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Elephantiasis from the Hellenic Antiquity Until Now-a-days

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In Greek antiquity a series of diseases were named after an animal. This custom had its roots in early prehistoric times, when medicine was not entirely separated from superstition. According to this concept, a disease was receiving its name after an animal in order through a magical way the disease itself to leave the patient and "magically" transported to the animal. Furthermore, the animal as a representative of the power of the nature could also magically help the patient to recover. With the development of the Greek rational medicine since 6^{th} century BC, Greek medico-philosophers tried to explain with a logical way the animal names of various diseases pointing out the resemblance of the characteristics of the diseases with the animals' features and appearance. Among those diseases was "Elephantiasis" or "Elephas" (the Greek name for Elephant, E λ é ϕ avta ϕ) [1]. Roman encyclopaedist Aulus Cornelius Celsus (30 BC-50 AD) is credited with the first use of the term "Elephantiasis" [Figure 1] in his work "De Medicina" [2]. However, the concept of Elephantiasis in antiquity was different than its definition in modern times [1].



Figure 1: Italian gravure of the 18th century, A woman with Elephantiasis

From the survived ancient Hellenic medical literature is obvious that the majority of the ancient Greek physicians dealt more or less with this pathological entity. The most comprehensive analysis may be found in the work of Aretaeus of Cappadocia (2nd or 4th c. AD) [3], the physician who gave us the most vivid medical descriptions of all times [4]. In his work a chapter was devoted to the disease (Aretaeus Med. De causis et signis acutorum morborum 2.13.1.1-2.13.21.8) describing that this was a disease of the skin thickens, swelling, gets ulcers, wrinkles, cracks and nodules. According to his opinion, those symptoms had been usually been expressed on the face and especially on the nose, lips and ears, where after thickening an ulceration was formed. The patient would gradually lose hair from the head, the eyelids, the whole body, as well as his nails from the hands and feet.

The disease would finally affect the entire body of the patient causing his death, while the ulcers in the nose, around the mouth and the fingertips could be among the first to appear. The Cappadocian physician noted that the disease was also named as "leontiasis" (Greek: $\lambda \dot{\epsilon} \omega v$, lion) due to the swelling in the blephara resembling those of the lion, as well as "satyriasis", because the patients presented an uncontrolled desire for sex as the Satyrs, the mythical Greek creatures [5]. These ideas were also supported by other ancient Greek and Byzantine physicians such as Galen (1st-2nd c. AD), Pseudo-Galen (1st - 2nd c. AD), Oribasius of Pergamon (4th c. AD), Aetius of Amida (6th c. AD) and Paulus of Aegina (7th c. AD), while they had also proposed the name "sarcocele". This description allows us to believe that Elephantiasis was in fact another disease than the modern one, most probably a tubercular cutaneous disease [4].

Although the ancient Greeks were excellent dermatologists [6,7], following a blurred diagnosis, the term "Elephantiasis" was applied by them for a plethora of other diseases in the following centuries and was strongly associated with ambiguity, implying both filariasis and leprosy. This diversity may have caused a confusion, so that the Latin philologists and scholars of the Arabic medical treatises to make the mistake to enmesh "Elephantiasis" with leprosy in their translations. Although the Arab physicians had thoroughly studied and in most case embraced the Hellenic and Byzantine medicine, they were in fact able to distinct these two diseases [8]. The medieval Persian physicians Rhazes (865-925 c. AD), Akhawayni (?-983 c. AD), Haly Abbas (930-994 AD), Avicenna (981-1037 AD) and Jorjani (1042-1137 AD), all noted "Elephantiasis" in their works [9]. Thus, due to translation errors, "Elephantiasis" as a term during the Middle Age included a cluster of diseases such as leprosy, tubercular disease of the skin and even poplar. It is one of the oldest and most bizarre crippling diseases of mankind and a series of irrelevant entities were included in its pathology [10]. It was the 18th century, when the surgeons of the era named as "Elephantiasis" the pathological concentration of lymph in the upper and lower limbs, as well as in the pubic area. As this oedema had been mainly presented in the legs, was the same disease described by the Arab physicians under the name "Elephas". Despite the misunderstanding in the early days of the modern medicine, nowadays "Elephantiasis" depicts what it was meant to describe, a lymphedema, a metaphor in which human legs are similar to those of an elephant [8].

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