

ORIGINAL ARTICLE

Tracing the Origins of the Physician's Medical Bag

Abstract

The structure of the materials inside a medical bag needs to be arranged in such a manner, that the treating physician to be able, even blindfolded, to quite his way through, in order to easy grasp every instrument and tool. This was an axiom firstly recorded by Hippocrates in ancient Greece. On the other hand, Egyptians and Palestinians used medical kits at about the same era, followed in later centuries by Muslim physicians. The historical debate of who was the innovator to manufacture such a box, or bag, still remains open for discussion. Our study tries to follow the origins of the physician's medical bag in antiquity.

Keywords: Medical bag or kit, Ancient Greece, Hippocrates, Egypt, Palestine, Muslim physicians

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Introduction

Since the Homeric era, it was known the statute of the itinerary (Greek: περιοδεύοντες) physicians.¹ They were the healers who offered their services travelling from town to town. Some of them, named “wise physicians” (Greek: σοφοί), founded local medical and philosophical schools, and were those who were visiting patients in their homes, prescribing them medicines, being paid by the patients themselves.² Hippocrates was among the firsts who understood the necessity of a well organized medical box, so that any physician-surgeon to be able to carry all the essential healing and treatment tools.^{3,4,5}

General practitioners and family physicians are usually required to carry a medical bag, especially for their house-bound patients.⁶ The 19th century had been stigmatized by remarkable advances in the tools to aid the physician to achieve a correct diagnosis and a better treatment. A huge part of patient care continued to be provided in the home, thus the physician required a means to carry these instruments and tools to the patient. This need was met with the development of the physician’s black bag (Figure 1), which became the principle symbol of the physician, an emblem for a physician to be recognized in the community.⁷ Many researchers believe that the early 20th century was the period when the physician’s bag appeared to serve the medical personnel. Our study traces the origins of the ancient medical boxes (kits, or bags), in a effort to demystify a forgotten medical story, the tale of the physician’s bag.



Figure 1. A black leather doctor's bag, circa 1911.

- 1- Homer, Mauropoulos, 2010.
- 2- Xenophon, 1961.
- 3- Hippocrates, 1967- 1971.
- 4- Tsoucalas, Kousoulis, Tsoukalas, 2011.
- 5- Tsoucalas, Sgantzos, Androutsos, 2016.
- 6- Nakar, Vinker, Weingarten, 1995.
- 7- Low, 2012.

Relics of the first mentioned medical kits

Two great ancient civilizations, Greek and Egyptian, claim for the first use of an organized medical kit. In Greece, the cult of Asclepios, mentioned inside the Homeric poems, demanded the donation of the votive offerings for the sufferers to be cured. In the Athenian Asclepieion, a base of a votive offering was found, with a relief depicting surgical instruments and suction cups (Greek: σικύες) (Figure 2), circa 320 BC, one of the earliest findings of an organized medical kit.^{8,9,10} In Egypt, inside the Temple of Kom Ombo, a renowned medical care centre of the late Ptolemaic Dynasty (circa 180 - 30 BC), one may admire a series of fascinating hieroglyphs on the inner face of the rear wall, which testify to significant advances in various fields of medicine, and a medical kit (Figure 3) is delineated.¹¹ Meanwhile, ancient Palestinian medical toolkits have been found among shipwrecks, kits which could date back to Ezra's (circa 450-350 BC) or even King David's (1040-970 BC) times.¹²



Figure 2: NMA 1378, Base of a votive offering with a relief depicting surgical instruments and suction cups (sikyēs), Athenian Asclepieion, 320 BC.

However, the first detailed description of a medical bag, with guidelines for the required equipment and structure, could be found in Hippocrates' writings (circa 460-370 BC) (Figure 4). In his treatise "On good manners" (Greek: Περὶ Εὐσχημοσύνης, Latin: De decenti habitu), Hippocrates mentioned, "All these require arrangements, depending on the materials, so that you can have the tools, the equipment, the metallics and the rest of it already prepared. Because the shortage of these things creates embarrassment and causes

8- Walton, 1894.

9- Tsoucalas, Karamanou, Laios, et al, 2016.

10- Asclepieion, Acropolis Museum, 2016.

11- Martinet, 1998.

12- North, 2000.



harm. For your trips, you will carry a simple and portable kit. The most appropriate is the one which follows a methodic layout, because the physician cannot keep everything in mind".¹³ A plethora of surgical metallic instruments were at physician-surgeon's disposal alongside with gauzes, compresses, bandages and drugs (powders, liquids, ointments, creams etc). Dioptras, hedrodiastoleus, mochliskos, otagra, kauterion, motos moloubus, catheters, metrechytes, agkistra, tricholabis, embryoukos, staphylagra, osteotomes, scalpels, psalis, spathomele, cyathiscomele, (Figure 5)¹⁴ "all placed harmonically inside the medical bag (Figure 6), arranged in the most appropriate way, to serve the proper arrangement for transportation and the speed during operations, as Hippocrates stated."^{15,16}

13- Hippocrates, 1967- 1971.

14- Milne, 1907.

15- Hippocrates, 1967- 1971.

16- Tsoucalas, Kousoulis, Tsoukalas, 2011.

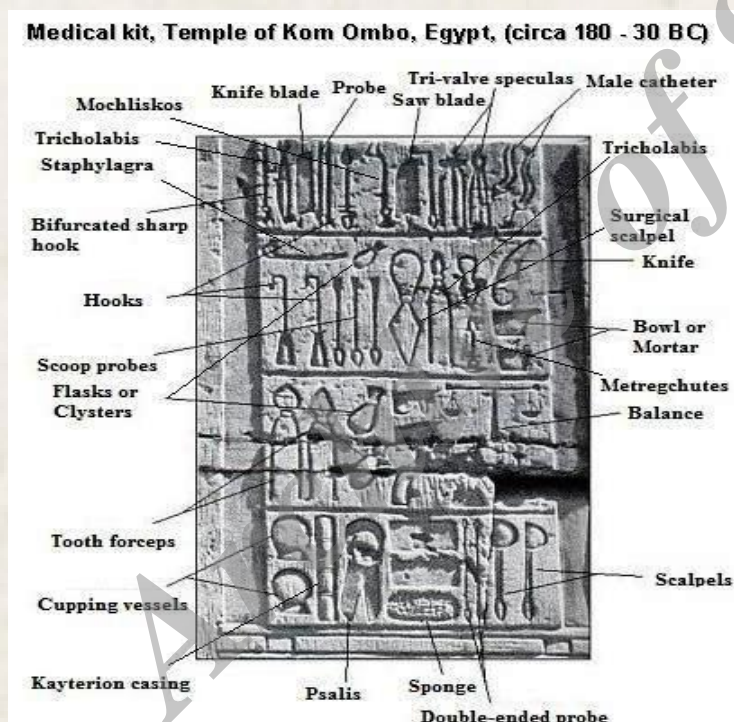


Figure 3: Medical kit, Temple of Kom Ombo, Egypt, circa 180 - 30 BC.

Archaeological findings, demonstrated the existence of a great variety of surgical instruments in the Muslim world since the 9th century. Those instruments, were decorated and carved to depict the icon of the Muslim world and to stand out by the ancient Greek ones. The skill of the Muslim metalworkers, enabled the production of fine and beautifully

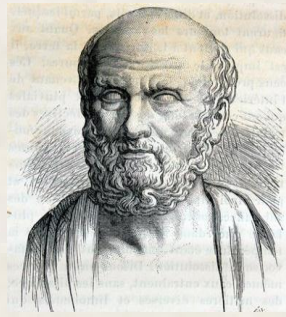


Figure 4: Hippocrates, gravure, *Corpus Hippocraticum*, Aldo Manuzio, Venice, 1526.

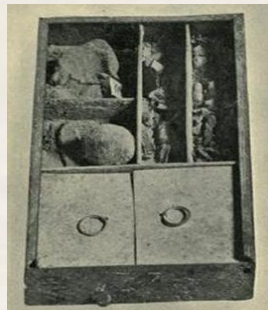


Figure 5: Greco-Roman 6 compartment medical kit, Archaeological Museum, Naples.



Figure 6: Greco-Roman surgical instruments, found by Dr G Savenko in 1819 at Pompeii in the Via Consularis, inside a surgeon's house.



elegant tools, all to be arranged in wooden kits. Metallic depictions adorned those medical kits. Following the Hippocratic theorem of “everything in order and with easy access”, Muslim physicians, such as Persian Muhammad ibn Zakariya al-Razi (9th-10th century AD), Spaniard Abu al-Qasim Khalaf Ibn Abbas al-Zahrawi (10th century AD) and Persian Ibn Sina (980-1037 AD) (Figure 7), had their own medical boxes to arrange all appropriate instruments, mostly wooden with metallic decorations, manufactured on the ancient Greek pattern (Figure 8).¹⁷

17- Cabana, 1996.



Figure 7: Rhazes, Albucasis, Avicenna, portraits.



Figure 8: Greco-Roman and Muslim surgeon's boxes, Archaeological Museum, Naples and Cairo Museum of the Islamic Art respectively .

Conclusion

The Greek eminent father of modern medicine, was not far from today's notion, as the main contents of the black bag include the basic tools, such as stethoscope, sphygmomanometer, flashlight, thermometer, alongside with metallic surgical instruments (hooks, scalpels, stitching needles) and some gauzes and bandages. Hippocrates did not emphasize on drugs but focused more on practical and structural issues for the kit, an opinion similar to the contemporary trend.^{18,19} The question of when the first special physician's portable medical bag was introduced in daily practice, even if it seems to date back to the time of Hippocrates, and who produced the first organised and standardized description, still remains an unresolved historical debate.

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