

Mykola Markiyanovych Volkovych: surgeon, scientist

The article focuses on the professional and scientific achievements of Professor Mykola Markiyanovych Volkovych, who gained recognition inside and outside the borders of Ukraine. He demonstrated an exceptional level of professionalism as a surgeon, being honoured as one of the founders of Kyiv's surgical school and earning a distinguished reputation as a scientist. Additionally, he introduced the «Rules for students undergoing training in the hospital surgical clinic», which are still relevant today. He's the author of nearly 100 works encompassing a wide range of issues within the fields of surgery, traumatology, orthopaedics, otorhinolaryngology, gynaecology, urology, and neurosurgery.

He serves as an example of a true surgeon who provides diligent observation and thorough patient examination, and loves surgery as a science.

O. P. Krymov



Mykola Markiyanovych was born on December 9, 1858 in Horodnya town in the family of a church deacon. The house where he spent his childhood has been preserved to this day. He studied at the Horodnya district school and at the Chernihiv classical gymnasium. In 1870, he was admitted to the second class of the gymnasium and successfully completed his studies in 1877, earning a silver medal. In the same year, he entered the medical faculty of St. Volodymyr University in Kyiv. As a student, he took an interest in attending the lectures delivered by the renowned professor and the surgeon, V. A. Karavaev, as well as seeing and participating in the surgical

procedures conducted by the esteemed professor. In 1882, M. M. Volkovych graduated from the university with honours. Subsequently, he entered a residency at the hospital's surgical clinic, which was under the leadership of Professor F. K. Bornhaupt (a former student of the German surgeon Richard von Volkmann). Having studied under the guidance of Professors V. A. Karavaev and F. K. Bornhaupt, he defended his doctoral dissertation in 1888. His research focused on the subject of «Rhinoscleroma with Clinical, Pathological, and Bacteriological Aspects.» In 1889, he began his clinical studies in Germany, specializing primarily in the field of otorhinolaryngology. Upon his return, M. M. Volkovych was elected a private docent. At St. Volodymyr University, he delivered the courses «Desmurgy: the Treatment of Fractures and Dislocations», «Diagnosis of Surgical Diseases» and «Ear, Nose, and Throat Diseases». In the autumn of 1889, M. M. Volkovych initiated the presentation of a systematic, but elective, series of lectures pertaining to the field of otorhinolaryngology. The subject of the introductory lecture dealt with «The Importance of Nasal Diseases in the Pathology of the Human Body».

In 1893, M. M. Volkovych assumed the position of the head of the surgical department at Oleksandrivsky Hospital in Kyiv. In 1903, he was elected a professor. His introductory lecture was «Surgery as Science and Art and the Educational Tasks of Surgery».

From 1911 to 1922, he headed the faculty surgical clinic and then the scientific research department of medicine at the Academy of Sciences of Ukraine. With the beginning of the First World War, M. M. Volkovych became a consultant-surgeon

for the South-Western Front and served as a representative of the Red Cross. He worked for both the hospitals located in the front and rear. In front-line conditions, M. M. Volkovych often held meetings of military doctors. He taught them the intricacies of military field surgery. An infirmary for the wounded was opened in the clinics of the Medical Faculty of St. Volodymyr University. Mykola Markiyanovych Volkovych headed the infirmary and managed it until its closure in 1915.

M. M. Volkovych was the organizer of the Kyiv Surgical Society (1908) and its permanent chairman until the end of his life. In 1914, he was awarded the title of honoured professor. In 1928, he was elected a full member of the Academy of Sciences of Ukraine. He lived in Kyiv on Tarasovska street, house No. 1. After a short-term illness, he died on July 11, 1928. He was buried at the Baikove cemetery in Kyiv.

Mykola Markiyanovych Volkovych is the author of nearly 100 works encompassing a wide range of issues within the fields of surgery, traumatology, orthopaedics, otorhinolaryngology, gynaecology, urology, and neurosurgery. He developed a novel technique for knee joint resection in 1896, as well as osteoplastic surgery for tuberculosis of the foot bones and ankle joint in 1894. Additionally, he contributed to the field by introducing the plastic closure of cysto-vaginal fistulas in 1901 and the incision of the abdominal wall during laparotomy in 1898. M. M. Volkovych was an advocate of an active approach to the treatment of bone fractures. The splint he designed for the purpose of immobilizing of the affected limb gained significant popularity and widespread use. He was among the first researchers to conduct laminectomy in 1894. He actively participated in the exploration and advancement of issues pertaining to abdominal surgery.

M. M. Volkovych suggested a surgical approach, known as the Volkovych-Dyakonov incision, as a means of gaining operative access to the appendix.

Volkovych's symptom is considered a clinical manifestation of chronic appendicitis. It is characterised by two distinct features: a) hypotrophy or atrophy of the muscles in the anterior abdominal wall, specifically in the ileocecal region; and b) increased pain experienced when the cecum is diverted outward.

Volkovych-Kocher's symptom is regarded as an indicator of acute appendicitis, characterised by the presence of pain. Initially, this pain manifests in the epigastric region, occasionally just beneath the xiphoid process. However, within a few hours, the pain becomes restricted specifically to the right iliac region.

Volkovych's symptom is indicative of symphysitis, characterised by the patient assuming a supine position, sometimes referred to as the «frog position» in

bed. This posture entails a minor external rotation and abduction of the hips, accompanied by a slight flexion of the knees. It is often observed in patients after childbirth or abortion.

During the III International Congress of Surgeons held in Brussels in 1911, a presentation was made highlighting splints and devices developed by M. M. Volkovych specifically for the purpose of treating fractures.

The research interests of M. M. Volkovych encompass a wide range of topics within the fields of surgery, traumatology, orthopaedics, otolaryngology, neurology, and urology.

Organizing the work of senior students, he came up with the «Rules for students undergoing training in the hospital surgical clinic». The document was officially approved by the Council of the Medical Faculty on May 21, 1908.

The rules state that students are assigned cases based on their personal observations. Patients undergoing recovery should be assessed during the morning hours, specifically between 9 a.m. and 3 p.m. In instances where there are unidentified occurrences related to the patient, the curator seeks guidance from either the professor or their assistant. It is imperative for the curator to be present at the lecture while carrying out the examination of the patient assigned to them. Furthermore, they must be present throughout surgical procedures and, if possible, during all dressing changes. In the fifth year, the surgical clinic assigns students a more active role in patient-related activities. This means understanding that they are not permitted to attend operations or dressings in the anatomical theatre following dissections or laboratory work. Consequently, the clinic assistant informs the curator about the scheduled surgery and dressing time for their respective patient. Students who fail to attend lectures, surgeries, and dressings for the purpose of curating patients will be denied the privilege of serving as curators for the patients assigned to them. The students present a comprehensive account of their observations made at the patient's bedside, the details of the surgical procedure, the progress of the patient's recovery after the operation, the condition of the wound during dressing, and the findings from the microscopic examination of the patient. These elements are included in the students' presentation of the patient's medical history, which is typically delivered upon the patient's discharge from the clinic.

These instructions provide a clear focus on the primary objective of the hospital clinic, which is to educate future doctors on how to independently manage patient interactions and deal with diagnostic and treatment issues.

M. M. Volkovych delivered lectures for students at the Kyiv Military Hospital. He also conducted practical classes there. The clinic was open for students to visit from 9:00 a.m. to 3:00 p.m.

It should be noted that M. M. Volkovych never had any illness or received any medical treatment. Paralysis of the lower limbs confined him to bed two weeks before his death. He did not call anyone for help. Professor F. G. Yanovsky heard about his illness. The last one says, «Mykola Markiyanovych, what caused your illness, and why did you choose not to let anyone know about it?». Mykola Markiyanovych answers, «You are a doctor, and you understand that if a condition is simple, it does not require any treatment, and if it is complicated, no doctor can treat it», which corresponds to the ancient adage, «Medicus curat, nature sanat».

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