In the old days, fractures and dislocations in Iran were managed by the local bonesetters who were not physicians, and learned this profession from their ancestors. After establishment of the Tehran Medical School in 1935, and departments of general surgery, the patients were gradually referred to the general surgeons in place of the bonesetters. The surgeons used to manage these fractures by closed reduction and plaster fixation.

In addition to management of fractures and dislocations the general surgeons used to perform other procedures, for example amputation of the limbs in malignant bone tumors and gangrenes, drainage of abscesses in the limbs, and application of plaster casts for treatment of the tuberculosis of the limbs and spine. There was no separate subject as orthopedics in the curriculum of medical schools. Fractures, dislocations, and infections of the bones and joints were thought by the general surgeons.

It appears that the first surgeon who managed fracture of the thigh (by open surgery), by inserting a Küntscher’s nail, was Professor Yahya Adl (1909 – 2003) at the Sina Hospital in Tehran around 1940. At that time, he had brought a few Küntscher’s nails from France, and used to manage fractures of the thigh with these nails [Küntscher’s nail, a long steel nail that is inserted down the long axis of a long bone, into the marrow, in order to fix a fracture (G. Küntscher, German orthopedic surgeon, 1902 – 1972)]. Because of lack of facilities at that time, after healing of fractures, the nails had to be removed from the thighs of patients, and again reinserted for other patients. His residents followed his technique and gradually this procedure became a standard technique in Iran.

After graduation of some of the Iranian orthopedic surgeons from Europe and North America, and upon their return to the country, gradually orthopedics became a known discipline in Iran. The first group of orthopedic surgeons who came to Iran from USA and Europe in 1950s were Dr. Khosro Samiei, Dr. Amir Kiya, Dr. Moshiri-Yazdi, Dr. Mohammad Masoud, and Dr. Shojaeddin Shaikholeslamzadeh.

It appears that the first orthopedic department which independently admitted the orthopedic patients was established at the No. 2 Hospital of the Social Security Organization in Old Karaj road; but in the university hospitals, the orthopedic patients were admitted to the departments of general surgery. The first orthopedic hospital in Iran, which was established in 1970, was Shafa Yahyaeiyan Hospital in Jaleh Street (now Shohada).

In the summer of 1964, Amir-Abbas Hoveyda, the then Prime Minister who, in a car accident had got his knees fractured, was admitted to the Pars Hospital, and was managed by Dr. Masoud and Dr. Shaikholeslamzadeh. They took advantage of this opportunity and requested the Prime Minister to establish a center for treatment of the handicapped patients (which were mostly due to the increased incidence of poliomyelitis at that time). With the Prime Minister’s order and persistent efforts of these physicians, the Iranian Society of Rehabilitation was established in 1967 and the responsibility of this society was given to Dr. Shaikholeslamzadeh. At that time, the handicapped patients, who were referred to this society, were managed by the orthopedic surgeons, whose number did not exceed 10 physicians.

Dr. Weis, an eminent Professor of Orthopedics and Rehabilitation from Poland, who was invited to Iran to see the condition of the handicapped patients, after observing the situation and condition...
of the patients, recommended that until a well-equipped center for treatment of these patients is established, the handicapped patients to be managed in one of the general hospitals in Iran. At that time, Shafa Yahyaeiyan Rehabilitation Hospital, which was recently reconstructed, was chosen for management of these patients. Fortunately, a few orthopedic graduates from England and the United States, who had returned home at that time, joined a few other orthopedic surgeons who were already staying in Iran, and started working together in this hospital. This well-equipped hospital with 12 orthopedic surgeons, 3 rehabilitation specialists, 5 anesthetists, and 2 general surgeons, who were all graduates from the well-known universities of Europe and North America, started to treat the handicapped patients in winter of 1969. I (the author) joined this hospital a few months after getting my degree from the United State in the early 1970. This hospital, from the very beginning, was a well-organized center with regular grand rounds, weekly conferences, journal clubs, and seminars. Regularly, one of the eminent professors of orthopedics from the United States used to be invited every month to attend the daily rounds, operation theater, clinics, and weekly conferences in order to guide the Iranian orthopedic surgeons.

After a few years, the Day-Care Rehabilitation Center and the Center for Constructing Artificial Limb were established in this hospital. Simultaneously, the School of Nursing and the School of Rehabilitation were also established. Considering the best facilities available in this hospital, as far as the orthopedic education and equipment were concerned, it was decided to start a postgraduate program in order to train the residents in orthopedics in this center. Consequently, I was appointed as chairman of the Education Program. In 1971, the center was ready to accept the orthopedic residents through an entrance examination, and with regard to the fame that the hospital had gained, many candidates enrolled for this examination, out of whom only 6 residents were selected.

Meanwhile, Sina and Reza Pahlavi (now Shohada) Hospitals, Shiraz University, and Melli (now Shaheed Beheshti) University announced their readiness to start their postgraduate training programs in orthopedics. Gradually, independent orthopedic departments were established in different medical schools. A separate orthopedic hospital, Farahnaz Hospital, affiliated to Melli University (now Shaheed Beheshti) was established in Sevvom-e-Esfand Street in Tehran, which was later on shifted to the American Hospital (now Akhtar Hospital).

The postgraduate orthopedic residents, after graduation, gradually started joining different universities and private practice. Since 1976, with cooperation of the orthopedic surgeons throughout the country in carrying out postgraduate training programs, the number of postgraduate orthopedic residents gradually increased. Some of these graduates joined other universities in different provinces and established independent orthopedic departments.

Currently, there are separate orthopedic departments in all medical schools throughout the country, and this subject is thought by the orthopedic surgeons. Undergraduate medical students have to undergo a one-month training course in orthopedics, and some of the interns also choose to undergo this training period.

After the Islamic Revolution in 1979, most of the orthopedic surgeons who were graduated from Europe and the United States left Iran; but the specialists who were trained in Iran, together with some other orthopedic surgeons who preferred to stay in the country and could organized and manage all previous orthopedic training programs in such a way that during the war between Iran and Iraq, these surgeons could manage very well the limbs and spinal injuries of patients whose number was very large.

In 1980s, some of these surgeons went to Europe and North America for subspecialization in the hand, spine, knee, shoulder, etc. surgeries, and upon their return, started to establish their respective subspecialized centers. Currently, all subspecialty training programs are carried out in different universities, and modern orthopedic surgeries are performed in Iran.

At present, orthopedic departments exist in almost all medical schools throughout the country, and orthopedics is taught by the qualified orthopedic surgeons. The postgraduate orthopedic training program for residents is now present in Tehran, Shaheed Beheshti, Iran, Isfahan, Shiraz, Mashhad, Ahwaz, and Kerman Universities of Medical Sciences. The residency period in orthopedic, at present, is 4 years. Selection of the residents for postgraduate course is carried out through a centralized examination which is conducted by the Ministry of Health, Treatment, and Medical Education.
The Board of Orthopedic Surgery was established in 1974 and at present has 13 members who are all professors and associated professor from different medical schools. The Board Examination is conducted once a year. The reference textbooks and journals are all those that are recommended in Europe and the United States. For undergraduate students, Persian textbooks are available. Although, there isn’t a independent research center for orthopedics in Iran, however the research programs are mostly carried out in the universities of medical sciences throughout the country. Overall, the diagnostic and therapeutic facilities, as far as the orthopedics in Iran is concerned, are satisfactory and almost all modern orthopedic procedures are performed in the country.

Although, there are orthopedic specialists in most of the big as well as small cities throughout the country, but unfortunately in the small cities the orthopedic surgeons, after completion of the compulsory period of service, immigrate to the big cities, especially Tehran, where the number of orthopedic surgeons is too high.

The Iranian Society of Orthopedics was established a few years before the Islamic Revolution, and although the number of the members was too small, but the monthly scientific conferences were held regularly; however, after the Islamic Revolution, due to the immigration of many of the orthopedic surgeons to foreign countries, the scientific sessions were cancelled. In this period, the weekly and monthly sessions as well as the annual conferences were held in the medical schools throughout the country.

The Iranian Society of Orthopedics was reestablished about 10 years back and currently the monthly scientific sessions and the annual conferences are held regularly. Since the last few years, the Iranian Society of Orthopedics publishes its own journal in Persian language.

References