

OBITUARIES

УДК 617.3(477)(092)Ашукіна

DOI: <http://dx.doi.org/10.15674/0030-59872024196-97>**Natalija Oleksandrivna Ashukina**

The team of Professor M. I. Sytenko Institute of Pathology of the Spine and Joints of the National Academy of Sciences of Ukraine is deeply saddened by the untimely death of Natalia Oleksandrivna Ashukina, head of the connective tissue morphology laboratory. Natalia Oleksandrivna passed away on 1 February 2024 at the age of 52. She was a talented scientist, a professional and sensible manager, a devoted friend. Thanks to her personal and professional qualities, she enjoyed the undeniable authority and respect of the Institute's employees, patients, and colleagues throughout Ukraine. This loss cannot be expressed in words.

Natalia Oleksandrivna Ashukina was born on 13 February 1971 in the city of Kharkiv in a family of engineers. In 1993, she received her higher education in "Biology, teacher of biology and chemistry" at V. N. Karazin Kharkiv National University. Already in the fourth year, she started working at the State Establishment "Professor M. I. Sytenko Institute of Spine and Joint Pathology of the National Academy of Sciences of Ukraine" in the connective tissue morphology laboratory, first as a laboratory assistant, and then as a junior, senior, leading researcher. In 2017, N. O. Ashukina headed the connective tissue morphology laboratory.

*It's easy to imagine you alive,
I don't have the strength
To believe you have passed away...*

Natalia Oleksandrivna's scientific activity from the beginning was related to the optimization of bone tissue regeneration on *in vivo* experimental models. In 2002, in Kyiv, she defended her PhD thesis "Regeneration of a bone-cartilage wound using calcium-phosphate ceramics" in the specialty "Cytology, histology" under the supervision of Professor N. V. Dedukh.

Natalia Oleksandrivna for more than 20 years, initially together with Doctor of Medical Sciences K. K. Romanenko, then with Professor O. K. Popsui-shapka studied the causes of non-union of diaphyseal fractures of long bones in order to improve their treatment. One of the directions is the study of the role of fibrin clot in bone regeneration of patients and its practical application in the surgical practice of doctors. For a long time, she studied the process of bone regeneration under the conditions of an imbalance in the level of thyroid hormones (hypo- and hyperthyroidism models), revealed the characteristic features of bone tissue remodeling under this condition, as well as differences in the reparative process at its various stages for each of the experimental models. In cooperation with professors Z. Z. Ziman (V. N. Karazin Kharkiv National University) and N. V. Dedukh conducted a number of studies on the use of new synthesized types of calcium-phosphate ceramics for osteoplasty in experiments on rats and identified promising samples for clinical using.

A separate area of scientific activity of N. O. Ashukina (together with Doctor of Medical Sciences A. G. Skidanov) was the study of the role of paravertebral muscles in the development of degenerative diseases of the spine based on various experimental models, as well as the study of recovery of paravertebral muscles after spondylodesis using clinical and experimental material.

As the head of the laboratory, N. O. Ashukina ensured the conduct of studies of the mineral density of bone tissue and the content of soft tissues in patients using the method of bone densitometry

(dual-energy X-ray absorptiometry). This became the basis for prescribing and analyzing the effectiveness of treatment for patients with low bone mass of various ages, as well as conducting international clinical trials.

N. O. Ashukina made a huge contribution to the work of the trade union of Professor M. I. Sytenko Institute of Spine and Joint Pathology of the National Academy of Sciences of Ukraine, functioning of the internal audit system, organization and information support of the institution's profiles in international scientometric databases.

For her responsibility, perseverance, active life and scientific attitude, efficiency and conscientiousness in work, the directorate of the Institute and the National Academy of Sciences of Ukraine repeatedly awarded Natalia Oleksandrivna with awards and diplomas. Her indisputable authority in the staff of the Institute, after all, is evidenced by the characteristics and reviews of employees.

Natalia Oleksandrivna is the author of more than 110 scientific publications, including 3 patents of Ukraine for inventions, 2 patents of Ukraine for

utility models, as well as works in the field of orthopedics, traumatology, vertebrology, pathology, oncology, experimental biology, osteology.

Among the aspects of N. O. Ashukina's scientific activity, the work as part of the editorial staff of the journal "Orthopaedics, Traumatology and Prosthetics" played an important role as since 2012, she was a part-time technical editor of one of the most rated publications of Ukraine.

In the memory of everyone, Natalia Oleksandrivna is an example of active scientific and social activity, boundless devotion to the profession, wisdom and love of life. Her whole life is endless devotion to her chosen cause and service to people. She was a kind, sensitive and caring person. Everyday communication with Natalia Oleksandrivna brought positivity, joy and a charge of energy. Her eyes always shone with interest, love for people and life, and boundless kindness.

We express our sincere condolences to family and friends, to all who knew and loved Natalia Oleksandrivna. The bright memory of this beautiful and cheerful person will remain in our hearts, and her name will remain in the history of our institute.

*Staff of the Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine
Editorial board of the journal "Orthopaedics, Traumatology and Prosthetics"*