Development of Hand Surgery in Ukraine

There was a need to create a new approaches to treat hand injuries due to rapid development of metallurgical, mining and engineer industry, which were accompanied by a high level of injuries with a significant amount of disability in the second half of 20th century, in Donetsk, Dnipropetrovsk and Kharkiv regions.

Department of maxillofacial surgery in Donetsk was re-profiled in a 40-bed traumatological department to assist patients with hand diseases and injuries and their consequences under the direction of R. Liba in 1970. Under direction of M. Andruson “Department of skin and plastic surgery” on the basis of SI “Sytenko Institute of spine and joint pathology of NAMS of Ukraine” was established in the beginning of 1972 in Kharkiv, and in 1974 on the basis of the 2nd city hospital in Dnepropetrovsk, 20 beds were allocated for patients with hand injury at the initiative of U. Kolontay.

New stage in the development of hand surgery and microsurgery in Ukraine began in 80’s: department of “Microsurgery, and reconstructive surgery of upper extremity” under the direction of I. Antonyuk was opened on the basis of the SI “Institute of Traumatology and Orthopedics of NAMS of Ukraine” in Kyiv in 1982.
First surgeons of department of “Microsurgery, and reconstructive surgery of upper extremity”. Left to right: V.Leskov, O.Movchan, A.Liabakh, S.Strafun, V.Gayovich, I.Kurinnyi

Same year in Dnipropetrovsk under the direction of A. Gulay and U. Kolontay on the basis of the 2nd city hospital, in 1985 in Kharkov under the direction of O. Chuchelin on the basis of the 3rd city hospital, and in 1987 in Donetsk under the guidance O. Borzykh on the basis of the regional traumatological hospital - interregional departments of surgery of the hand was opened.

O. Borzykh
During the period of 80-90’s, hand surgeons from all regions of Ukraine took care of the following issues: surgery and rehabilitation of fingers flexor and extensor tendons; upper extremity peripheral nerves and brachial plexus surgery; treatment and prevention of hand ischemic contracture; creation of the system of reconstructive surgical treatment in case of neglected brachial plexus and peripheral nerves injuries; development of a system of reconstructive surgical treatment in case of polystructural upper extremity trauma, including gunshot wounds; surgical treatment of Dupuytrens contracture; treatment of tendinopathy; reconstructive interventions for upper extremity fractures and their consequences; treatment of congenital pathology of the hand; development of external fixation devices for hand fractures treatment; replantation of the upper extremity segments.

In October 1985, on the initiative of the Dnipropetrovsk Center for surgery of the hand - for the first time in Ukraine monothematical conference “Treatment of hand injuries and their consequences” was held. In 1992, first Ukrainian with international participation scientific and practical conference on surgery of the hand “Hand injury: primary care and rehabilitation of patients” was held, which was attended by 137 delegates from Ukraine, Russia, and Belarus.

The “Republican center for surgery of the hand” was established on the basis of the department of “Microsurgery, and reconstructive surgery of upper extremity” of the SI “Institute of Traumatology and Orthopedics of NAMS of Ukraine” in 1988. Employees of this center shared
their experience with surgeons from other institutions. Thus, on the basis of trauma department of 3rd city hospital the “Kyiv city center for surgery of the hand” was opened, and the cooperation with other hand surgery departments was established with the assistance of the republican center's specialists.

Development of hand surgery in the western regions of Ukraine began in the 90’s. In Lviv, on the initiative of M. Toropovsky, on the basis of the 8th city hospital, a center of “Microsurgery and hand surgery” was created.

In Zakarpattia (Uzhhorod), since 1997, on the initiative of V. Gayovich and A. Pogorilyak microsurgery and hand surgery service was established, which are now under the care of the combustiology department. In Volyn (Lutsk), hand surgery service is transmitted to the initiative group, also working in the city burn center. In Ivano-Frankivsk, Chernivtsi, Ternopil and Rivne - initiative groups in the field of hand surgery service have been formed in the structure of orthopedic and trauma departments.

In the 2nd millennium, specialists from the department of “Microsurgery, and reconstructive surgery of upper extremity” (Kyiv) regularly went to the regional and district centers in order to teach and conducting of demonstrative surgical interventions, and invited orthopedic and trauma surgeons to study hand surgery. Program of monthly training on tendon surgery and some aspects
of surgery of the hand was implemented at that time. Dozens of orthopedic and trauma surgeons were carried specialization in hand surgery according to that programs.

2005 marked by the opening of another center for surgery of the hand in Luhansk on the initiative of V. Ivchenko and under the guidance of V. Golovchenko, whose surgeons owned microsurgical equipment and provided highly skilled assistance to the population of this region.

“Ukrainian hand surgery society” was created in 2012, and led by prof. S. Strafun, as a result of collaboration of all hand surgery centers, and in 2014 UHSS was accepted into the FESSH.

Until 2014 in Donetsk and Luhansk had full-profile microsurgery and hand surgery centers, which provided emergency round-the-clock assistance to all people of this and other regions of Ukraine with injuries and diseases of the hand, polystructural extremity trauma, and tissue defects.

Since the beginning of the military conflict at the east of Ukraine, hand surgery department in Luhansk has been destroyed and ransacked, it does not function, and the department in Donetsk has lost its high level of qualification, since all leading specialists have moved from occupied territory and work in various centers of Ukraine.
At present, our experts are regular participants in the annual FESSH Congress, and young specialists participated in the FESSH Academy. Due to close scientific and practical communication with European colleagues, leading specialists in microsurgery and reconstructive surgery of the upper extremity are always in the trend of the world's events in the hand surgery field.

Several training sessions on tendons and microsurgery have been conducted in Ukraine, with the participation of internationally renowned experts as Hanno Millesi. A regular hands-on practice seminar “Hand surgery course” was started in 2018, where about a hundred specialists were able to improve their skills in tendon suture, bone osteosynthesis and use of regenerative technologies in the field of surgery of the hand.

“Ukrainian hand surgery society” uses different methods in order to teach trauma and orthopedic surgeons the surgery of the hand, such as: training courses and seminars, webinars, lectures, presentations in various scientific and scientific-practical forums, publications in professional and scientific-popular journals, publication of methodological materials and monographs.

Further development we see in the development and implementation of modern technologies in hand surgery, closer integration with FESSH and directly with the European hand surgery societies. It is important to conduct a variety of training programs with the support of FESSH, both in Ukraine and in other European countries.