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LEADING ROLE OF SCIENTISTS-SURGEONS OF THE DEPARTMENT OF GENERAL SURGERY DSU IN THE FORMATION AND DEVELOPMENT OF COMBUSTIOLOGY IN DNIPROPETROVSK REGION

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For 100 years of its existence, the Department of General Surgery has made a significant contribution to the development of such areas of surgery, training and the formation of relevant services in the Dnepropetrovsk region, such as urology, combustiology, emergency surgery of the abdominal cavity. Its specialists had a wide range of training and successfully performed surgical interventions in the field of neurosurgery, vascular surgery, urology, traumatology, thoracic and abdominal organs, developed issues of analgesia during surgery. Research of the Department of Surgical Diseases was not limited to these areas. They went beyond research initiative topics. They covered almost all areas of surgery and related disciplines, including traumatology, anesthesiology, oncology, urology and more.

The contribution of the Department of General Surgery to the development of the surgical service of our region is quite significant. But there are two areas where she was the founder and did a lot in their birth, training and the formation of relevant services. These areas are urology and combustiology.

Висока частота опікового травматизму у промислово-розвинутому регіоні та її збільшення, пов`язане із збільшенням обсягів металургійного і машинобудівного виробництва у 60-70 роки, тривалість і складність лікування цієї категорії хворих визначили необхідність відкриття такого центру, де можна було б сконцентрувати хворих, кваліфікованих спеціалістів і наукові кадри. У квітні 1962 року на базі міської клінічної лікарні №2 м. Дніпропетровська, у складі клініки загальної хірургії були розгорнуті опікові ліжка. Ініціатором створення опікового відділення був завідувач кафедри загальної хірургії ДМІ (1961-1963 рр.) кандидат медичних наук, доцент Рудольф Карлович Крикент.

Associate Professor R.K. Crickent was a brilliant surgeon of a wide range of activities, who, along with general surgical interventions, performed excellently in neurosurgical, thoracic, urological, vascular and reconstructive plastic surgery. At that time, doctors worked in the department: participants of the Second World War M.D. Brick and L.K. Bondarenko. The department had 3 wards with 10 beds each. Traditional dressing methods of treatment of the burnt were used. However, the treatment of patients with common burns often ended in death. Victims who had deep lesions of more than 25-35% of the body surface died, usually at the stage of burn shock, which determined the main topic of scientific work of the clinic at that time.

In March 1964, by order of the regional health department, a 30-bed cremation ward was officially opened, headed by L.K. Bondarenko. In 1965, the Department of General Surgery was headed by Doctor of Medical Sciences, Professor LN Kovalenko. Under her leadership, the cremation department began to actively conduct research and introduce new methods of treating patients. The first completed research was performed by assistant AA Aslanyan "Microflora of burn wounds and some immunological shifts in burnt patients" and clinical resident IV Pepper "Effect of thermal injury on kidney function". In 1972, the department was expanded to 60 beds and received the status of the regional, which also performed the coordinating functions of the Center. Head of the department FF Ivzhenko, residents LM worked in the hospital. Groysman, M.D. Brick, L.K. Bondarenko. On burn injuries became the main scientific direction of the Department of General Surgery. For 17 years under the guidance of Professor LN Kovalenko on the basis of the burn clinic were completed dissertations aimed at studying the pathogenesis and treatment of burn shock (G.Yu. Khapatko), micronutrient metabolism (MK Timchuk), features of anesthesia (VM Pasyak), functional and morphological changes in the adrenal glands (TD Tregubova, KA Moroz), the state of the cardiovascular system during surgical treatment of burns (VM Barvinsky), specialized complexes of physical therapy for the prevention of complications (AP Zubenko), etc. More than 150 scientific articles were prepared and published in journals, collections of scientific works in the country and abroad, 12 methodical letters and recommendations. Employees of the department and doctors of the department spoke many times at All-Union and national scientific-practical conferences, and in 1975 on the basis of the Dnepropetrovsk burn department was held IV Republican scientific-practical conference on "Burns". It was attended by more than 150 doctors and scientists. There were many guests from mm. Moscow, Leningrad, the Moldavian SSR, Saratov, Perm, Minsk and other cities of the Soviet Union, where there were large cremation centers at the time.

Inventive and innovative work is also fruitfully carried out at the department. In 1982 he received a diploma for the invention of tires for the prevention of burn contracture of the hand and finger (Professor L.N. Kovalenko, Associate Professor I.P.

Bizhko, student NG Beltyukova). 39 certificates for various innovation proposals were received. In addition, there are 35 implementations of recent work (recorded since 1976), including 2 at the national level. One of them on the treatment of burns in the shock stage was published in Prague in 1981 (assistant G.Yu. Khapatko).

This work has achieved significant scientific and practical results, both in the treatment of shock and in the treatment of burns in general, which allowed to cure patients who had burns on 50% of the body surface, of which up to 35% of deep burns. Mortality in the shock stage was significantly reduced, but subsequent stages of burn disease were still difficult and problematic to treat. In this regard, the clinic shifted the emphasis to the study of the development of burn toxemia and septicotoxemia, prevention of infectious complications. In the practice of the regional burn department were introduced methods of surgical and chemical necrectomy for deep burns, treatment in a controlled abacterial environment (ATU-1, ATU-3), the use of mesh autodermotransplants obtained using a perforator developed at the department with a coefficient of 2 stretching up to 1: 6. The staff of the General Surgery Clinic and the regional burn department performed topical economic contract research work. The results of research on the phased treatment of victims of thermal injuries and the development of methods and devices for the treatment of hand burns were evaluated by the medals of the ENEA in 1980.

In the period from 1983 to 1996, the Department of General Surgery was headed by Doctor of Medical Sciences, Professor V.G. Kharchenko. Under his leadership, studies of the pathogenesis and effectiveness of treatment of burn disease were continued. Extracorporeal methods of detoxification, enterosorption and application sorption were introduced into the practice of the regional burn center, the issues of reconstructive and restorative surgery after burn deformations and contractures were thoroughly studied. The obtained data were summarized in doctoral dissertations of I.P. Bezhka "Preventive and Reconstructive Surgery of the Burnt Brush" (1994) and S.V. Slesarenko "Development and study of the effectiveness of combined methods of detoxification in burn disease" (1996), PhD theses O.V. Fomin and M.M. Chkoura. Performers of the ordered scientific topic, Professor L.N. Kovalenko, associate professors I.P. Bizhko, G.Yu. Khapatko, assistant V.M. Barvinsky for the high level of research and implementation of achievements in the practice of health care were awarded by the Ministry of Health of the USSR.

During 1978-1979 he worked as an assistant at the Department of General Surgery of the DMI O.M. Prokopenko, who previously headed the cremation center in Perm. Author and co-author of 42 scientific papers. He actively developed methods of using necrolytic drugs in the treatment of deep burns. He performed unique reconstructive and plastic surgeries in patients with post-traumatic and cosmetic defects. He paid great attention to the prevention and treatment of post-burn scars. For the first time in Ukraine he introduced and widely used the technique of compression therapy. He brought up a whole galaxy of combustiologists who successfully work and develop modern trends in the treatment of burns, scars and tissue defects.

Associate Professor IP In 1994, Bizhko defended his doctoral dissertation "Preventive and Reconstructive Surgery of the Hand". The author has developed and proposed application sorption for the treatment of burns, a number of methods of

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surgical treatment of burns and burns. He developed methods of surgical rehabilitation of patients with complications of burn injuries, introduced new methods of surgical treatment of severe contractures. The author's works were widely presented at international congresses of combustiologists in England, France and Spain. He also became the author of the creation of a regional system of treatment and rehabilitation of the burnt, on his initiative in Dnepropetrovsk was established a city center for reconstructive and plastic surgery. For the creation of a new direction in hand surgery in 1990 he was awarded the title of "Laureate of the State Prize of the USSR", and for special contribution to the development of health care in 1997 by Presidential Decree was awarded the title of "Honored Doctor of Ukraine".

The doctoral dissertation of the doctor-combustiologist SV became a generalizing scientific work on improvement of detoxification methods. Slesarenko "Development and effectiveness of combined methods of detoxification in burn disease." After defending his doctoral dissertation, Serhiy Volodymyrovych became a regional specialist in combustiology, headed the regional center of thermal trauma and plastic surgery. Dnipropetrovsk School of Combustiology for its scientific achievements became known not only in Ukraine, CIS countries, but also abroad - Italy, Belgium, Israel, Singapore, Czechoslovakia, Bulgaria, Greece and others. as well as articles in methodological journals.

The latest work was performed in accordance with the problem of the quality of intensive care, which is carried out in the department in conjunction with doctors of other specialties, namely anesthesiologists. Defense in 2001 of candidate's dissertations V.V. Slinchenkov and D.P. Leshchev under the leadership of the Laureate of the State Prize in Science and Technology, Doctor of Medical Sciences, Professor O.M. Kligunenko allowed to develop and substantiate a new technology of intensive treatment of acute burns with the use of plasma substitutes with oxygen transfer function - the drug "Perftoran", the successful implementation of which continues under the leadership of the Academy of Sciences and Academy of Sciences of Ukraine, doctor of medical sciences, professor L.V. Novitskaya-Usenko.

The implementation of these developments has made it possible to cure even more victims with severe burns, but this has increased the need for postclinical conservative and surgical rehabilitation of convalescents. One of the scientific directions of the clinic was the use and study of the effectiveness of sanatorium methods on the recovery of patients who have suffered burns. The data obtained showed that it is possible to significantly reduce disability after serious injuries in the Dnipropetrovsk region under the conditions of treatment of victims in the cycle: hospital-clinic-sanatorium.

Since 2000, the Center has been accepting patients not only with burns, but also with other diseases or injuries related to the loss of skin and in need of plastic surgery. The name of the "burn department" was changed to "Center for Thermal Injury and Plastic Surgery".

To date, the combustiological service of the region has been reorganized, resulting in the creation of a comprehensive system of phased treatment: specialized hospital -(Dnipropetrovsk Center for Thermal Injury and Plastic Surgery, burn department of Kryvyi Rih); polyclinic chain (Dnepropetrovsk); Rehabilitation department for patients who have suffered burns (Sanatorium "Dniprovsky", Romankovo and Sanatorium "Salty Estuary", Znamenivka, Dnipropetrovsk region), which allows to make the cycle of treatment of acute period and rehabilitation a single treatment process. Outside the region, convalescents are being rehabilitated according to the testimony of the Avangard sanatorium (Nemyriv).

Today, the Center for Thermal Injury and Plastic Surgery provides round-the-clock specialized care to 8 surgeons-combustiologists (S.V. Slesarenko, P.T. Gavrilenko, S.A. Zhornyak, S.V. Stazhevsky, P.O. Badyul, I. V. Baranov, A.Y. Kramar, Y.M. Goncharova), five of which have the highest qualification category.

According to the results of research work in the field of combustiology at the department were completed and defended dissertations for the degree of Candidate of Medical Sciences staff:

- 1. BADYUL PAVLO OLEKSIYOVYCH DPh "Early surgical and rehabilitation recovery of functions in deep limb injuries" (Prof. SV Slesarenko) 2009.
- 2. GUZENKO BORYS VIKTOROVYCH DPh "Prognosis, diagnosis and prevention of complications of infectious-inflammatory genesis in the acute stage of burn disease" (Prof. SV Slesarenko) 2010.
- 3. NOR NADIYA MYKOLAYIVNA DPh "Early surgical interventions and their effectiveness in the treatment of patients with thermal trauma of the hand" (Prof. SV Slesarenko) 2012.
- 4. SLESARENKO KYRYLO SERHIYOVYCH DPh "Surgical treatment of patients with deep localized defects of the integumentary tissues of the lower extremities" (Prof. SO Muntyan) 2016.
- 5. BADYUL PAVLO OLEKSIYOVYCH DM «Reconstructive and reconstructive surgery of defects of integumentary tissues with the use of perforating flaps " (Prof. SV Slesarenko) 2018.
- 6. KORPUSENKO OLENA IHORIVNA "Substantiation of methods of preoperative planning and surgical treatment of integumentary defects" DPh (Prof. SV Slesarenko) 2021.

Employees of the Center are members of the European Association of Burns (EVA), the American Society of Plastic Surgeons (ASPS), the World Society for Reconstructive Microsurgery (WSRM), the Association of Combustiologists of Ukraine (ACU), the All-Ukrainian Association of Plastic Surgeons. , Association of Anti-Aging Gender and Preventive Medicine.

Head of the Center, Doctor of Medical Sciences, Professor SV Slesarenko, who is also a corresponding member of the Ukrainian Academy of Sciences, a member of the VAPREH and AKU presidiums. Recently modern methods of treatment, such as early surgical interventions with alloplasty at the widespread defeats, revascularizing operations under the conditions of total defeat of soft tissues and practically all types of reconstructive and plastic operative interventions are introduced and widely carried out in practice. New domestic and foreign drugs are being introduced, and their effectiveness is being analyzed. The results of scientific research conducted on the basis of the regional Center have world novelty and high practical value, they are protected by 16 copyright certificates and 3 patents of Ukraine. These works were widely presented at International scientific forums, congresses, symposiums, national conferences on burn injuries. The scientific achievements of the department have received international significance. Such employees as professors S.O. Muntyan, VP Krishna, S.V. Slesarenko, MD Badul P.O. Today they are full members of the European Surgical Associations, take an active part in international forums on topical issues of surgery, combustiology, internships abroad. The geography of scientific cooperation in recent years has expanded significantly and is 23 countries.

And today the staff of the department is a powerful mechanism that is able at a high enough level to continue to fruitfully carry out the pedagogical workload, to conduct surgical research and treatment work.

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