. Fortunately it is possible to use artefacts to illuminate these diverse aspects of medicine in the Greek and Roman world. To be sure, they do not reveal a complete picture there are, of course, many important issues that leave no artefactual evidence - but the surviving material remains can pro-

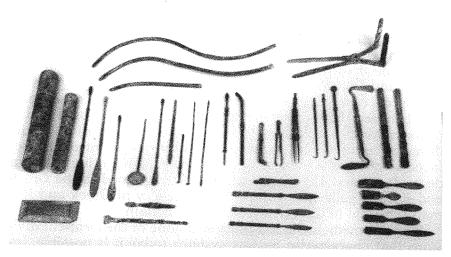


Fig. 3 - A large instrumentarium from Italy, 1st or 2nd century AD.



Fig. 4 - A stone stamp for impressing eye-salves (collyria) with the prescriptions of Titus Vindacius Ariovistus, from Kenchester, England.

vide a vivid starting point for discourses on the practise of early medicine. Thus, selected exhibits can introduce the subjects of health, hygiene and body care, drugs and pharmacy, folk remedies, surgery, temple medicine, amulets, magical remedies, and the healers themselves, whether mortals or the healer deities.

What, then, is the extent of the Greek and Roman medical collections of the British Museum? I am currently preparing a catalogue of these collections for publication in 2002, so this paper is an interim account of the project. Central to the collections is a very important assemblage of surgical instruments, the great majority of which belong to the period of the Roman Empire. They comprise examples of all the essential tools of ancient surgery - scalpels, cupping vessel, forceps, sharp and blunt hooks, needle holders and probes of various kinds. These vary



Fig. 5 - The marble tombstone of Jason, an Athenian physician, 2nd century AD

from simple (but effective) instruments to examples with elaborate decoration or costly inlays. In addition, there are more specialised instruments such as the *staphylagra* or uvula forceps, bone lever, crown trephine, artery forceps, bone chisels, rectal dilator, catheters and curettes. There are also two sets of surgical instruments, one an example of the small portable surgical kit of core tools; the other a much more extensive set, one of the largest known from the Roman World. We also have a number of replicas of surgical instruments from Pompeii and Herculaneum made in the foundries of Chiurazzi/De Angelis and purchased from them in 1920.



Fig. 6 - A bronze figurine of Salus (Hygieia), goddess of health, 1st - 3rd century AD.

One of the advantages of curating the medical collections at the British Museum is that it has been possible to work with colleagues in the Department of Scientific Research over the years, and we have been able to extract a large amount of new and important information by means of scientific analysis. This includes the characterisation of the metal composition and patina of the Naples foundry replicas which should help, in cases of doubt, to differentiate genuine instruments from the numerous and widespread Naples replicas. As they are usually quite convincing replicas and, because of their increasing age, they have often started to corrode, this is an important development.

# Ralph Jackson

For didactic purposes replicas are of great value, and we recently commissioned reconstructions of the instruments in a newly-discovered surgical kit found in a grave at Stanway near Colchester, England. The process of manufacture of these replicas, which involved detailed discussions between curator and craftsman, revealed fresh information about the form and function of the instruments.

Our collections also include medical and pharmaceutical implements and utensils, notably drug boxes and jars, palettes, scoops and spoons. Traces of surviving *materia medica* have been analysed in our laboratory.

One very particular aspect of Roman medicine, and one of the few areas of specialisation, was eye medicine. We have a few instruments relating to eye surgery, but much more extensive evidence for the medical treatment of eye complaints, notably the objects known as oculists' stamps or *collyrium* stamps, small stone blocks engraved with prescriptions for eye complaints and intended for marking sticks of eye medicine (*collyria*). The 15

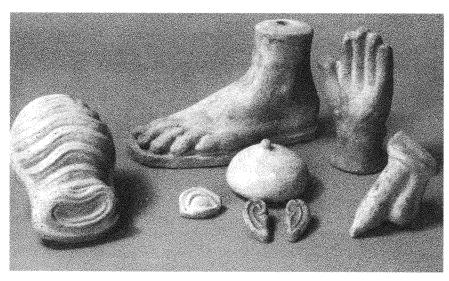


Fig. 7 - Terracotta anatomical votives, from various sites, 3rd - 1st century BC.



Fig. 8 - Ivory figurine showing a negro man with Pott's disease.

# Ralph Jackson

stamps in the British Museum comprise one of the largest collections of these artefacts, which are especially characteristic of

the North-West provinces of the Roman Empire.

The collyrium stamps are not the only inscribed material of medical significance. We have also decrees honouring Greek physicians from Gytheion and Karpathos; wooden writing tablets from the fort of Vindolanda, near Hadrian's Wall, mentioning doctors, drugs and patients, and a graffito on a pottery bowl fragment from the River Thames recording a veterinary doctor. Perhaps most famous of all is the inscribed tombstone of the doctor Jason, from Athens, showing him in characteristic pose, examining a patient. The other images of healing personnel, primarily the healer gods Asklepios/Aesculapius and Hygieia/Salus, are in a variety of media - stone statues, bronze and terracotta figurines and engraved gemstones. Finally, we have a range of stone, metal and terracotta anatomical votives, representing most of the body parts; and a movingly realistic depiction of disease, probably spinal tuberculosis (Pott's disease) on a Hellenistic ivory figurine.

While our modest medical displays potentially reach a wide visiting public (currently about 5-6 million visitors per year), information is also disseminated in many other ways, by academic and popular publications, by seminars, study days and lectures, and, in the near future, by multimedia on our Compass computer system. By combining expertise from all parts of the museum as well as from our peers outside our aim is to maximise the information to be obtained from our collections and to make that

information clearly and freely available.

Correspondence should be addressed to: Ralph Jackson, Curator of Roman Britain Prehistory and Early Europe, The British Museum, Great Russell Street London WC 1B 3 DG, GB.

MEDICINA NEI SECOLI ARTE E SCIENZA, 12/2 (2000) 339-346 Journal of History of Medicine

## Articoli/Articles

# GLI STRUMENTI PER LA CATALOGAZIONE DELLE APPARECCHIATURE SCIENTIFICHE

### MARA MINIATI

Istituto e Museo di Storia della Scienza, Firenze, I

#### **SUMMARY**

## INSTRUMENTS TO CATALOGUE SCIENTIFIC APPARATUSES

The study of Italian scientific-historical objects has been neglected for years. This is the reason why important documents concerning these objects have been lost or dispersed. So, cataloguing scientific instruments is important not only as a way which allows the identification of the object and the reconstruction of its history, but also as an important moment of tutelage and preservation of a cultural heritage.

It is necessary to compare the newly proposed catalographic methods with ones already used for artistical, archaelogical and architectonical objects. On the other hand, it is essential to consider the informatic technology, thanks to which we can offer an immediate and easy access to scientific data and their cultural wider range diffusion.

Il patrimonio storico scientifico italiano non ha goduto, almeno fino a una decina di anni fa, di grande attenzione.

Questo ha provocato dispersione di materiale, perdita di documenti archivistici, distruzione di apparecchiature effettivamente usate e poi superate.

Del materiale storico scientifico, inoltre, soprattutto se usato. se di epoche relativamente recenti, se ritenuto di scarsa o nessuna importanza, non esisteva nessun tipo di registrazione: né fotografica, né inventariale, né, tanto meno, catalografica, assenze, queste, che hanno certamente agevolato processi di dismissione e sparizione.

Key words: Scientific instruments - Museums - Informatic technology