

The Development of Orthopaedics and Traumatology in Turkey and Some Results

Elif ATICI*, Teoman ATICI**

* M.D., Uludag University, Faculty of Medicine, Department of Medical History and Deontology, Bursa-Turkey.
e-mail: elifatici@uludag.edu.tr

**M.D., Bursa S.S.K. Region Hospital, Orthopaedics and Traumatology, Bursa-Turkey.

Summary

The independent science field becoming of Orthopaedics and Traumatology in Turkey has been realised by the efforts and contribution of many respected physicians. In this essay, initially a brief statement about the development of orthopaedics and traumatology is going to be presented, and the main subject, that is the efforts of the physicians who have contributed in the development of Orthopaedics and Traumatology in Turkey are going to be mentioned.

Key Words; Orthopaedics and Traumatology, History of Medicine, Turkey.

Introduction

The later separation of orthopaedics and traumatology from general surgery like urology, gynecology, and alike fields and its becoming as an independent science field has been in different dates and ways in every country. Orthopaedics, dealing with the treatment of the irregularities in the locomotor system consisting of bones, joints, and muscles, and traumatology, dealing with the treatment of the injuries after trauma, have been serving as independent departments in the surgery clinics until recent years.

The most important part of traumatology science field consists of injuries in the skeleton system. Especially, because of the incremental increase of mass injuries caused by the II. World War, and muscle-skeleton traumas caused by the industrialisation, the importance of traumatology has been raised (1). Initial treatment efforts aiming at the orthopaedic illnesses seen in children, in time has begun to lose their importance because of the prophylaxy and early diagnosis of many illnesses, and with the progress in living conditions a considerable varia-

tion in the age of patients has been seen. With the development and increased use of prosthesis, the importance of illnesses related to the age has been raised in orthopaedics (2).

In general surgery, the development of thorax surgery that deals with lung and heart illnesses has caused an increase in workload of general surgeons, meanwhile, almost a total annihilation of polio as a result of vaccination in Europe, decrease in bone and joint tuberculosis by the help of the use of antibiotic and tuberculostatic medicines has caused a limitation in the action area of orthopaedics. These reasons led orthopaedics and traumatology to be joined under an independent science field name (3).

The independent science field becoming of Orthopaedics and Traumatology in Turkey has been realised by the efforts and contribution of many respected physicians. In this essay, initially a brief statement about the development of orthopaedics and traumatology is going to be presented, and the main subject, that is the efforts of the physicians who have contributed in the development of

Orthopaedics and Traumatology in Turkey are going to be mentioned.

A General Look to the Historical Development of Orthopaedics and Traumatology in the World

Although the distinction of the orthopaedic illnesses and their treatment is based on centuries ago, systematic operative treatment has been available since 200 years (4). Although there have been fast improvements in orthopaedics in the last 70-75 years in our world, studies related to orthopaedics spread far back to the crutches found in the excavation carried out in the entrance of Hirkouf Cupola belonging to B.C. 2830s. Again, because of polio documents determining that the Prince of Egypt belonging to the 18th dynasty had hip and foot deformation in leg shortness take us to the past (1). Karl Jaeger reports that as a result of investigation of human bones that belong to prehistoric times, in the 53.8 % of the events, perfectly coalesced bones have been observed, and states that this could be the result of appropriate treatments applied during those ages (5). The validity of most of the applications of Hypocrates who has first identified congenital dislocated hip, many applications related to traction systems, including hip and leg fractures, plaster cast and bandage are still accepted (1,6).

Orthopaedics, which is the oldest speciality branch of surgery, is formed of Greek words *orthos* (to put in order, to set up and to remove deformations) and *paidos* (child) that means regular child (1,7). And, according to R. K. Sayre (1876) and Saint-Germain (1882) this term is based on *padious* (education, training) and means faultless education, putting in order. In this matter, although J. M. Delpeche (1828) has used the term *Orthomorphia* (8), and F. Bridneteau *Orthosomatia*, these have not been adopted (9).

The term orthopaedics was first used by the French physician Nicolas Andry (1658-1742) in 1741 (1,2,8). From that day so far the meaning of the term has changed very impressively. Although initially it has been prepared as the title of a guide for parents

and identified as protective physician occupation, later it has developed as a new medicine branch (2).

In the early period when orthopaedics dealt only with innate anomalies, bone, joint tuberculosis and polio sequela, for the reason that these illnesses were seen more often in children, orthopaedics specialists had to deal with the other children's illnesses of surgery. And, the treatment of fractured, dislocated and injured parts was in the scope of general surgery. In time, orthopaedics specialists have begun to show close interest in traumatology, so that, "extremity traumatology" slowly has moved from general surgery into the scope of the orthopaedics clinics. In this matter, first England and United States of America, followed by Germany, France and Italy have taken the lead (10).

The inclusion of surgery as a course in medicine was first in 1745 by the special efforts of Dr. Gerhard von Swieten in University of Vienna. And, in 1785 traumatology courses started. In 1785 for the first time under Vienna Surgery Clinic semi-private "accident surgery station" (unfallstation) was founded. The first orthopaedics institute for disabled children was founded by Swiss Andre Venel (1740-1791) in 1780. He is accepted as the founder of surgery orthopaedics (5). The first orthopaedics hospital was founded in London in 1838 by John Little (1810-1894) who was the founder of orthopaedics surgery in England (8). In time, in orthopaedics special surgery setting up needs arose (1). In 1875-1900, orthopaedics clinics began to be opened at universities (5).

During the 19th century orthopaedics surgery was in the management of the private foundations as a sign of being wealthy. In the places named "Disabled Shelter Place", bone and joint infections, scoliosis and hereditary illnesses were aimed at being healed (2). Especially, with the increase in mass injuries caused by the I. World War, and incremental muscle-skeleton traumas caused by the industrialisation, it was seen for the first time that the term orthopaedic surgery has begun to be used (1). In the beginning works aiming at treating the orthopaedic illnesses seen in children, in time, have begun to loose their former importance because of

the prophylaxis and early diagnosis of many illnesses. And, with the positive progress in living conditions a considerable variation in the age of patients has occurred. With the development and increased use of prosthesis, the importance of illnesses related to the age has been raised in orthopaedics (2).

In Europe, the first independent university orthopaedics clinic and chair was found in Leipzig in 1923 by general surgeon Prof. Schede who was dealing with bone surgery. However, this clinic, like others, in the beginning has dealt only with deformations, not with traumatology (5). The previous orthopaedics clinics, on the other hand, have been establishments that attempted to treat the deformations only by the help of apparatus like corsets and alike, and private philanthropy foundations functioning as providing service without bed (3). Later, orthopaedics and traumatology in some universities has functioned as a section under general surgery, and in some universities as an independent clinic (5).

In general surgery, the development of thorax surgery that deals with lung and heart illnesses has caused an increase in workload of general surgeons, meanwhile, almost a total annihilation of polio as a result of vaccination in Europe, decrease in bone and joint tuberculosis by the help of the use of antibiotic and tuberculostatic medicines has caused a limitation in the action area of orthopaedics. These reasons form one of the reason for joining orthopaedics and traumatology under an independent science field name (3). In 1960s "Orthopaedics and Traumatology Clinics" was founded in Switzerland, Germany and France. In September the 26th in 1967, for the first time the "German Orthopaedics Association" changed its name as "Orthopaedics and Traumatology Association" (5). This situation has received the negative reaction of the general surgeons. The idea that in order for orthopaedics specialists to become successful in traumatology, they should first qualify in general surgery and then to change to orthopaedics and traumatology received a general acceptance (10).

The Development of Orthopaedics and Traumatology in Turkey

Like in all world, in Turkey as well the proceeding of surgery into a modern appearance has been in the 19th century. Until that period, surgery developed separately from physician profession, and for a long time surgeons worked as technical members under the control of physicians.

After the removal of Janisary profession (1826), in order to meet the physician and surgeon need of the modern army, for the first time in March the 14th, 1827 a *Medicine School* (Tıphane-i Amire), and a *Surgeon School* (Cerrahhane-i Amire) was founded. By this, in modern sense medicine education started. In the beginning, the education of surgeons was thought together with the medicine education. However, the urgent surgeons need of the army made it a must to train surgeons in a short time (11). While courses were given in Italian in the Medicine School, in the Surgeons School the education language was Turkish. Getting started in 1839, the education went on with the name "*Mekteb-i Tıbbiye-i Adliye-i Şahane*" and in French. The name "*Cerrahhane*" has been removed and a unique medicine school has been founded. In the same date a *Pharmacist Class* has been founded. However, the education programs and the duration of the surgeons and pharmacists was different from the one of the medicine students. During that time, duration of surgeon education was three years. Anatomy, small surgery, zoology, botanic, pharmacology, and short general pathology education was given. The first clinic was opened in 1842. In 1847 for the first time students were sent to Europe for education. After that date, the Military Medicine School was accepted as a faculty by Europe (12).

Civil Medicine School (Mekteb-i Tıbbiye-i Mülkiye) was founded in 1867. For the first time in the Civil Medicine School, and after 1870 in the Military Medicine School after the acceptance of the necessity to give the courses in Turkish and to take medical education to become a surgeon, the number of the individuals entering has decreased. This situation caused the number of surgeons that was already insufficient for the country's needs to decrease even

more. For this reason, in 1876 in Haydarpasha Military School *Small Surgeon School* was founded. Also, after 1879 with an exam available in medicine, bonesetters were granted "*Small Surgeon Certificate*". As a result of the acceptance of surgery as a speciality branch by the physicians, the surgeons class has spontaneously disappeared. The Civil Medicine School has taken the name faculty in 1908. In 1909 Civil and Military Medicine Schools were joined and took the name Medical Faculty (12-14).

First Developments in Orthopaedics

The inclusion of orthopaedics in medical education began in 1905 with Dr. Orhan Abdi (Kurtaran) (1878-1948). After graduating as a military physician in 1899, Dr. Orhan Abdi was sent to University of Bonn (Germany) by Sultan Abdulhamid in 1900. Between 1900-1902 he took orthopaedics education from Prof. Max Shede and learned the production of the orthopaedics equipments from Eschaum. Later, he became an assistant of Prof. Hoffa in Baviera and Prof. Sick in Hamburg. In 1905, by the order of the Padishah, he returned to İstanbul and began to work as a teacher at Military Medicine School "Orthopaedics and War Surgery". So, these two courses were given first by Dr. Orhan Abdi. After the consolidation of the Military and Civil Medicine Schools, he continued to give lectures as a teacher of "Orthopaedics and Big Surgery Operation". Again, in the same date, until a new clinic was opened, once in a week orthopaedics courses were added to Surgery. This course was given by Dr. Rıza Nur. Later, from time to time it continued as conferences and lectures with the name "Paediatric Surgery and Orthopaedics" (15).

With the foundation of the Medical Faculty it was seen that for the first time orthopaedics branch has become semi private. During those years, there were three Surgery Clinics in the management of Dr. Cemil Pasha, Dr. Kerim Sebati, and Dr. Orhan Abdi. The name of the III. Surgery Clinic was "Surgery and Orthopaedics". However, after the departure of Cemil Pasha in 1913, and the becoming of Dr. Orhan Abdi as the chairman of the II. Surgery Clinic, the name orthopaedics was removed (15).

In the late 1920s and early 1921s, Dr. De Lacombe began to give lectures with the name "Paediatric Surgery and Orthopaedics". As a substitution of Dr. De Lacombe who released from his duty in 1922, Dr. Mouchet (1886-1941) was appointed. During those years, it was seen that Dr. Akif Sakir Sakar (1888-1961), who has taken his place in the history of medicine as the person who established modern orthopaedics in Turkey, was appointed as an interpreter of Dr. Mouchet by Dr. Akil Muhtar (Ozden), the Dean of that time. Dr. Akif Sakir Sakar used to interpret Dr. Mouchet who was working on the orthopaedics patients once in a week in the Faculty Clinic in Cagaloglu, and his lectures that he was giving one day in a week in the auditorium in Haydarpasha. After becoming an Associate Professor in 1923, he began to give some lectures between the years 1923 and 1925. In 1925, after Dr. Mouchet changed to teach in "Surgery Operation and Techniques", he became the head of Paediatric Surgery and Orthopaedics Department, which did not have a clinic (5,15,16).

In 1927-1929, Dr. Akif Sakir Sakar worked in Hamburg with Prof. Sudeck on bone surgery (16). Seeing that fractures treatment and orthopaedics was not sufficient in Turkey, he showed effort to establish a modern orthopaedics clinic (10). In 1930 first Paediatric Surgery and Orthopaedics Clinic, which contained 30 beds, was founded. The first assistant of the clinic that was under the management of Dr. Akif Sakir Sakar was Dr. Iffet Naim Onur (5,15,16). So, he provided the first step to establish modern orthopaedics in Turkey. Additionally, seeing the significance of using visual materials in education, in the lectures and conferences for the first time Dr. Akif Sakir Sakar benefited from the photographs and operation images of the orthopaedics patients (15).

With the 31 May 1933 dated and 2552 numbered "University Reform Law", İstanbul Darulfunun was closed, and in 1 August 1933 İstanbul University was founded. The Medicine Faculty in Haydarpasha, institution and clinics were moved to the European side of İstanbul. So, Paediatric Surgery and Orthopaedics took its place in Sisli Etfal Hospital. In

the clinic Prof. Dr. Akif Sakir Sakar and Associate Prof. Dr. Munir Ahmet Sarpyener were working. During that period in the clinic that had 10 beds, the staff was not sufficient. The first book of the clinic was published by Dr. Akif Sakir Sakar in 1936 with the title "Lectures on Paediatric Surgery and Orthopaedics" (15).

Dr. Akif Sakir Sakar had three goals; the establishment of the clinic, Paediatric Surgery and Orthopaedics' becoming a specialisation branch, and separating Paediatric Surgery from Orthopaedics. His first step after the establishment of Paediatric Surgery and Orthopaedics Clinic was making it accepted as a specialisation branch. With this aim, he took the lead to enable the establishment of "Turkish Orthopaedics and Traumatology Surgery Society". The founders of the society, the centre of which was Istanbul Medicine Faculty Paediatric Surgery and Orthopaedics Clinic, founded in April the 27th 1939, were Akif Sakir Sakar, Ali Rıza, Faik Aldogan, Behzat Kamuran Yegen, Faruk Esen, İffet Naim Onur, Munir Ahmet Sarpyener, Nazım Arman, Osman Cevdet Cubukcu, Sadrettin Onaran, Zeki Zeren, Zuhtu and Rifat Hamdi Berkman.

Paediatric Surgery and Orthopaedics took its place among the 22 specialisation branches identified in the 2nd article of the 9 August 1947 dated and 6600 numbered "Regulation About the Documents of Medicine Specialisation". The assistantship duration was identified as 3 years in the 8th article of the regulation (15).

In May the 15th 1955 with the special efforts of Dr. Akif Sakir Sakar, the clinic moved to the new building in Capa that was formed of 5 floors, and attained a modern appearance. On the 2nd cellar floor of the clinic that had 100 beds, there were prosthesis atelier, auditorium, kitchen, laboratory, servant dormitory, laundry room, restoration atelier, morgue; on the 1st cellar floor there were polyclinic, quarantine, record rooms, roentgen, physical treatment and rehabilitation, burn treatment room, underwater and over water bath tanks; on the ground floor there were operation room, management division, rooms of the lecturers and assistants, library, archive, secretary

part, canteen; and on the 1st and 2nd floors there were rooms for the patient and nurses (15). So, Dr. Akif Sakir Sakar has founded the modern orthopaedics clinic that was his ideal.

In 1960, when having a look at the table it was seen that there were 3 Medicine Faculties in Turkey, among the Paediatric Surgery and Orthopaedics Clinics, in Istanbul Medicine Faculty paediatric surgery, in Ankara Medicine Faculty conservative orthopaedics treatment, and in Izmir Medicine Faculty only child orthopaedics were the areas that were dealt more often. According to the Specialisation Regulation and traditions traumatology was done in the General Surgery Clinics. Although there were 4 Bone and Joint Illnesses Hospitals in Istanbul (Baltalimani), Egirdir, Trabzon, and Urla, these were working as osteoarticular tuberculosis centres. Except orthopaedics specialist in Trabzon, Dr. Cevdet Alptekin, all specialists in these 4 hospitals were general surgeons. After the acceptance of Paediatric Surgery and Orthopaedics as a specialisation branch in 1947, the first assistants began to graduate in 1951. In 1960 there were only 10-12 specialists in all over the country (17).

First Developments in Traumatology

In Turkey first developments in modern traumatology started with the studies of Dr. Burhaneddin Toker (1890-1951) in 1921. During this period, most of the physicians were not interested in the treatment of the fractures and plaster preparation. Traumatology consisted of just simple chest and stomach injuries that were in the area of general surgery, and the treatments that were in the hands of most of the bonesetters. Against the important efforts of Dr. Burhaneddin Toker and Dr. Akif Sakir Sakar, it cannot be said that fracture treatments were done in the modern sense in the hospitals and clinics that were dealing with general surgery during that period (10).

After completing his medicine education in Turkey, Dr. Burhaneddin Toker went to Germany during the I. World War and worked together with the popular surgeons of that period Brauer and Küttner

for 7 years (1913-1920) in Berlin and Hamburg. During that period, because fractures-deformations and injuries were cured in the general surgery, he specialised in modern bone surgery. Returning to Turkey, he started to work as the Surgery Chief in Cerrahpasha Hospital, which was a municipality hospital. During those years, surgery treatment opportunities were insufficient. Fracture-deformation treatment was mostly done by the bonesetters. Most of the physicians were not interested in fracture treatment and plaster structure. Dr. Burhaneddin Toker, who was aware of the lacking points in this field, dealt especially with traumatology. In order to increase the number of the patients, he made friendships with the policemen who take injured people to the hospital, and assured that all injured around were taken to Cerrahpasha. In a short time, as a result of achieving important success Cerrahpasha Hospital started to work as an accident surgery centre. Attaining a mobile roentgen device from the municipality, by doing fractures reposition under radiology, they realised the first conservative modern fracture treatment in Turkey. Additionally, he had the Braun device, which was used in fractures, according to the schema and measures that he had brought from Germany, and used it after having it done by a smith by instructing him personally (3,5,10,18).

Dr. Burhaneddin Toker, who believed in the importance of publications in science, published "Journal of Turkish Surgery" as a surgery journal for the first time in 1927. Having the feeling that a surgery society is lacking, he took the lead in the foundation of "Turkish Surgery Society" in 1929 with the aim of improvement in the scientific works (18).

After the 1933 dated University Reform Law, the I. Surgery Clinic took its place in Cerrahpasha Hospital, where Dr. Burhaneddin Toker was the Chief. To the directorship of the hospital Prof. Rudolf Nissen was appointed. Dr. Burhaneddin Toker first as an Associate Professor was appointed to the assistantship of Nissen, and after 5 months became a Professor. After Hazım Bumin, the first Turkish surgeon from the new generation specialised and

became an Associate Professor in 1937, Prof. Nissen decided that for the assistantship Dr. Dervis Manizade (1903-2003) would be appropriate. During those years, Dervis Manizade was working in the Traumatology Service of the II. Surgery Clinic of University of Vienna, and was preparing for Associate Professorship. In 1937 he started to work as an assistant of Nissen and Toker. In the clinic for the first time archive system was established (1938). He prepared patient follow forms, and made sure that these forms were filled in completely and regularly for each patient. During those years, fracture-deformation treatment was done within general surgery and was discussed that they are the subjects of orthopaedics branch.

After the departure of Prof. Nissen, Prof. Dr. Burhaneddin Toker was appointed to the directorship of the I. Surgery Clinic of the Medicine Faculty in 1941. He opened the surgery building in 1943, the plan of which was set by Nissen, and the construction of which started in 1939. So, the clinic took a modern appearance (18).

Dr. Toker and Dr. Manizade, who very closely followed the developments in traumatology, did many successful attempts. The first Smith-Petersen nail was applied by Dr. Toker in 1941, and the first intrameduller nail in the tibia fracture by Dr. Manizade in 1950 (3,5).

In 1951, after the death of Dr. Burhaneddin Toker, Cerrahpaşa I. Surgery Clinic was divided into two. To the directorship of the first clinic Dr. Kazım İsmail Gurkan, to the third clinic Dr. Fahri Arel were appointed (15). In 1960, Dr. Dervis Manizade, who was appointed to the directorship of the III. Surgery Clinic, for the first time gathered the traumatologic instances in one place. He accepted Dr. Kemal Bayraktar and Dr. Macit Uzel as specialist assistants in the clinic, who showed interest in this field by collecting the equipments necessary for traumatology. Between 1926 and 1963, by joining the I. and II. Surgery Clinics, a 6-sectioned Surgery Clinic was founded. And one of these was Traumatology Service, which had 30 beds and that was appointed completely for bone and joint injuries, and

orthopaedics instances. To the chairmanship of this department Dr. Manizade, who assured its establishment, was appointed (10).

The Gathering of Orthopaedics and Traumatology and Their Development in Turkey

In 1959, Dr. Rıdvan Ege (1925-), who has taken Orthopaedics and Traumatology education in United States of America and returned to Turkey started to work in the General Surgery Clinic of Gulhane Military Medicine Hospital since Orthopaedics was not established yet. The lecturer of the I. Surgery Clinic Prof. Dr. Necmi Ayanoglu has said that if sufficient number of orthopaedics patients are treated he would help in the opening of the Orthopaedics Clinic. Dr. Rıdvan Ege, who believed that skeleton traumatology was not the field of General Surgery, that it was the speciality of orthopaedists who dealt with muscle and bone illnesses, aimed at including trauma into Orthopaedics and to separate Paediatric Surgery, which as a result of an old French custom was added to Orthopaedics. Beginning to work on this matter, Dr. Rıdvan Ege completed 262 orthopaedic operations (33 vertebra, 62 hip and long bone fractures, 11 hip hemiarthroplastis and cup arthroplastis, 36 child hip, foot, polio operations, 15 tumour and other attempts) in 1 year, and published these in Turkish and English. Again, in the same period he visited the 3 Medicine Faculties in Turkey that dealt with Orthopaedics (Istanbul, Ankara, Izmir), and 4 Bone and Joint Illnesses Hospitals, and started a communication with his colleagues. After presenting his works to Prof. Dr. Necmi Ayanoglu, he agreed on presenting a suggestion to the Professors Committee for the establishment of Orthopaedics and Paediatric Surgery Clinic. He also accepted Dr. Rıdvan Ege's suggestion for naming the clinic as Orthopaedics and Traumatology. So, the separation of Orthopaedics from Paediatric Surgery, and Traumatology from General Surgery, and joining them as an independent Orthopaedics and Traumatology Clinic was realised first in Gulhane Military Medicine Hospital in 1961 (19). In

September 1962, the first issue of *Acta Orthopaedica et Traumatologica Turcica* was published (20).

With 1963 Specialisation Regulation, after completing General Surgery education Orthopaedics, Paediatric Surgery, and Traumatology were accepted as high specialisation branches (5,15). In 1965, for the first time, in the Ministry of Health Ankara Numune Hospital Orthopaedics and Traumatology Clinic was founded and to the chairmanship of the clinic Dr. Orhan Aslanoglu was appointed. In 1966, the number of orthopaedists, including the assistants, reached the number of about 40. In the same year, the first National Orthopaedics and Traumatology Congress, organised by Dr. Rıdvan Ege, was held in May 25-28, 1966 in Egridir (19).

Regarding the increasing population of Istanbul, the superabundance of student number and the heavy load of patient care, with the decision of the University Senate after Istanbul Medicine Faculty, Cerrahpasha Medicine Faculty was founded within Istanbul University in October the 20th in 1967 (14,21). A board with the name Orthopaedics and Paediatric Surgery was established in Cerrahpasha Medicine Faculty linked to Surgery. On returning of Prof. Dr. Dervis Manizade, who had gone to Europe for scientific research has prepared a report and presented it to the Deanship with suggestion to change the name of the board as Orthopaedics and Traumatology. In 1969, he was appointed to the directorship of Orthopaedics and Paediatric Surgery board with the decision of the Professors Committee. The establishment of the Orthopaedics Board as a separate clinic was realised in 6 January 1971, and attaining the name of Orthopaedics and Traumatology in 22 July 1971 (5,10).

Another development realised in the same years was appointing orthopaedics specialists to the Forensic Medicine Association that was connected to the Ministry of Justice. On seeing the fact that reports concerning the decisions related to Orthopaedics and Traumatology were given by the physicians of other specialisation branches, and thus, causing medical and judicial mistakes, after 1969 orthopaedics spe-

cialist was appointed to the Forensic Medicine Association (20).

In 1970 for the first time, International Congress of Orthopaedics and Traumatology was held in Ankara. In the same year, in order to coordinate the works of Orthopaedics and Traumatology societies in the 3 big cities (Istanbul, Ankara, Izmir), and to serve Turkish physicians countrywide, with the lead of Prof. Dr. Rıdvan Ege "Turkish Orthopaedics and Traumatology Union Society" was founded. The society organises congresses once in every two years (17,19). So far, the last National Congress of Orthopaedics and Traumatology was the 18th, which was held in October 18-23, 2003 in Istanbul.

According to the Specialisation in Medicine Regulation published in 8 April, 1973 dated Official Newspaper, consequently the gathering of Orthopaedics and Traumatology under a single name, separating Paediatric Surgery from Orthopaedics and announcing it as an independent branch, giving the General Surgeons and Traumatologists, who have been dealing with Orthopaedics and Traumatology for 10 years, a specialisation authorisation for one time were decrees determined. So, totally 10 persons including Dr. Orhan Arslanoglu, who has been dealing with Orthopaedics and Traumatology, Dr. Dervis Manizade, who has been dealing with Traumatology for years were granted Orthopaedics and Traumatology Specialist certificate (17). With the foundation of High Education Association in 1981, the Orthopaedics and Traumatology Boards became departments.

The field of Orthopaedics and Traumatology has shown a great improvement in Turkey. The applications in Europe are realised successfully. Today, works are carried on in 9 sub branches: paediatric orthopaedics, trauma surgery, hand and microsurgery, elbow and shoulder surgery, sports injuries and arthroscopic surgery, arthroplastic surgery (artificial joint surgery), spinal surgery (spine surgery), foot and ankle surgery, skeleton system tumours (orthopaedic oncology).

Turkish Orthopaedics and Traumatology Union Association has established the Turkish Orthopaedics

and Traumatology Education Council in September 2001 in order to ensure that the Orthopaedics and Traumatology specialisation and after specialisation education reaches the highest level, to provide the standardisation of the education institutions and to apply certificated sufficiency (board) exams. In the Council there are 3 working groups. These are: Determination and Inspection of the Orthopaedics and Traumatology Specialisation Education Standards Group, and Determination of the Education Standards After Specialisation Group (Exam Education Commission) and the Group Working to Determine About the Promotion Requirements in the Education Institutions of Orthopaedics and Traumatology Field.

In order to evaluate the infrastructure and facilities of the units that provide Orthopaedics and Traumatology education in Turkey, to discuss the sufficiency of these supplies regarding a standard education and to provide a guide that may be used in the determination of the standards required for Orthopaedics and Traumatology specialisation education, a report that comprised 2001-2002 period was prepared. According to this report, today in 71 institutions Orthopaedics and Traumatology specialisation education is provided. 43 of these are within universities, 19 are within the Ministry of Health, 9 are within the Ministry of Labour and Social Security. Regarding the distribution of these according to the provinces, it may be seen that there are 18 education clinics in Istanbul, 15 in Ankara, 8 in Izmir, 2 in Bursa. In other provinces of ours there is one education clinic in each. From all of the 9 sub branches stated above only 9,9% percentage is within the institution. 59% within the university clinics, 32% within the clinics of the Ministry of Health and in the 7,8% of the Social Security Foundation (SSK) clinics there are sub branch application. It is seen that in the institutions there are 6 the less and 141 the most beds. According to the figures of 2001 there are 119 professors, 90 associate professors, 72 assistant professors, 36 head assistants, 104 special-ists, and 510 students having specialisation education (22).

Within the period of 2001-2002, totally 593 publications 193 of which in foreign language, and 908 presentations were completed (Universities: 300 Turkish, 169 foreign; Hospitals of the Ministry of health: 73 Turkish, 22 foreign; Social Security Foundation Hospitals: 27 Turkish, 8 foreign publications). It is seen that in the clinics of the Ministry of Health and Social Security Foundation there is more service load, and on the other hand, that especially regarding trauma the clinics of some universities are very insufficient.

As a result of this study it is seen that in Turkey the ongoing specialisation education has not reached the contemporary standards, and that there are differences between the institutions. For this reason, it is aimed at reaching the standards of the West by enhancing more unity among the institutions, preparing common education programs, removing the lacking things in the infrastructure and the facilities.

Conclusion

Orthopaedics, that began to its journey in Turkey in 1905 with Dr. Orhan Abdi Kurtaran by getting its place in the medicine education, beginning in the Military Medicine School, has gotten its first clinic in the Istanbul Medicine Faculty with the intensive efforts of Prof. Dr. Akif Sakir Sakar in 1931. Although it was accepted as a separate branch in 1947, until 1960 it has done common works under the names Orthopaedics and Paediatric Surgery Clinics, and has brought specialists. The development in Traumatology that began with Prof. Dr. Burhaneddin Toker, continued its improvement with a Traumatology Service within General Surgery for the first time in 1960 as a result of the works of Prof. Dr. Dervis Manizade. For the first time, with the efforts of Prof. Dr. Rıdvan Ege Orthopaedics was separated from Paediatric Surgery, and Traumatology was separated from General Surgery in Gulhane Military Medicine Academy in 1961 and took the name Orthopaedics and Traumatology.

Today, the works aiming at the improvement of education and service quality in the field of Orthopaedics and Traumatology, which has shown a great development in Turkey, are continuing.

REFERENCES

1. Ege R. Hip Surgery and Problems. (Kalça Cerrahisi ve Sorunları). Ankara: THK Press, 1994: 1-3.
2. Rauschmann MA., Thomann KD. 200 Years Orthopaedics. Images from the Past. Orthopade 2000; 29(12):1008.
3. Manizade D. 65 Years of Cerrahpasha Hospital. (65 Yıllık Cerrahpaşa Hastanesi). Istanbul, 1976:82.
4. Feldman PH., Wittenberg RH. History of the Treatment of Spinal Disease. Orthopade 2001; 30(10):776.
5. Manizade D. Orthopaedics and Traumatology. (Ortopedi ve Travmatoloji). In: Unat EK. ed. The History of Developments in Medical Branches in the World and Turkey after 1850. (Dünyada ve Türkiye’de 1850 Yılından Sonra Tıp Dallarındaki İlerlemelerin Tarihi). Istanbul: Gurtas Press, 1988:338-43.
6. Peltier LF. The Genuine Works of Hipokrates. Clinical Orthopaedics and Related Research 2002; 400:19.
7. O’Neill O. Some Limits of Informed Consent. J Med Ethics 2003; 29:4.
8. Sigerist C, Underwood EA. A Short Story of Medicine. Oxford: Clarendon Press. 1962: 658.
9. Ersoy N. Samples from the Thrapeutical Methods in Bursa Medical Folklore and Some Results From the Point of Modern Medicine. (Bursa Tıbbi Folklorunda Kırık-Çıkıklarla İlgili Tedavi Yöntemlerinden Örnekler ve Modern Tıp Bakımından Bazı Sonuçlar). Master Thesis (unpublished). Bursa, 1986: 9.
10. Manizade D. Bone and Joint Traumatology (Fractures and Dislocations). (Kemik ve Mafsal Traumatolojisi (Kırık ve Çıkıklar)). Vol. I. İstanbul: Publication of Cerrahpasha Medical Faculty. No:119. 1983: 1-21.
11. Altıntaş A. Medical Education in Ottomans. (Osmanlılarda Tıp Eğitimi (Tıbhane-i Amire Dönemi)). Symposium of Health Services in Ottoman Empire. Ankara. 2000: 89-95.
12. Sehsuvaroglu BN, Demirhan AE, Guressever GC. History of Turkish Medicine. (Türk Tıp Tarihi). Bursa: Tas Press, 1984: 185-8.
13. Kahya E, Erdemir AD. Medicine and Health Associations from Ottomans to Turkish Republic. (Osmanlıdan Cumhuriyete Tıp ve Sağlık Kurumları). Ankara: Publication of Turkish Religion Wakf. 2000: 267-70, 403.
14. Unat EK. From the Foundation of Istanbul Medical Faculty to the Cerrahpasha Medical Faculty. (İstanbul Darülfununu Tıp Fakültesi Kuruluşundan Cerrahpaşa Tıp Fakültesinin Kuruluşuna). Cerr. Tıp Fak. Derg. 1973; 4(4): 326-37.
15. Tanacan H. The History of Turkish Orthopaedics I-II. (Türk Ortopedisinin Tarihçesi I-II). Acta Orthop Traumatol Turc 1993; 27: 151-9, 227-38.

16. Frik F. The Founder of Orthopaedics in Turkey, Prof. Dr. Akif Sakir Sakar. (Türkiye'de Ortopedi Kurucusu Ord. Prof. Dr. Akif Şakir Şakar). *Dirim* 1958; 33(9-10): 227-8.
17. Ege R. Opening Speech. XVI. National Congress of Turkish Orthopaedics and Traumatology. Congress Proceedings Book. Publication of Turkish Orthopaedics and Traumatology Union Association. 1999:1-14.
18. Goksoy E. The Biography and Work of Prof. Dr. Burhaneddin Toker-On the Occasion of the 50th Anniversary of His Death- The New History of Medicine Studies 2001; 7: 387-409.
19. Ege R. Opening Speech. XV. National Congress of Turkish Orthopaedics and Traumatology. Congress Proceedings Book. Publication of Turkish Orthopaedics and Traumatology Union Association. 1997:1-28.
20. Tanacan H. The History of Turkish Orthopaedics III. (Türk Ortopedisinin Tarihçesi III). *Acta Orthop Traumatol Turc* 1994; 28: 1-7.
21. Vural S. Foundation Days of Cerrahpasha Medical Faculty. (Cerrahpaşa Tıp Fakültesinin Kuruluş Günleri). *Cerr. Tıp Fak. Derg.* 1989; 20(1): 127-37.
22. Inventory of Turkish Orthopaedics and Traumatology Associations. Report of Turkish Orthopaedics and Traumatology Education. 2002.