## **CHRONICLE**

УДК 001.32(477.54):617.3(09)"1805/2022"(045)

DOI: http://dx.doi.org/10.15674/0030-598720234133-137

## The history of the formation and activity of the Kharkov regional branch of the All-Ukrainian public organization «Ukrainian Association of orthopedic surgeons»

### V. A. Filipenko, S. Yu. Zolotarova, O. G. Shevchenko

Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine, Kharkiv

In 2022, Kharkiv regional branch of the All-Ukrainian public organization "Ukrainian Association of Orthopedic Traumatologists" celebrated its 95th anniversary.

Specialists had to win the right to independent existence as a separate specialty of orthopedics and traumatology with great difficulty. Despite the fact that 7 February 1927 is considered the official date from which the history of the Kharkiv Scientific Society of Traumatologists and Orthopedists begins, the story actually began much earlier - from the first years of the foundation of Kharkiv Medical Society (1861). Even then, among the most urgent and concerning problems, it singled out such issues as pain relief, treatment of injuries and diseases of the musculoskeletal system; brought them for discussion by the Society of Surgeons. The reports of that time regarding orthopedics and traumatology, which had great practical and theoretical significance, include reports by M. I. Anoshchenko "On a complex dislocation of the foot" (1876), V. F. Grube "On the treatment of spinal curvature" (1880), "On the issue of periosteal plastic repair" (1881) and "On the treatment of pes varus" (1895), as well as A.I. Krasnov's "On the issue of significance of the periosteal membrane during resections and amputations", etc. This usually contributed to the development of both the practice of orthopedics and the theoretical foundations of surgical treatment of injuries and diseases of the musculoskeletal system. But only in 1906, surgical association was formed and orthopedic specialists became part of it.

Changes in socio-economic conditions in the country, high rates of injury and disability due to injuries made it necessary to organize an orthopedic care center — the Medical and Mechanical Institute, which was opened in Kharkiv in 1907 (now — State Establishment Professor M. I. Sytenko Institute of Spine and Joint Pathology of the National Academy of Sciences of Ukraine). This played a huge role in the formation of the specialty and development of the orthopedic and trauma service in Kharkiv and the country. The organizers of the Institute and its employees are the initiators of many progressive initiatives and formations of the field as an independent branch of medical science and practice. The history of Kharkiv Society of Orthopedic Traumatologists (KSOT) is inextricably linked with it.

In 1926, there was a need to combine traumatology and orthopedics, which have the same theoretical anatomic-physiological foundations, examination methods and methodological approaches to treatment, hence the separation of an independent specialty "traumatology and orthopedics". Professor K. F. Wegner (Fig. 1) claimed that "traumatological methods of treatment do not exist, because all traumatology of the musculoskeletal system is built on methods based on orthopedic surgery, and therefore, to be a traumatologist, one must be an orthopedic surgeon."

The separation of orthopedics and traumatology into an independent scientific discipline, a separate specialty, and the growth of its role in the public health system became the basis for its separation, first into a subsection of the surgical section, and then in



**Fig. 1.** Photo of Professor K.F. Wegner, founder and first director of the Medical-Mechanical Institute (SE "Professor m. I. Sytenko Institute of Spine and Joint Pathology of the National Academy of Medical Sciences of Ukraine")

1927 into an independent section of Kharkiv Scientific Medical Society (KSMS), which was reorganized into Kharkiv Regional Research Center of Orthopedics and Traumatologists.

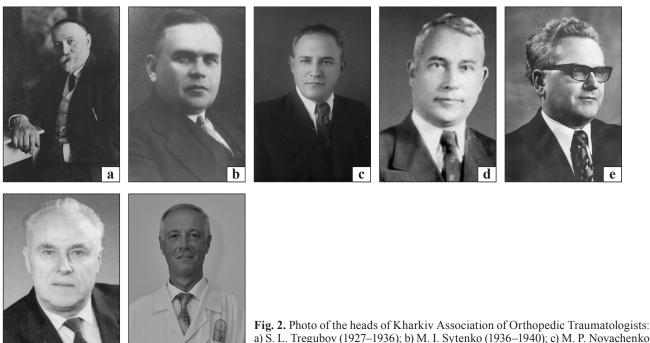
Professor Samuil Leontiyovych Tregubov was elected the first chairman of the Kharkiv Regional Scientific Society of Orthopedic Traumatologists. From 1936 to 1940, Professor M. I. Sytenko. Since 1940, Professor Mykola Petrovych Novachenko, 1966 — Professor Oleksandr Pavlovich Kotov, 1971 — Academician of the NAMNU, Professor Oleksiy Oleksandrovich Korzh. From 1980 to 2006, for more than a quarter of a century, Kharkiv Society of Orthopedic Traumatologists (KSOT) was invariably headed by Professor Mykola Stepanovych Bondarenko. In January 2006, Professor Volodymyr Akimovich Filipenko (Fig. 2) was elected the head of the Society.

KSOT has always kept its hand on the pulse of the development of the specialty, solving scientific, practical, but, above all, organizational issues in the broadest sense of the word. As early as at the first meetings of the society, questions of a scientific and organizational nature were considered, regarding the problems of traumatism and its prevention, as well as dispensation of orthopedic patients

In 1926–1927 pp. at the meetings of the unit, the reports of M. I. Sytenko "On dispensation in the field of traumatology", S. L. Turner "On dispensation of orthopedic patients", V. O. Marks "On the prevalence of orthopedic diseases among the rural population", O. P. Kotov "Disability in Ukraine and the prospects of prosthetic repair" and others were discussed. In addition, great attention was paid to the biomechanics of the locomotor system (L. P. Nikolaev, G. S. Kozyrev, O. V. Nedrygailova); the prospects of prosthetics and new types of structures were discussed (O.P. Kotov, A.E. Zukerman); in a number of thorough reports, the methodology and results of treatment of congenital dislocation of the hip, clubfoot, traumatic injuries and their consequences, bone and joint tuberculosis were described. Later, these methods were published and widely implemented in health care practice.

The journal "Orthopaedics and Traumatology", which began to be published in Kharkiv in May 1927 at the initiative of the leadership of the Ukrainian Institute of Orthopedics and Traumatology (hereinafter referred to as the Institute), with the active participation of KSOT, played a special role in the popularization and introduction of new methods of examination and treatment of orthopedic and traumatological patients, and in raising the level of education of doctors.

Professor M. I. Sytenko was the organizer and first editor of the journal. The publication of a specialized periodical in orthopedics and traumatology was a great success. The journal soon gathered leading specialists and became a mouthpiece of orthopedic opinion in the country. Due to this, information about the achievements of leading domestic scientists in this field was popularized and made available to



**Fig. 2.** Photo of the heads of Kharkiv Association of Orthopedic Traumatologists: a) S. L. Tregubov (1927–1936); b) M. I. Sytenko (1936–1940); c) M. P. Novachenko (1940–1966); d) O. P. Kotov (1966–1971); e) O. O. Korzh (1971–1979); f) M. S. Bondarenko (1980–2006); g) V. A. Filipenko (2006 and today)

a wide range of specialists not only in our country; the authority of domestic orthopedics and traumatology in the eyes of the entire medical community grew significantly (Fig. 3).

In September 1930, the need for coordination of scientific research, exchange of experience, and wider implementation of the achievements of domestic orthopedics and traumatology in practice arose. M. I. Sytenko, organized the first meeting of orthopedists of Ukraine, at which the main issue was the convening of the 1st congress of specialized specialists; it was held in Kharkiv in January 1936 under the chairmanship of Prof. M. I. Sytenko. By the decision of the congress, the Ukrainian Scientific and Medical Society of Orthopedists-Traumatologists was organized, the head of the Board of which unanimously elected Prof. M. I. Sytenko. Of the 15 members of the Board, there were 8 scientists of Kharkiv branch of orthopedic traumatologists - Prof. M. I. Sytenko (head), Prof. S. L. Tregubov (deputy chairman of the board), F. E. Elyashberg (secretary), Associate Prof. M. P. Novachenko, B. K. Prykhodko, N. B. Shmariyovych, V. I. Zukerman, O. P. Kotov.

Attaching great importance to the clear organization of specialized care, which ensures effective treatment of patients, KSOT, together with the Institute, carried out a great deal of work on the organization and creation of a network of orthopedic and traumatological institutions and an effective system of specialized care for the population. For the scientific justification and correct solution of this problem, a study was conducted to assess the prevalence and structure of diseases in certain regions of the country: among children of the rural population in the Dykanivsky district of Poltava region (expedition of Institute employees in 1929) and in the industrial regions of Donbass and Kryvorizhye (three expeditions in 1930-1931). The results of the survey of the prevalence of orthopedic diseases were discussed in detail at the meetings of the unit. At the same time, a network of scientific reference points was created on the Left



**Fig. 3.** The first issue of the country's first specialized journal on orthopedics and traumatology

Bank of Ukraine. For the first time in the country, special courses for the training of plaster technicians were opened, and examination of newborns in maternity hospitals by orthopedic specialists began. The clear system of organizing orthopedic care developed by Kharkiv orthopedic traumatologists has gained general recognition in Ukraine and has become a model for other regions.

In 1939, during the Second Congress of Orthopedic Traumatologists of Ukraine in Kyiv, Professor M. I. Sytenko emphasized that domestic orthopedics has turned from a specialty that studied and treated deformities in children to a full-fledged orthopedic surgery, surgery of the motor system, thanks to the efforts of the members of KSOT.

By the early 1940s, in addition to a large number of studies on current topics published in journals and various anthologies, members of the group published a number of monographs and manuals, many of which became classics of orthopedics and traumatology and are still table books for specialists in this field. These are "Fractures and their treatment" (K.F. Wegner), "Methodology of conservative treatment of childhood diseases" (M.G. Zelenin), "Basics of orthopedics" (S.L. Tregubov, A.V. Taft), "Constant extension" (M. P. Novachenko, F. E. Elyashberg), "Examination of patients with injuries and diseases of the organs of support and movement" (V. O. Marks), "Plaster technique" (M. A. Pohorelskyi), "Functional treatment of injuries and diseases of the musculoskeletal system" (A. K. Prykhodko) and others.

Due to the beginning of the Second World War, the work of the unit was suspended. But even in these difficult years, its members did not stop their public, scientific, medical and organizational activities. They fulfilled their medical duty, solved the primary task of providing qualified assistance to the wounded. Leading Kharkiv orthopedists-traumatologists, members of KSOT, were appointed to the positions of chief surgeons of military districts, armies, and hospitals: M. P. Novachenko, A. V. Taft, B. I. Shkurov, Y. A. Freifeld, V. O. Marks and many others. A number of Kharkiv scientists — F. E. Elyashberg, A. K. Prykhodko, V. O. Marks, and other organizers and participants of interhospital conferences gave reports on the treatment of gunshot wounds, prosthetic repair and treatment of complications on the stump, restorative treatment during injuries of the locomotor system, bone and joint tuberculosis and other topical problems of wartime traumatology and orthopedics.

After the liberation of Kharkiv from the fascists, KSOT was one of the first to resume its work. In 1944, 12 meetings of the society were held, all their efforts in the first post-war years were aimed at restoring orthopedic, traumatological and prosthetic institutions in Kharkiv region and in Ukraine, in particular, special attention was paid to the industrial regions of Donbas. Among the priority scientific tasks that arose in those years were the following: development of issues of treatment of war invalids, bone repair, regeneration of bone tissue, plastic reconstructive surgery, biomechanics of the musculoskeletal system, treatment of patients after amputation of limbs, prosthetic repair, etc.

Members of KSOT take an active part in the preparation and organization of the 3<sup>rd</sup> Congress of Orthopedic Traumatologists of Ukraine, which took place in May 1947 in Kyiv under the chairmanship of Professor M. P. Novachenko.

On the initiative of KSOT, the specialized journal "Orthopaedics, Traumatology and Prosthetics" resumed its work, the editor-in-chief of which was Professor M. P. Novachenko, head of the branch and director of the Institute. The journal is still published and popular among specialists. It is published under the leadership of outstanding orthopedists-traumatologists, students of the Sytenko school, members of the KSOT, their names are known not only in Ukraine, but also outside of Ukraine: 1966–2005 — chief editor of Academician O. O. Korzh, since 2005 — Professor M. O. Korzh.

One of the most important tasks of KSOT members is to improve the quality of training of specialist doctors, to teach advanced and most effective methods of treating orthopedic and trauma patients, to improve the theoretical training and personal skill of a surgeon of this specialization.

In the late 1950s, with the aim of sharing the experience of treating patients and improving the qualifications of orthopedists-traumatologists, members of the KSOT began to organize Specialist Days, which were initiated by Professor M. P. Novachenko. Since the 90s, there has been a tradition of holding monothematic meetings of the society, combined with the Day of the Traumatologist, which continues today. The problems of rehabilitation of patients and disabled people in the case of limb amputation defects are being actively studied.

A decisive factor during the medical and social-labor rehabilitation of patients who have had a limb amputated is early prosthetic repair. For the first time in the country, members of KSOT, Academician O. O. Korzh and Doctor of Medical Sciences V. A. Berdnikov developed a method and technology of prosthetic repair for patients on the operating table (express prosthetic repair) after amputations or re-amputations of the lower limbs in adults, and Candidate of Medical Sciences O. K. Popsuishapka, in children. On the initiative of Academician O. O. Korzh, for the first time in Ukraine, 7 regional traumatological medical-labor expert boards were organized, one of which operated on the basis of Professor M. I. Sytenko Institute.

Academician O. O. Korzh and Professor M. I. Khvysyuk actively researched the problem of traumatic injuries and diseases of the spine and large joints — Kharkiv specialists are among the best in the treatment of this disorder. Under the leadership of Doctor of Medical Sciences M. I. Kulish specialists developed new methods of radical conservative and restorative operations in tumors or fracture-dislocations of the hip joint, with aseptic necrosis of the femoral head, severe forms of arthrosis, and created a new design of the endoprosthesis of the hip joint. Under the leadership of Academician O. O. Korzh researchers studied the features of structural reconstruction of bone tissue under the conditions of implantation of artificial materials, used as bone substitutes in reconstructive and restorative operations. The first developments regarding the study of corundum ceramics - dense and porous samples, sapphires, layered carbon were made with participation of H. Kh. Gruntovskyi, I. B. Timchenko, O. A. Tyazhelov. Experimental and theoretical research conducted by the members of KSOT became the basis for clinical approval and wide implementation of new types of biomaterials for reconstructive and restorative operations in practical health care.

Throughout its history, KSOT maintains close contact with orthopedic traumatologists from other regions of Ukraine, organizes and conducts interregional conferences, invites specialists from other regions to its meetings, provides practical consultation and medical assistance to patients at the invitation of colleagues. Joint meetings are held with other societies of Kharkiv Medical Society - neurosurgeons, neurologists, surgeons, radiologists, etc. Society members take an active part in international conferences abroad. Over the years of its activity, KSOT has grown into one of the largest and most authoritative specialized societies in Ukraine, both in terms of quantity and professionalism. So, in 1926, the number of members of the sub-section of orthopedic traumatologists was 30, 58 in 1944, 234 in 1991, 412 doctors in 2016, and today 195 specialists take an active part in the work.

The changes in socio-economic and social conditions in the country that took place after 1991 also affected the organization of the activities of KSOT. In 2007, in accordance with the decision of the general meeting, work was carried out on renaming KSOT as Kharkiv regional branch of the All-Ukrainian public organization "Ukrainian Association of Orthopedists-Traumatologists" (KRB AUPO "UAOT") and its state registration as a legal entity. Therefore, since January 2008, the association began to carry out full-fledged independent activities as a public organization and a legal entity, and since 12 March 2008, the Association of Public Health Organizations "UAOT" became a collective member of Kharkiv Medical Society. Changes in the organizational foundations of society's activities did not affect its scientific and creative potential.

Over the past 20 years, more than 1,500 reports have been heard at the meetings of the branch, regarding the most diverse problems of the branch. More than 3,000 scientific papers, 40 monographs and textbooks were published, 250 applications for inventions were issued, and 200 copyright certificates and patents were obtained. Today, the center's main areas of scientific and practical activity include: treatment of spinal diseases and injuries; orthopedic arthrology and joint endoprosthesis; orthopedic oncology; diagnosis, prevention and treatment of osteoporosis of various etiologies; prevention of bone-purulent complications in case of bone fractures; providing assistance to patients with polytrauma; problems of regeneration of bone tissue and cartilage due to the influence of biologically active substances and various physical factors; new technological solutions in orthotics and prosthetics due to injuries and diseases of the musculoskeletal system; the issue of using new biomaterials in orthopedics and traumatology; modern aspects of providing prosthetic and orthopedic care to the population; improvement and development of the organization of specialized orthopedic and trauma care for the population of the regions of Ukraine. Prominent orthopedic traumatologist scientists of the Kharkiv school were awarded State prizes - to Academician O. O. Korzh (for the development and implementation in practice of the technique of transplantation of large bone allografts, 1977), Professor M. I. Kulish and Professor B. I. Simenach (for the development of operative interventions on joints, 1996), Professors M. O. Korzh, V. O. Radchenko, H. Kh. Gruntovsky, A. I. Prodan; Candidate of Medical Sciences A. O. Mezentsev (for the development and



Fig. 4. Participants of the scientific and practical conference "Combat trauma" 16 February 2023, Kharkiv

implementation of new technologies for spine diseases in 2008), Professor A. G. Istomin (2010).

The full-scale military invasion of Ukraine in February 2022 radically changed the life of the entire country. In a short time, medicine completely reoriented itself to the military situation. And first of all, it concerns orthopedic and traumatological institutions. Heavy gunshot, mine-explosive and other combat-related injuries became dominant. Our colleagues, orthopedic traumatologists, faced completely new challenges. And they received them with honor, each in his place, starting from the battlefield, front-line hospitals, specialized departments of military and civilian medical institutions (Fig. 4).

Kharkiv Oblast, the hero city of Kharkiv, was one of the first to take on the enemy onslaught. The management of the military hospital together with the doctors and scientists of our institution were able to establish a clear system of quality care for the wounded in these extreme conditions.

These events definitely had an impact on the work of UAOT. However, as early as in December 2022, the center resumed its activities. Meetings are held in a blended format (online/offline) and are devoted to the most urgent issues of assistance to victims of hostilities. Leading specialists not only of Ukraine, but also of the states that support our country are involved in the reports. All this helps our specialists to treat the consequences of various injuries of the musculoskeletal system.

The article has been sent to the editors 15.11.2023

# THE HISTORY OF THE FORMATION AND ACTIVITY OF THE KHARKOV REGIONAL BRANCH OF THE ALL-UKRAINIAN PUBLIC ORGANIZATION «UKRAINIAN ASSOCIATION OF ORTHOPEDIC SURGEONS»

#### V. A. Filipenko, S. Yu. Zolotarova, O. G. Shevchenko

Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine, Kharkiv

- Volodymyr Filipenko, MD, Prof. in Orthopaedics and Traumatology: filippenko1957@gmail.com
- Svitlana Zolotarova: lana89nk@gmail.com
- Olena Shevchenko: elena.shevch59@gmail.com