
History of Contemporary Medicine in Iran

Development of Thoracic Surgery in Iran

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Introduction

Historically, Hippocrates (460 – 377 B.C.) was the first physician who described the evacuation of pus from pleural space. Then, Galen (129 – 199 A.D.) wrote on the same procedure.^{1,2} In Iran, some renowned physicians such as Ahwazi or Haly Abbas (10th century A.D.), Razi or Rhazes (865 – 925 A.D.), and Ibn-Sina or Avicenna (980 – 1037 A.D.) had also mentioned the chest diseases such as tuberculosis (TB), pneumonia, and empyema in their medical works. Rhazes had described precisely a method for removing the fluid from the pleural space.³⁻⁵

During the middle decades of the 20th century, thoracic surgery was separated and developed in Iran as a branch of general surgery. Today, thoracic operations in Iran are performed by surgeons who are trained in chest surgery and the quality of care is comparable to worldwide practice.

Presented here is a brief history of development of thoracic surgery in Iran. The paper has been written based on several interviews with pioneer chest surgeons and some related documents available at the Ministry of Health.

The first modern educational institute in Iran called Dar al-Founon was founded in 1851.⁶ The medical department of Dar al-Founon served later as a core for the establishment of School of

Medicine at Tehran University in 1934. It seems that the first modern surgical operation in Iran under ether anesthesia was performed by the Austrian teacher of Dar al-Founon, Dr. Jacob Eduard Polak (1818 – 1891) in 1852. The patient who underwent operation had bladder stone.⁷ After 1920s, various surgical procedures were gradually performed in Iran by both Iranian and European surgeons. For instance, Dr. Hossein Motamed had done operations such as laparotomy and cholecystectomy at Sina Hospital in Tehran. But thoracic surgery was not yet commonly performed.⁸

Under the auspices of “TB Charity Foundation” in 1948, the Abo-Hossein Hospital was established near the Bou-Ali Hospital in Tehran. The main objective was medical and surgical treatment of the patients who were diagnosed as having TB. Dr. Mohammad Ghazi-Tehrani (b. 1921) (Figure 1), the French-trained chest specialist started to work there. Later, Dr. Anwar Shakki (1913 – 2003) (Figure 2) was employed to work at Abo-Hossein Hospital and the surgery for TB and other lung diseases started in Iran.

Between 1920 and 1950, most of the thoracic operations were occasionally performed in the above-mentioned centers. But lack of closed circuit anesthesia, formal training on thoracic surgery, and



Figure 1. Dr. Mohammad Ghazi Tehrani (b. 1921)

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antibiotics were the main obstacles for chest operations. Later on, the late Professor Yahya Adl (1909 – 2003) who was a pioneer in modern surgery in Iran, attempted to perform some thoracic operations in 1940s. He taught these procedures to his assistants.

Worldwide, the thoracic surgery as an independent specialty in surgery evolved from general surgery only in the first decades of the 20th century. In Iran, modern surgery was developed between 1920 and 1950. During this period, the chest operations were limited to few academic and nonacademic centers and there was no formal training on thoracic surgery up to 1970s. In 1970s, thoracic surgery education was started at Tehran University and then in other medical centers.

In 1934, Dr. Masih Daneshvari (1899 – 1976), a chest physician trained in Europe, returned to Iran. He established the first “TB Sanitarium” (known as Shah-Abad Sanitarium) in 1937 (Figure 3).⁹

In 1943, an association for supporting the TB patients was started to work and Dr. M. Daneshvari was one of its members. Then, other centers for management of TB patients were founded in Tehran. They were Poosti Hospital in Shahr-e Rayy near Tehran and Emmamieh Hospital (later called Bou-Ali Hospital in 1945). The “Pulmonary Diseases Center” was established in 1952 by the support of WHO, Ministry of Health, and Red Lion and Sun Society (now Red Crescent Society). The Head of “Pulmonary Diseases Center” in Tehran was Dr. Khalil Falsafi.

After 1961, rigid bronchoscopy and biopsy were done by Dr. Mohammad-Ibrahim Dehghan at the Department of Surgery of Sina Hospital, which was headed by the late Professor Yahya Adl.

In 1961, the TB Sanitarium at the Army Hospital No. 505 was established by Dr. Mohammad Goran, the English-trained pulmonologist, and Dr. Javad Tabatabaee (b. 1930). In this



Figure 2. Dr. Anwar Shakki (1913 – 2003).



Figure 3. Dr. Masih Daneshvari (1899 – 1976).

way, a modern hospital with surgery and radiology departments as well as a laboratory was founded.

Prior to the establishment of the Army Hospital No. 505, thoracic surgery and operations on TB patients were performed at the Army Hospital No. 502 by Dr. Nezam-Addin Jazairi (1915 – 1992), Dr. Hassan Rahmani, and Dr. Abbas Fahid (b. 1927).

After foundation of Army Hospital No. 505, Dr. H. Rahmani moved to this hospital and joined Dr. Manouchehr Khojasteh.

Since 1960, thoracic operations gradually became popular. At that time, the closed circuit anesthesia was available. The efforts of Dr. Ghazi-Tehrani and Dr. Anwar Shakki made the surgeons familiar with thoracic surgery. The Bou-Ali Hospital was a training center for the surgeons in the field of chest surgery. Later, they continued their training in Europe or America and became chest surgeons. Dr. Manouchehr Rahbar (b. 1935), Dr. Abbas Fahid, Dr. Hassan Rahmani, and Dr. Abdollah Taaghrol were among those surgeons.

On the other hand, some cardiovascular and chest surgeons were employed by Tehran



Figure 4. Dr. Hamid Etebar.



Figure 5. Dr. Farrokh Saidi, (b. 1930).

University and other governmental centers. Among them, there was Dr. Hamid Etebar (Figure 4) who was the Head of the Department of Cardiovascular and Chest Surgery at former Pahlavi Hospital (now Imam Khomeini Hospital). He performed chest surgery and trained other surgeons. Other chest surgeons in Tehran were Dr. Amir Mansoor Roushan-Zamir (b. 1930), Dr. Davood Kazemi, Dr. Sarkis Sarkisian, and Dr. Jahangir Mir Ala (d. 1971).

Dr. Farrokh Saidi (b. 1930) is an American-trained cardiothoracic surgeon (Figure 5). He started his work at the Nemazee Hospital affiliated to Shiraz Medical School and performed thoracic surgery especially on pulmonary hydatid cysts. He has done extensive investigation on it.¹⁰ Later, he founded the fellowship course of thoracic surgery at Shaheed Modarress Hospital affiliated to Shaheed Beheshti University of Medical Sciences. At this center, many esophageal resections were performed by him and his residents for the treatment of cancer during 1984 – 2001. This was an important stimulus for development of thoracic surgery at Shaheed Beheshti University of Medical Sciences.

Dr. Siavash Sehat (b. 1934) started thoracic surgery since 1967 as a trained chest surgeon in Isfahan. Later, Dr. Abbas Tabatabaee joined him and chest surgery was developed in Isfahan.

Dr. Mohammad-Reza Nassizadeh, an American-trained chest surgeon came back to Iran in 1969. At that time, cardiac surgery had been started in Tabriz by Dr. Abbasgholi Daneshvar, but no thoracic surgeries were performed there. In the middle of 1970s a thoracic surgery department in Tabriz was established by Dr. Nassizadeh.

Up to 1983, there was no thoracic surgery department in Ahwaz, Khuzestan Province,

although thoracic surgeries were performed by expert general surgeons such as Dr. Manouchehr Dawaei, Dr. Kamkar Parsi, and Dr. Abdolaziz Eftekhari during 1960 – 1970. In 1971, Dr. Seyed-Mohammad-Reza Fakhraee (b. 1951), a graduate of Tehran Medical School started to work as the first thoracic surgeon in Ahwaz.

In Mashhad, Dr. Mohsen Azimi, the French-trained thoracic surgeon, founded the first thoracic surgery department at former Shahnaz-e Pahlavi Hospital (now Ghaem Hospital) in 1961; then, Dr. Ferydon Mehdavian and Dr. Bahman Motarjem (b. 1934) joined him.

In Kerman, the patients with TB and other pulmonary diseases were managed at Morsalin Hospital, founded in 1901 by the English Missionary. The former Pahlavi Hospital (now Shaheed Bahonar) established in 1956 and Dr. Habibollah Farokhi, a general surgeon, performed the first thoracotomy in 1962 in Kerman. Later, the first thoracic surgeon, Dr. Masoud Baghai (b. 1958) started his work in 1994 in Kerman.

Up to 1973 there was no independent thoracic surgery department at Tehran University and the patients were admitted at various wards.

In 1984, general thoracic surgery was approved by the Ministry of Health as a postgraduate subspecialty and so far more than 80 thoracic surgeons have been graduated in Iran.

References

- 1 Somers J, Faber LP. Historical Developments in the Management of Empyema. *Chest Surg Clin North Am.* 1996; **6**: 403 – 418.
- 2 Sigerist HE. *The Famous Physicians* [in Persian]. Tehran: Amir Kabir Publication; 1993: 65 – 74.
- 3 Zarifi Z. *A History of Tuberculosis*. Tehran: Abourihan Publication; 1995: 32.
- 4 Razi MZ. *Alhawi* [in Arabic]. Vol. 4. India: Heidar Abad Publication. 1936: 83, 103, 106.
- 5 Tadjdakhsh H. *History of Veterinary Medicine and Medicine in Iran* [in Persian]. Vol. 2. Tehran: Tehran University Publication. 1996: 292.
- 6 Elgood C. *A Medical History of Persia and the Eastern Caliphate* [in Persian]. 5th ed. Tehran: Amir Kabir Publication. 1992: 554.
- 7 Saadat-Lajvardi SI. *Famous Contemporary Iranian Physicians* [in Persian]. Tehran: House of Culture and Publication. 2003: 6.
- 8 Faghih A. *The Sina Hospital History*. Tehran: Timourzadeh and Tabib Publishers; 1998: 15.
- 9 Haghgou M. *TB and Cancer*. Tehran: Bou-Ali Publication; 1956: 32 – 33.
- 10 Saidi F. *Surgery of Hydatid Disease*. Philadelphia: W.B. Saunders Company; 1979.