



History of Surgery in Turkey

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Hittites, Phrygians, Lydians, Ions, Urartu

(B.C. 2000 - B.C. 600)

Persians *(B.C. 543-333)*

Empire of Alexander the Great

Roman Empire

Byzantines *(395-1071)*

Turks *(1071-to present)*





- Medical history goes back to the eighth century, the time of the Uyghurs and Orhon Turks. During this period surgeons from neighboring countries had an influence on Turkish medicine and some written data were established.
- Physicians were educated in hospitals in a "master-apprentice" relation.



Akinci S Dissection and autopsy in Ottoman Empire [in Turkish]. *Istanbul Tıp Falcultesi Mecmuasi*. 1962;2597- 115



Central Asian Turkic States

- The first Turkish medicine text belongs to the Uyghurs.
- various eye diseases, headache, ear, nose and oral diseases, respiratory and heart diseases, diseases related to children and childbirth, sexual organ diseases.
- Uyghurs tried to treat some diseases by cauterisation which is a different application of acupuncture.

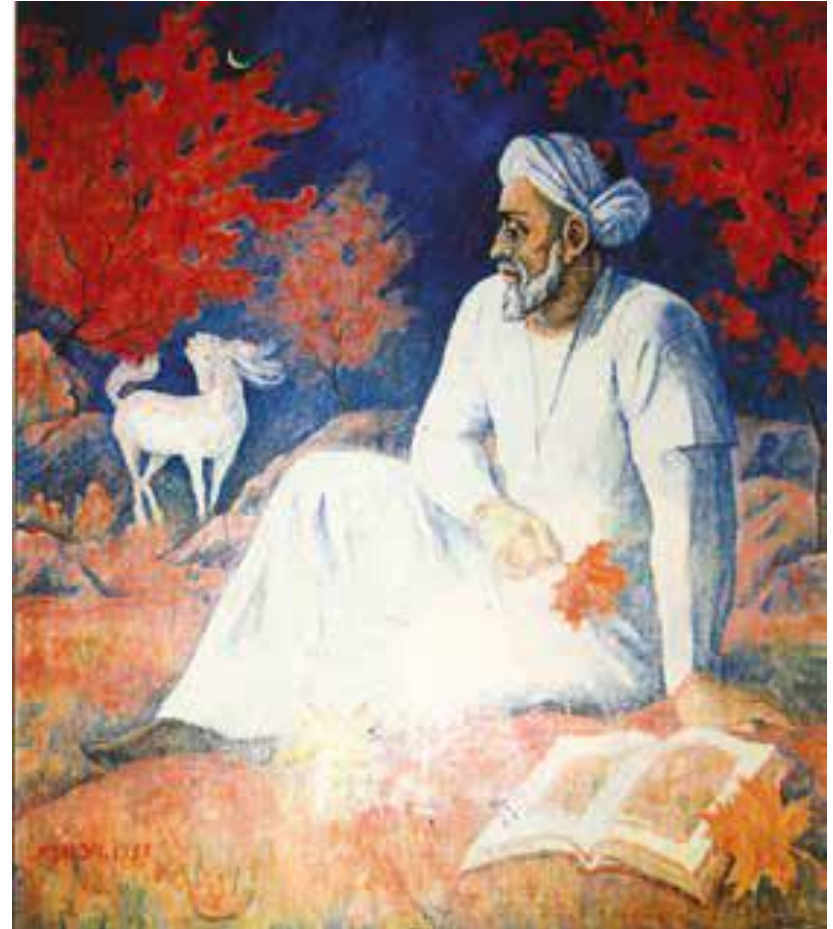


The first Turkish medical text found in Turfan excavations. (*History of the World and Turkish Medicine, picture 141, depicted by Ilter Uzel*)



İbni Sina (Avicenna) (980-1037)

- Died at the age of 57; he left more than 150 works on physics, astronomy, medicine and philosophy.
- He hypothesised the presence of creatures that are invisible to the eye causing transmission of some diseases hence sensed the presence of microbes without microscope.



İbni Sina (Avicenna) (980-1037)

- Surgical intervention was not preferred because of inadequate knowledge of anatomy, development of surgical instruments and fighting against pain and microbes.
- He suggested that surgical intervention can be performed if there is sufficient knowledge, skills and tools.



Ibni Sina is examining. (*History of World and Turkish Medicine, image 136*)

İbni Sina (Avicenna) (980-1037)

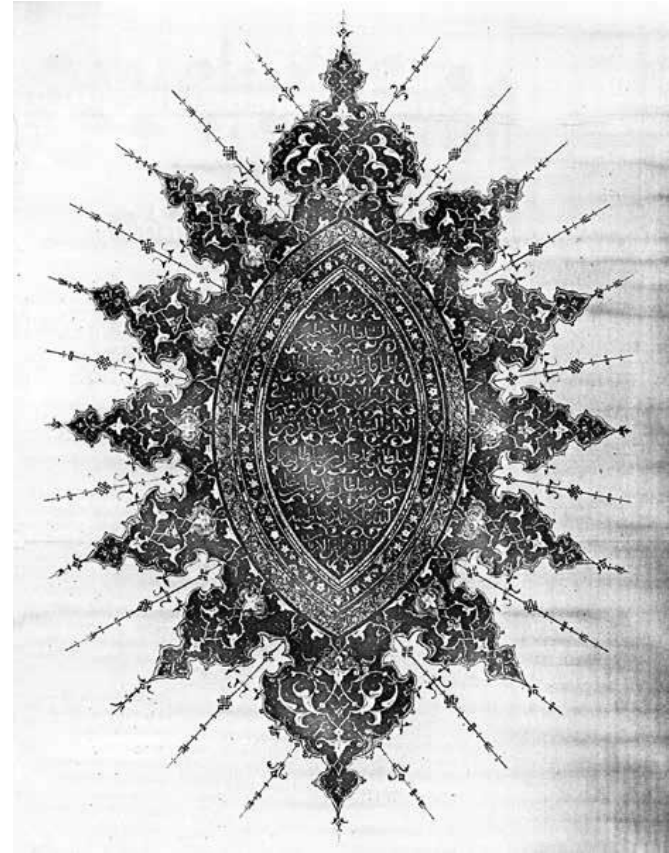
- Where to start the surgery, nerve and vascular distribution, the organs that should be considered during the operation, the rules of clean-up during and after the intervention, and the postoperative care of the patient
- For pain, which is a significant problem, he recommended opium, wine and henbane to control the operation pain.
- In the treatment of kidney stones, he indicated that surgical treatment should be performed if the result is not reduced by medication.



Ibn Sina discussing with his colleagues, from the Latin translation of the Law, 15th century (*World and Turkish Medical History, picture 134*)

İbni Sina (Avicenna) (980-1037)

- In the 13th century, his most important work “Canon of Medicine” which consists of 5 volumes, was translated to Latin by Gérard, and it was taught as a textbook for about five centuries.



İbni Sina's famous work Canon of Medicine (el-Kanün fit't - tıb'bı) cover page, page 2. **(The Health Volume II in the Ottomans, Editor Dr. Coskun Yilmaz, Dr. Necdet Yilmaz)**

Great Seljuk State Period - Anatolia

- The Oldest Medical Center of the Anatolia: Gevher Nesibe Darussifa and Medical School
- The Gevher Nesibe Medical School and Hospital in Kayseri, Turkey, built in 1206, can also be visited today as a museum of medical history.

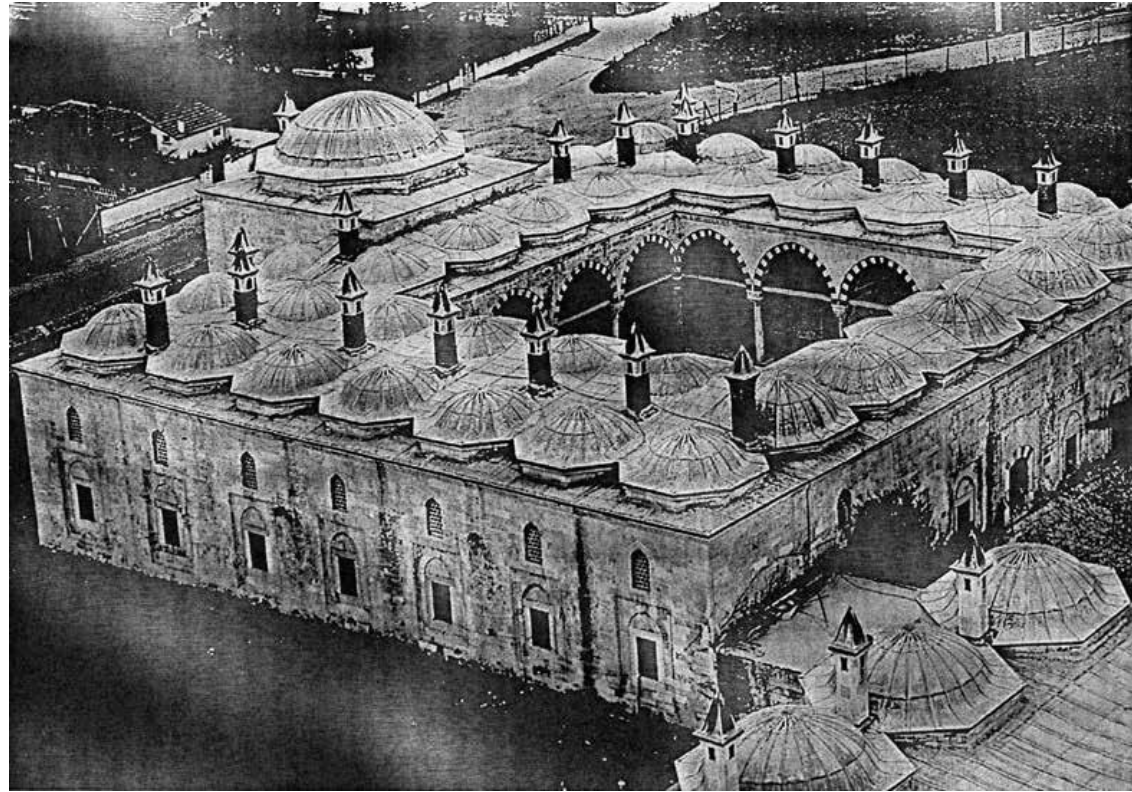


Gevher Nesibe Sultan



Ottoman Empire Period

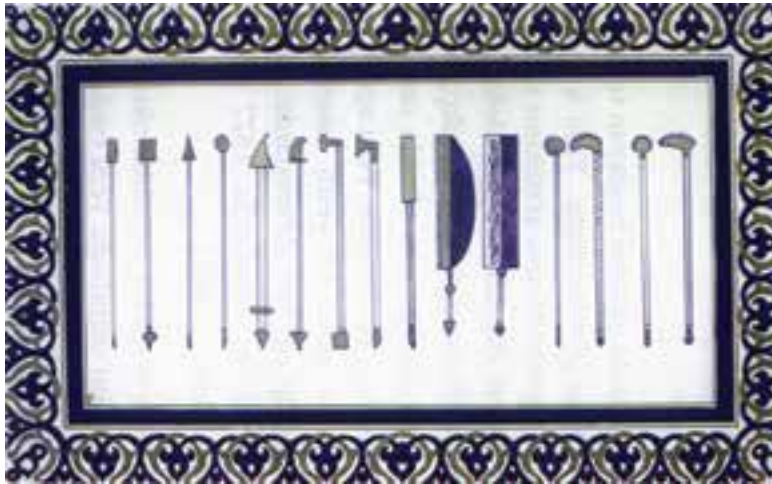
During the years when the Ottoman Empire was established, traditions in the Anatolian Seljuk period were continued.



Edirne II. Beyazıt Medical School.

Sabuncuoğlu Şerefeddin (1386-1470)

- was particularly interested in surgery.
- He wrote two volumes of the book titled “Cerrahiyetü'l Haniye” and explained the subjects with miniatures. The work includes 136 surgical procedures and 163 images of surgical instruments.



Bone surgery tools

Sabuncuoğlu Şerefeddin (1386-1470)

- It contains various detailed sections related to treatment with cauterisation, information about various operations, fractures and dislocations.
- Hemorrhoids, anal atresia, skin lesions, adenitis, pleurisy, urinary tract stones, hernia, birth, eye diseases, tumors, gout, many other diseases and treatments.



Left and right, Evacuation of a cervical abscess and examination of a groin hernia as illustrated in the first Turkish surgical book by Sabuncuoğlu in the 15th century.

Akinci S Dissection and autopsy in Ottoman Empire [in Turkish]. *Istanbul Tip Falcultesi Mecmuasi*. 1962;2597- 115



Sabuncuođlu Őerefeddin (1386-1470)

The original book is still in the National Library of Paris and translated into French under the title “ Le Premier Manuscrit Chirurgical Turc”



Method for treatment of shoulder dislocation, Cerrahiyetü'l Haniyye



Ottoman Empire Period

- On March 14, 1827, Cerrahhane-i Amire and Tiphane-i Amire (Mektebi Tibbiyeyi Askeriye) were established by Mustafa Behçet Efendi. The surgery training was 4 years in Turkish and medicine training 6 years in French.
- In 1836, medical education was combined with surgery education. Thus, the class of physicians with diploma who can operate, was started.



Ottoman Empire Period

- In 1875, young doctors from military medicine school were selected with a test and among those were Naim Efendi who was sent to Vienna, Cemil Topuzlu, Hayrettin and Osman Efendiler who were sent to Paris.
- On their return, they were assigned as teacher for surgery in military medicine school.
- He made a great effort to have a uniform medical education by bringing together the medical school of medicine and the military medical school at that time. Thus, this new educational institution was called the medical school and Cemil Topuzlu was appointed as the first dean.



Cemil Topuzlu Pasha

Cemil Topuzlu Pasha made important contributions to Turkish medicine on septicemia, asepsis and antisepsis and ensured some principals to be established and widespread around the country.



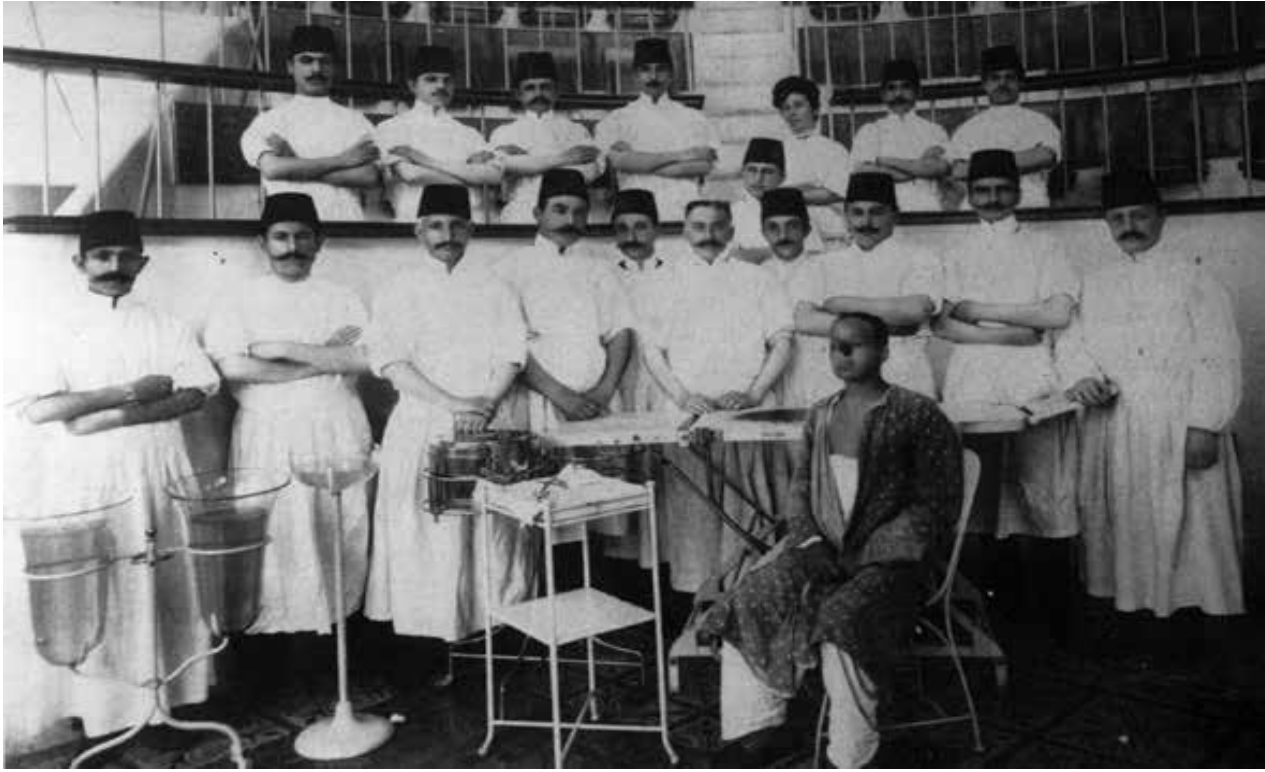
Cemil Topuzlu Pasha

In a woman he had operated for breast cancer, A.Axillaris got injured while cleaning her axillary cavity, and anastomosed the truncated artery. In America, Alexis Carel published the same technique five years later in 1902 and received the Nobel Prize for medicine.



Cemil Topuzlu Pasha

In another patient he has operated for hemorrhoids, he gives chloroform for anesthesia, patient syncope, after trying artificial respiration with no success due to breathing and cardiac arrest, he started the heart by opening the chest and doing open heart massage. He published these cases in Germany.



Cemil Pasha at Haydarpaşa Numune Hospital before a surgery in the surgery operating room.



Republic Period

- After the War of Independence, the health staff and infrastructure was inadequate during the first years of the new Turkey.
- Nevertheless, the first fifteen years of the republic was full of very important successes.
- There were hospitals with a capacity of 2,000 beds, 1,000 physicians and a few hundred medical personnel.
- In 2004, there were 1175 hospitals with 172,500 beds and around 4,500 general surgeons.



University Reform and Arrival of Foreign Professors

- On May 31, 1933, “Istanbul University’ was established in Istanbul with the University Reform.
- During Nazism, Turkey hosted Jewish academicians who were for the most part forced retired, terminated, dispatched or removed.
- In this period, very important scientists came to Turkey and offered their contribution to the development of surgery.



Foreign Doctors Visiting Istanbul University

| ncı Direktör | Enstitüler | |
|----------------------|----------------------------------|----------------|
| Dr. Aimé Mouchet | Anatomi | |
| Dr. Philips Schwartz | Patolojik Anatomi Enst. | 1952 ye kadar |
| Dr. S.Oberndorfer | Genel ve Deneysel Patololi Enst. | |
| Dr. H.Winterstein | Fizyoloji Enstitüsü | 1956 ya kadar |
| Dr. Julius Hirsch | Hijyen Enstitüsü | 1948 e kadar |
| Dr. Hugo Braun | Mikrobioloji Enst | 1950 ye kadar |
| Dr. Werner Lipschtiz | Biokimya Enst. | 1939 a kadar |
| Dr. Havrowitiz | | 1939'dan sonra |
| Dr. Fr. Dessauer | Fizik Tedavi Enst. | 1937 ye kadar |
| Dr. Max Sgalitzer | | 1939'dan sonra |
| Dr. S.Obendorfer | Kanser Araştırma Enst. | 1938 den sonra |
| Dr. K.Löventhal | Histoloji-Embryoloji | 1939 a kadar |
| Dr. Tibor Peterfi | Histoloji-Embryoloji Enst | 1939'dan sonra |
| Dr. Stary | A.Ü. Fen-Matematik | 1945 den sonra |



Foreign Doctors Visiting Istanbul University

| İrektörler | Klinik | |
|---------------------|---------------------------------------|-----------|
| rick Frank | İç hastalıkları Kliniği (Gureba) | 1957 de |
| odolf Nissen | I. Cerrahi Kliniği (Cerrahpaşa) | 1939'a ka |
| vilh-Liepmann | Kadın Hastalıkları Kliniği (Haseki) | 1939 da |
| gersheimer | Göz Hastalıkları Kliniği (Cerrahpaşa) | 1939'a ka |
| utin/Hellmann | Kulak-Burun-Boğaz Kliniği (Çapa) | 1943'e ka |
| essauer,M.Sgalitzer | Radyoloji Kliniği (Çapa) | 1938. ka |
| lfred Kantorowicz | Diş Hekimliği ve Eczacılık Okulu | 1950'ye |
| . Rosenthaler | Diş Hekimliği ve Eczacılık Okulu | 1955'e ka |
| odendorf | Diş Hekimliği ve Eczacılık Okulu | 1938'e ka |
| izt Neumark | Hukuk- İktisat Fakültesi | 1952'e ka |
| rnst Hirsch | İstanbul-Ankara Hukuk fakültesi | |
| . Bertalan Schwarzd | İstanbul Hukuk Fakültesi | 1953'e ka |



Prof.Dr. Rudolph Nissen



Dr. Nissen 1896-1981

Thank you

