

Letter to the Editor

The magnificent and arcane medical figure of the 7th century AD Paul of Aegina

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doi:10.5281/zenodo.15710230.

Byzantine medicine was admirable more for the practices followed than for the theoretical elaborations, which did not go further than the Hippocratic views. All the great writers of the time, Oribasius, Aetius, Agapius, Symeon the Seth and Paul of Aegina relied on the knowledge gathered by the School of Hippocrates and the physiology of the 4 humors. Paul cared for the man holistically, intervened in the precarious balance of the four humors, followed the Dioscuridian pharmacological experience and subordinated superstition to etiology. In dictionaries he survived as the author of medical books [1-2].

Paul of Aegina (Latin: Paulus Aegineta, Greek: Παῦλος Αἰγινήτης) [Figure 1], native of the Hellenic island of Aegina in the Saronic bay 16 miles from the port of Piraeus. He was among the last pupils of the Alexandrian School of Medicine in Egypt, where he had exercised medicine, just before its destruction by the Arabs during the 7th century AD [3]. He has the last famous figure of the eclectic Greek compilers in the Alexandrian School, a school with notorious fame in anatomy and dissections both in humans and animals. Although he had lived in an era of political and clash turbulence, Paul must have stayed for a while in Alexandria after the Arabs conquer it and was highly respected by all and glorified by both worlds Western and Arabic. He was known among the Arabs as “The obstetrician” (Arab: alqawabeli, the birth-helper, Greek: μαϊευτήρας) and by the Byzantines as the “Peregrinator” (Greek: περιοδευτής) and “Iatrosophistis” (Greek: ιατροσοφιστής, an authority in medicine). It

seems that naming someone “The Obstetrician” among the Arabs was something like a title of recognition, as the same had happened in other cases, like Soranus of Ephesus. The “Peregrinator” could mean someone who had travelled the known world to acquire his skills, an old tradition of the ancient Hellenic medico-philosophers, or a magnificent physician in a constant movement to exercise medicine when he is called by a city to confront some serious issues like an epidemic or an ill king, another Hellenic tradition [4-5]. The view of Paul's skill and reputation in obstetrics was supported in the early 19th century but was gradually sidelined by writers and scholars [6]. Most probably, Paul travelled a lot to gather all the medical knowledge existent at the time. This fact should have helped him to compose his work. He was the author of the medical encyclopedia “Medical Compendium” (Greek: Πραγματεία Ιατρική, Latin: Compendium Pleiades), consisting of 7 books, a masterpiece unrivalled in its accuracy and completeness. His treatise was almost immediately translated into the Arabic language to influence all physicians of the era [4-7].

Paul in his work gave us vivid and detailed descriptions of tracheotomy, tonsillectomy (amygdalectomy), catheterization of the bladder, lithotomy, inguinal herniotomy, abdominal paracentesis for ascites, aneurysm reconstruction, orthopaedics restoration, cosmeticplastic operations, cataract and many other surgical procedures including palliative operations against cancerous tumors and many more.

Furthermore, he provided an in-depth description of spinal dislocations, noting their serious nature and the significant risks of morbidity and mortality associated with them. Following the Hippocratic and Galenic tradition, he categorized spinal dislocations and subluxations into three types: anterior, posterior, and lateral [8].



Figure 1. Paulus Aegineta, miniature portrait Pauli Aeginatae Praecepta salubria, 1511.

He was the first Greek physician to describe step by step a variety of surgical operations. Meanwhile in his work concerning Drugs (7th Book), 600 herbs were categorized, alongside with 80 non-botanical ingredients in an alphabetical order. To him are attributed a monograph titled "On the therapy and treatment of the child", and a treatise "On Gynaecology" which must have had an impact in the Arab world or could have been his first work to be translated. His work was based in the fundamental medical knowledge of the ancient Greeks, following mostly the Galenic views. He lived in the eve of the Byzantine surgery and with his work strongly helped its evolution [9-12].

Paul was a physician and surgeon with supreme skills, ahead of his time. He was using antiseptics,

usually salt powder, painkillers, and ligation (Greek: απολίνωση, apolinosis) of bleeding vessels. He was the quintessential student of the best medical authorities of the Hellenic world, such as Hippocrates of Cos and Galen of Pergamos. He had a great impact on physicians such as Rhazes, Haly Abbas, Albucasis, Avicenna and Fabricius ab Aquapendente, all majestic figures in the history of medicine, who lived in subsequent eras. The importance of his work is testified by the longevity and endurance of his theories and practice which withstood time and proved through publications by the "Aldine Press" in Venice during 1528 and by "The Sydenham Society of London" between 1844 and 1847, centuries after he had passed away. Paul of Aegina's writings enormously influenced surgeons through the Renaissance and marked a continuum of the ancient Greek surgery [13-16]. For many researchers Paul was considered as the most prolific writer, while his 6th Book on Surgery was the most valuable work on surgery to be written during Byzantine times [17]. The instrumentarium used by Paul was so complete, made by his own patents and by surgical tools ameliorated by the Arabs [18]. There are lexica of names which claim that Paul lived in the 4th century AD (ca. 395) [19]. Of course, the majority classifies him in the 7th century AD [20].

Very little is known of the life of Paul of Aegina. In his work Paul noted that the ancients had already covered the entire field of medicine and therefore, all that was left to do was to summarize their knowledge to make it more easily accessible. This quotation explains the emphasis on encyclopedias and the modest amount of original works of the Byzantine scholars and physicians. Medicine in his time was conceived as an *ars perfecta* and Paul was seen as its most prolific representative.

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