

ŞEREFFEDDİN SABUNCUOĞLU (1386–147?): AN OVERLOOKED YET BRILLIANT OTTOMAN PHYSICIAN

ŞEREFFEDDİN SABUNCUOĞLU (1386. – 147?):
NEPREPOZNATI, ALI SJAJAN OSMANSKI LIJEČNIK

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SUMMARY

Şereffeddin Sabuncuoğlu was a skilled surgeon from the early Ottoman period (15th century) in the Anatolian city of Amasya. He was a physician, surgeon, trainer, scientist, miniature artist, calligrapher, and the author of three significant books in addition to four other known manuscripts. In this study, unlike the previous historical clinical articles about him focused only on certain chapters he had written in his book 'Imperial Surgery', we have tried to focus on his whole life, including his personal experiences and things happening in his immediate environment.

Keywords: *Şereffeddin Sabuncuoğlu, Cerrahiyetü'l-Hanniye, Ottoman Medical History, Ottoman physician, Amasya Darüüşşifa*

INTRODUCTION

Although official documents have been lost in time, *Şereffeddin Sabuncuoğlu* is thought to have lived between the years 1386 and the 1470s. This estimate is based on his writings and the information that can be gleaned from them, including the medical masterpiece that was completed before his death. Perhaps unsurprisingly,

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no grave or tomb has been found for him (Sabuncuoğlu, 1465; Uzel & Süveren, 2000; Uzel, 2020) (Figure 1).



Figure 1. Şereffeddin Sabuncuoğlu (1386–147?), depicted by İlter Uzel.

Despite this uncertainty about his personal life, we can be fairly certain that he was one of the more skilled surgeons of the Ottoman period, as there is documentary evidence that he conducted surgical operations that can be considered fairly complex for the period. His surgical interventions were in almost every field of modern surgery such as General Surgery, Neurosurgery, Urology, Obstetrics & Gynecology, Orthopedics, Thoracic surgery, Vascular surgery, Ear-nose-throat (ENT), and even Ophthalmology (Batirel, 1997; Darçin & Andaç, 2003; Doğan & Tutak, 2021a, 2021b; Er, 2013; Oguz, 2006, Sarban et al., 2005; Verit et al., 2003; Verit & Kafali, 2005). He was almost certainly also an experimental scientist, the author of some medical writings, and a master medical preceptor for his trainers (Uzel, 2020). He lived and worked all his life in the city of *Amasya* in the centre of the Anatolian peninsula, which at the time was a major agricultural and commercial city in the early Ottoman period, and he is thought to have witnessed the great Ottoman conquest of *Constantinople*. Nevertheless, he never gained the admiration of *Fatih Sultan Mehmet*, the conqueror, despite his efforts to reach the

ruling inner circle where he hoped to present his detailed and illustrated surgical Turkish notes named “Imperial Surgery” (*Cerrahiyetü’l-Hanniye*). However, the lack of acknowledgement from the Ottoman leadership did not deter him, and he continued to work feverishly. We suspect that the reasons the Ottoman elite ignored him were due to the initial societal transition from a military migratory culture to a settled one, which history has shown preserved very little literature. Additionally, it is assumed that the bureaucratic environment at the Palace was not as intellectually oriented as it would become later. Secondly, *Sabuncuoğlu* lived in a provincial Anatolian city far away from Istanbul, which, as it is now, was a truly global city. Lastly, according to the scholars of the era, the main reason was most likely that he produced his masterpieces in Turkish, while classical Arabic and Persian were the preferred literary and academic languages of the Ottoman court instead of the vernacular. Nevertheless, although he knew Arabic and Persian very well, he insisted on writing in Turkish. He explained the reason in his own words: “*The average physicians in this country are generally illiterates, and the ones who are literate can only understand Turkish texts*” (Uzel, 2020). Moreover, there is little doubt why the surgical textbooks he penned featured so many detailed illustrations. Although previous articles in clinical journals about *Şereffeddin Sabuncuoğlu* focused only on chapters from his book ‘Imperial Surgery’, this study reports his whole life, including his experiences and works within the historical and social context of his own environment.

METHODS, RESULTS & DISCUSSION

The life story of Şereffeddin Sabuncuoğlu

Based on what can be ascertained from his own writings, he spent all his life in *Amasya*, where he wrote his manuscripts and treated his patients, with the exception of his trip to Istanbul, where he attempted to present his book to the Sultan as well as several journeys to *Kastamonu*, a nearby city where he sometimes treated patients (Uzel, 1992, 2020). *Amasya* is an ancient city located near the river “*Yeşilirmak - Green River*” with a long history dating back from 7500 BC and is well known for its royal tombs from the “Pontus Kingdom” (333-26 BC) that were carved in the rocks (UNESCO World Heritage) (Wikipedia, 2021) (Figure 2).



Figure 2. A scene from the central Anatolian city *Amasya*.

His father's name was *Ali*, and his grandfather, who was also a well-known physician, was *Ilyas*. Uzel (2020) established that *Şereffeddin Sabuncuoğlu* came from a prominent local medical family, and there is still an ancient neighborhood in *Amasya*, which was probably named after the family, "*Sabuncuoğlu*", according to local historians.

He was trained and later worked at *Amasya Darü'sşifa* (the Central State Hospital), which was built by the Mongolian Anatolian state *Ilkhanate* before the Ottomans, in the year 1308 (Oguz, 2006; Uzel, 2020; Wikipedia, 2021) (Figure 3A-B).





Figure 3A/B. Amasya *Darüüşşifa* (Central State University Hospital), est. 1308.
External/Internal (A/B) view respectively.

He was proud to mention in his books that he had been a member of the surgical staff for 14 years in that hospital, which, in modern terms, can be considered an equivalent to today's State University hospitals that were funded by the Ottoman rulers and active until the 19th century (Uzel, 2020). Actually, only the most able could achieve those positions in the Ottoman health system, and we can infer that those state positions were not life-long and there might be a retirement system based on the knowledge that even *Sabuncuoğlu*, as a long-lived brilliant physician and surgeon, was only employed there for a limited time. Later, in his 80s, he seemed to mostly wanted to put his academic and practical experience into medical writing.

He reported that one day, while he had been walking in the center of *Amasya*, one of his former patients was standing in front of him, pointing at his tracheostomy orifice treated by *Sabuncuoğlu* that undoubtedly saved his life and gave thanks to him (Uzel, 1992). This anecdote can be considered a clear example that *Şereffeddin Sabuncuoğlu* lived an unassuming life among the public. On the other

hand, another strikingly groundbreaking example of Anatolian medical practices that we learn from *Sabuncuoğlu*'s manuscripts is the existence of female surgeons referred to in his writing as “*Tabiba*” (a female doctor) (Uzel, 2020) (Figure 4).



Figure 4. A female physician (*Tabiba*) performing a gynecological operation to address a vaginal prolapsed excess mass, probably a prolapsed myoma.

The principles of medical training and practice in the early Ottoman period

Medical physicians were generally divided into two groups: those with their own shops/premises and traveling ones. It has been reported that a thousand physicians were practicing in 700 medical shops (surgeries) in private practice in Istanbul in the 16th Century. Medical training was classified into three consecutive phases: apprenticeship, journeyman, and master's degree. After being confirmed as a master, the trainee received his “certificate”, which enabled him to perform medical procedures unaccompanied (Köken & Büken, 2018).

His handwritten manuscripts

There are three main books, among a total of seven, known to have been written by *Şereffeddin Sabuncuoğlu*. *Akrabattin* was the initial masterpiece that had been translated from a Persian manuscript related to the preparation of drugs, to which he contributed several chapters in his mid-50s. The last one was *Mücerrebname*, which was committed to paper at the ripe old age of 85 (Uzel, 2020). It is composed of various drug concoctions surprisingly closely related to modern

medical multidisciplines. Additionally, this book is noteworthy in regard to current medical practice in that he mentioned strategies to improve the composition and efficacy of certain medications and tested them on himself in an early form of modern phase I clinical trials. To test his newly formed antivenom, he let a poisonous snake bite him after taking the medicine in front of his assembled patients (Sabuncuoğlu, 1465; Uzel & Süveren, 2000; Uzel, 2020).



Figure 5. *Şereffeddin Sabuncuoğlu* performing an abscess drainage in the axillary region. Notice the positions of both the patient and surgeon, and also the handled instrument.

The previous book “Imperial Surgery” (*Cerrahiyetü’l-Hanniye*), which was originally published in duplicate form, is better known in contemporary medical literature circles and there are sample of historical clinical articles for almost all surgical disciplines based on the original one (Batirel, 1997; Darçin & Andaç, 2003; Doğan & Tutak, 2021a, 2021b; Er, 2013; Oguz, 2006; Sarban et al., 2005; Verit et al., 2003; Verit & Kafali, 2005). The book was rediscovered in the first quarter of the 20th Century by Süheyl Ünver and Ilter Uzel, who compiled the original copies of the manuscripts into a book in the year 1992 and 2020 (Darçin, 2003; Oguz, 2006; Uzel, 1992, 2006, 2020). Today, there are three original but slightly differing handwritten copies of “Imperial Surgery” surviving in Istanbul and Paris (Sabuncuoğlu, 1465a, 1465b; Uzel, 2020). Actually, this book is generally considered by Western historians as a Turkish replica of an Arabic book by *Abul-Qasim Al-Zahrawi*, *At-Tasrif* (On Surgery by Abulcasis) (936–1013AD) with some

original contributions (Elcioglu et al., 2010). However, Uzel I (2020) opposed this point of view because he claimed there was no known exact equivalent of the Arabic original. Nevertheless, even these contributions are important for that time when the evolution of medical science was so slow. However, the main difference between *Cerrahiyetü'l-Hanniye* and the others was that it was the first known illustrated surgical textbook. *Sabuncuoğlu* had decorated his pages with miniature diagrams of almost all surgical applications in related sections, unlike his inspiration, *Abulcasis*. In these colored pictures, the author mostly drew himself as the main surgeon and featured patients positioned with the related devices and his surgical assistant, if any (Figure 5).

Nevertheless, surely, “Imperial Surgery” by *Sabuncuoğlu* was the pioneer of the systematically designed surgical textbook (Uzel, 2020). The illustrations in this historical treasure composed of 138 unique surgical scenes and featured 168 different surgical instruments – 11 of which were of his own invention (Kadioğlu et al., 2017; Uzel, 2020).

CONCLUSION

Şereffeddin Sabuncuoğlu, as an ethical physician, surgeon, trainer, scientist, and especially as the author of medical literature with his intricately beautiful diagrams and calligraphy, should be ranked among the most prominent figures of the 15th century, especially when we consider his Western contemporaries who were just emerging from the Dark Ages. Although he was not a well-known clinician in his time, in modern times, he has been gaining the reputation and recognition he deserves.

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REFERENCES

1. Batirel, H. F. & Yüksel, M. (1997). Thoracic surgery techniques of Serefeddin Sabuncuoğlu in the fifteenth century. *The Annals of Thoracic Surgery*, 63(2), 575-7. [https://doi.org/10.1016/s00034975\(96\)01234-9](https://doi.org/10.1016/s00034975(96)01234-9)
2. Darçın, O. T. & Andaç, M. H. (2003). Surgery on varicose veins in the early Ottoman period performed by Serefeddin Sabuncuoğlu. *Annals of Vascular Surgery*, 17(4), 468-472. <https://doi.org/10.1007/s10016-003-0012-3>

3. Doğan, F. & Tutak, F. N. (2021a). Craniomaxillofacial Surgery Techniques of 15th Century Turkish Surgeon Serefeddin Sabuncuoğlu. *The Journal of Craniofacial Surgery*, 32(3), 828-831. <https://doi: 10.1097/SCS.00000000000007268>
4. Doğan, F. & Tutak, F. N. (2021b). Illustrations of Hernia Surgery in the Early Period of the Ottoman Empire by Şerefeddin Sabuncuoğlu. *World Journal of Surgery*, 45(7), 2116-2120. <https://doi: 10.1007/s00268-021-06058-8>
5. Elcioglu, O., Ozden, H., Guven, G. & Kabay, S. (2010). Urinary bladder stone extraction and instruments compared in textbooks of Abul-Qasim Khalaf Ibn Abbas Alzahrawi (Albucasis) (930-1013) and Serefeddin Sabuncuoğlu (1385-1470). *Journal of Endourology*, 24(9), 1463-1468. <https://doi: 10.1089/end.2009.0648>
6. Er, U. & Pamir, M. N. (2013). Ottoman surgical treatises and their influences on modern neurosurgery in Turkey. *World Neurosurgery*, 80(6), e165-9. <https://doi: 10.1016/j.wneu.2013.01.005>
7. Kadioğlu, S., Ögenler, O. & Uzel, I. (2017). A Classical Wooden Vaginal Speculum Mentioned in Old Medical Manuscripts. *Archives of Iranian Medicine*, 20(3), 193-195.
8. Köken, A. H. & Büken, N. Ö. (2018). Ahi Evran (1171-1261) and an Assessment of Akhism and the Morality of Medicine (in Turkish). *Lokman Hekim Dergisi*, 8, 54-70.
9. Oguz, H. (2006). Ophthalmic chapters of Serefeddin Sabuncuoğlu's illustrated surgical book (Cerrahiyyetü'l Haniyye) in the 15th century. *Annals of ophthalmology (Skokie)*, 38(1), 49-52. <https://doi: 10.1385/ao:38:1:49>
10. Sabuncuoğlu, S. (1465a). Cerahiyet al-Haniye. Amasya: Publisher unknown, c.1465. Ms no. 693, Turkish Suppl. Held at: Bibliotheque National, Paris, France.
11. Sabuncuoğlu, S. (1465b). Cerahiyet al-Haniye. Amasya: Publisher unknown, c.1465. Ms no. 79. Held at: Ali Emiri Section, Fatih Millet Library, Istanbul, Turkey.
12. Sabuncuoğlu, S. (1465c). Mucerebname. Amasya: Publisher unknown, c.1465. Ms no. 3229. Held at: Ayasofya Section, Suleymaniye Library, Istanbul, Turkey.
13. Sarban, S., Aksoy, S., Uzel, I., Işıkan, U. E. & Atik, S. (2005). Orthopaedic techniques of Sabuncuoğlu in the 15th century Ottoman period. *Clinical Orthopaedics and Related Research*, 439, 253-259. <https://doi:10.1097/01.blo.0000180894.12451.30>
14. Uzel, I. (1992). *Cerrahiyyetü'l Haniyye I, 1st ed.* (in Turkish). Ankara: Türk Tarih Kurumu Press [Turkish Historical Society Press].
15. Uzel, I. (2020). *Cerrahiyyetü'l Haniyye I, 2nd ed* (in Turkish). Ankara: Türk Tarih Kurumu Press [Turkish Historical Society Press].
16. Uzel, I. & Süveren, K. (2000). *Mücerreb-name Şereffeddin Sabuncuoğlu. 1st ed* (in Turkish). Ankara: Atatürk Kültür Merkezi Press.
17. Verit, A., Aksoy, S., Kafali, H. & Verit, F. F. (2003). Urologic techniques of Serefeddin Sabuncuoğlu in the 15th century Ottoman period. *Urology*. 62(4), 776-8. [https://doi: 10.1016/s0090-4295\(03\)00004-9](https://doi: 10.1016/s0090-4295(03)00004-9)
18. Verit, F. F. & Kafali, H. (2005). The oncologic surgery of Serefeddin Sabuncuoğlu in the 15th century. *European Journal of Surgical Oncology*. 31(7), 803-804. <https://doi: 10.1016/j.ejso.2005.02.028>
19. Wikipedia, The Free Encyclopedia (2021, May 15th). Amasya, <https://en.wikipedia.org/wiki/Amasya>
20. Wikipedia, The Free Encyclopedia (2021, May, 15th). Ilkhanate, <https://en.wikipedia.org/wiki/Ilkhanate>

SAŽETAK

Şereffeddin Sabuncuoğlu bio je vješt kirurg iz ranog osmanskoga razdoblja (15. stoljeće) u anatolijskome gradu Amasya. Bio je liječnik, kirurg, trener, znanstvenik, umjetnik minijatura, kaligraf i autor tri vrijedne knjige i četiri poznata rukopisa. U ovom istraživanju, za razliku od prijašnjih povijesnih kliničkih članaka o njemu koji su se usredotočili samo na pojedina poglavlja njegove knjige "Imperial Surgery", pokušali smo se fokusirati na njegov cjelokupan život, uključujući njegova osobna iskustva i događaje koji su se zbivali u njegovu neposrednu okruženju.

Cljučne riječi: *Şereffeddin Sabuncuoğlu, Cerrahiyetü'l-Hanniye, osmanska medicinska povijest, osmanski liječnik, Amasya Darüşşifa*