

DOCTOR VOJISLAV SUBOTIĆ – LIFE AND WORK OF THE FOUNDER OF SERBIAN SURGERY

Jelena Horvat (1), Ranka Kravić (2), Vladimir Petković (1), Fotina Gavrić Jovanović (3), Dijana Piljić (4), Eva Stojković (1)

(1) HEALTH CENTER NOVI SAD, NOVI SAD; (2) INSTITUTE FOR HEALTH PROTECTION OF RAILWAY WORKERS - SIGNAL, NOVI SAD; (3) HEALTH CENTER VELJKO VLAHOVIĆ, VRBAS; (4) HEALTH CENTER NOVI BEČEJ, NOVI BEČEJ

Summary: Doctor Vojislav Subotić was born in Novi Sad in 1859. He was a leading surgeon in Serbia in the late 19th and early 20th centuries. He is known for inventing a splint for immobilizing the fractured femur and introducing innovations in ligating blood vessels. Surgeon Subotić successfully performed surgeries at a time when modern medical technological advances such as endotracheal anesthesia, parenteral rehydration, blood transfusion, and antibiotics did not exist. His feats were heroic as he managed to save patients' lives and treat various diseases and injuries using limited resources and knowledge available at that time. His courage, skill, and dedication to medicine made him an exceptional surgeon whose operations often meant life-saving interventions. He published a large number of papers in the fields of abdominal surgery, urology, and orthopedics.

Keywords: Vojislav Subotić, surgery, ligating blood vessels, splints for femur immobilization

INTRODUCTION

The goal of this paper is to explore the life, family, education, career, and contributions to medicine of the renowned surgeon Vojislav Subotić. Born in Novi Sad, Subotić was a leading surgeon in Serbia at the end of the 19th and beginning of the 20th century. He lived for 64 years, studied in Vienna and Paris, and achieved significant medical innovations such as inventing a splint for immobilizing fractured femurs and introducing innovations in ligating blood vessels. He was one of the founders of the Medical Faculty in Belgrade and the head of the surgical department at the General State Hospital in Belgrade. His name is associated with the development of operative medicine in Serbia, earning him the title of the father of practical surgery in the country. Additionally, he served as a volunteer physician in several wars, including the Serbo-Turkish War and World War I. The legacy of the Subotić family, donated to the Museum of the City of Belgrade in 1975, includes 56 items, as well as family albums and documents, mostly related to Dr. Vojislav Subotić, his elder brother General Dejan, and their father, the writer Dr. Jovan Subotić.

The family of Vojislav Subotić had a significant impact on Serbian history. His mother, Savka Polit, came from a Greek (Vlach) family that migrated to Novi Sad from Constantinople. Savka was actively involved in the educational sector and fought for women's rights. She founded various educational institutions and women's organizations in different cities, such as the "Udruženje gospođa" in Zagreb, the "Ženska zadruga" in Novi Sad, and the "Viša ženska škola" in Pančevo and Novi Sad. She was also one of the founders and the first president of the "Kolo srpskih sestara," where she emphasized the importance of educating children for the future of the nation. Savka was known for her dedication and enthusiasm in promoting Serbian women's folk art and crafts at domestic and international exhibitions. She particularly praised the Pirot carpets, calling them "poetry of women's hands in line with Serbian folk songs." Savka was recognized as the "mother of her people" by the poet Aleksa Šantić. Her contribution to the struggle for women's rights and the promotion of Serbian culture was significant and left a mark in history.

Vojislav Subotić's father, Jovan Subotić, was also a notable figure in Serbian history. He held a doctorate in law and philosophy and worked as a lawyer, poet, and playwright. Jovan Subotić was the editor of the *Letopis Matice srpske*, a leader of the Serbian people in Vojvodina, the organizer of the Assembly of Serbs in Pest in 1848, a participant in the May Assembly in Sremski Karlovci, the founder of the Karlovci Patriarchate, and the president of the *Matica srpska* in Novi Sad. He was also involved in

editing the newspaper "Narod" and overseeing the financing of the Theater. He worked on connecting Serbian and Croatian political centers such as Novi Sad, Zagreb, Osijek, and Belgrade.

Jovan and Savka Subotić had six children: Vida, Verica, Branislav, Ozren, Dejan, and Vojislav. Vida and Ozren died at a young age from smallpox. Branislav became a diplomat, while Dejan served in the Russian army. He joined the Serbian army in the First Serbo-Turkish War in 1876/7. Afterward, he became an honorary Serbian consul general in Crimea and participated in both Balkan Wars and World War I. He died in 1920 and was buried in the family tomb at the Zemun cemetery.

BIOGRAPHY OF VOJISLAV SUBOTIĆ

Vojislav Subotić was born in Novi Sad. He received his education in Zagreb and Novi Sad, where he completed his secondary education. He studied medicine in Vienna and Paris. During his education, he worked as a demonstrator under Professor Karl Rokitansky in Vienna. Subotić completed his medical studies in 1881, at the age of only 22. He pursued his specialization under Professor Eduard Albert in Vienna, who was the head of the First University Surgical Clinic.

Picture 1. Doctor Vojislav Subotic



Albert was known for introducing antisepsis, new surgical procedures in surgery such as junostomy and nephrectomy, as well as for performing the first nerve transplant and many other achievements. Subotić also studied under Karel Maydl, who introduced colostomy in abdominal surgery. After acquiring knowledge from these great surgeons, Subotić was appointed as a physician and primary care physician in Zemun, where he founded the Surgical Department and became the head of the hospital. There, he performed complex surgeries and published papers in prestigious scientific journals in Austria-Hungary and Germany. He assumed the position of head of the Surgical Department at the General State Hospital in Belgrade at the beginning of 1889. He immediately began significant work on the development and advancement of Serbian surgery. Some publications add the word "Elder" to distinguish him from another Vojislav, Vojislav M. Subotić, the first Serbian neuropsychiatrist. Both gentlemen contributed to Serbian medicine in different ways, leaving a significant impact on society. The surgeries performed by Dr. Subotić successfully, at a time when modern medical technological advancements such as endotracheal anesthesia, parenteral rehydration, blood transfusion, and antibiotics did not exist, were truly heroic endeavors. Today, many of the complex surgeries he successfully performed can only be performed by a small number of surgeons in our country, demonstrating how great and skilled he was in his profession.

In Serbia today, almost every branch of surgery can be associated with the work of Dr. Subotić, who performed surgeries on all organs. Evidence of this can be found in available literature. Unlike other nations who proudly record the beginnings of their surgery, due to insufficient knowledge of the history of Serbian surgery, even distinguished surgery professors date the beginnings of "their" branches of surgery decades after Subotić and his colleagues routinely performed them. Dr. Vojislav Subotić, a surgeon of great reputation, was known for his modesty. He always operated with closed doors, restricting access only to physicians, avoiding any advertising that he considered inappropriate for a serious physician. Dr. Mihailo Petrović praised his stance on advertising. Today, such behavior could serve as an example for the majority. Dr. Subotić made sketches for projects that a design firm in Budapest used to build Surgical Pavilions on West Vračar in 1907. Those pavilions were among the most modern in Europe at the time. They were used until the 1970s when they were demolished. Subotić edited a compendium entitled "The First Yugoslav Meeting for Operative Medicine" in 1912. The compendium was printed by "Nova štamparija" of Save Radenković and his brother and comprised 538 pages of text, including all papers and discussions in full, as well as 108 images and one color table. Additionally, the Second Yugoslav Meeting for Operative Medicine was held on September 5th and 6th, 1921, organized by Miroslav Čačković, a professor at the Medical Faculty in Zagreb. Subotić was elected president of the Serbian Medical Society five times in a five-year period, described as a "period of scientific momentum" by Dr. Bukić Pijade.

Dr. Subotić was an exceptionally important Serbian patriot who participated in multiple wars and provided aid to the wounded. As a surgeon and physician, he was active in wars against Turkey and Bulgaria, as well as in World War I. He organized meetings with surgeons from different countries to analyze and share their wartime experiences in treating war injuries. In this way, he contributed to the exchange of knowledge and the advancement of surgical practice in caring for the wounded. In 1913, he initiated one of the first clinical programs that emphasized reconstruction, instead of ligating, injured arteries and veins. Surgeons from around the world visited his clinic to assist in this program, and at a presentation in London (1913), there were discussions about the experience in managing 77 injured major blood vessels, resulting in 32 vascular reconstructions - 19 arteriorrhaphies and 13 venorrhaphies. Ironically, it took almost 40 years before similar successful efforts were achieved during the latter part of the Korean War (1952 to 1953). Dr. Subotić was a surgeon who in World War I was destined to surrender to the Bulgarian occupiers, but instead decided to retreat through Albania. After the war, he served as a delegate of the Kingdom of Serbia in the Interallied Medical Commission in London and Paris. Upon returning to Thessaloniki, he decided to decline the offered position of surgeon in the rear hospital and worked in the legendary Surgical Field Hospital in Dragoman, founded by Duke Stepa Stepanović. Upon returning to Belgrade, he began the restoration of the Surgical Department of the General State Hospital, which was devastated and looted.

Vojislav Subotić, a member of numerous prestigious foreign professional societies, passed away on December 17, 1923, at the table where he was supposed to give a lecture. Instead, his successor at the Department, Associate Professor Milivoje Kostić, delivered the lecture. Subotić was the recipient of numerous domestic and foreign decorations and honors, and he began publishing his professional works in 1886. He described various medical cases, such as actinomycosis and operative cases of pancreatic cysts. Additionally, in 1898, he reviewed the War Sanitary Service by Colonel Dr. Mihailo Mika Marković, providing useful advice and suggestions. At the First Congress of Serbian Physicians and Naturalists, held from September 5th to 7th, 1904, he delivered a lecture entitled "Contribution to the Pathology of Appendicitis." Moreover, he published several papers on splenic cysts and other spleen diseases, described injury to the hepatic duct during abdominal trauma, and wrote about ileus, ulcer, acute and chronic pancreatitis, intestinal tuberculosis, hernias, and a range of other surgical diseases, as well as immobilization of fractures of the long bones of the legs. He also wrote about the epidemic of typhoid fever in Serbia and other important topics. His most significant work, "Army Experience of Traumatic Aneurysms," was published in 1913 in the journal "The Lancet."

It is not possible to compile a complete bibliography of Subotić, but the available list includes at least 38 papers, mostly published in leading foreign journals, at least 31 reviews of books or articles from foreign literature, several hundred reviews and discussions recorded in the minutes of meetings of the Serbian Medical Society on operated patients. His discussions on non-surgical diseases at these meetings demonstrate his broad knowledge of medicine as a whole. Subotić, raised in the orderly state of Austria-Hungary, regularly wrote Reports on the work of the Surgical Department of the General State Hospital in

Belgrade. These reports were sent to the Sanitary Department of the Ministry of Internal Affairs, and from 1892 were almost regularly printed in the "Serbian Archive for Comprehensive Medicine." He published a total of 39 factual reports, thanks to which it is possible to reconstruct the work and development of surgery at the Surgical Department of the General State Hospital in Belgrade with almost complete certainty. Unfortunately, his successor did not publish any such reports after his death, which greatly complicates the study of the development of interwar surgery in Serbia.

After all, the question arises: What have the post-war generations done to honor this great son of the Serbian people? The correct answer would be: "Enough, but not as much as it should." The street where the Dean's Office of the Medical Faculty is located was named after Vojislav Subotić. The former Second Surgical Clinic under the leadership of Professor Vojislav K. Stojanović placed a bust of Subotić in the clinic's amphitheater, the work of academician Nikola (Koka) Janković. Professor Zoran Gerzić wrote a contribution about Subotić in the first book of the edition of the Serbian Academy of Sciences and Arts "Life and Work of Serbian Scientists" in 1996. The author of these lines published "Memory" about Subotić in the "Serbian Archive for Comprehensive Medicine" in 2003, on the occasion of the 80th anniversary of Professor Subotić's death. The Surgical Section of the Serbian Medical Society restored the Subotić family tomb at the Zemun cemetery on the 80th anniversary of Professor Subotić's death, placed a memorial plaque and a copy of the bust in the lobby of the Serbian Medical Society building, and placed his photograph and a picture of the house where he lived in Zemun in the meeting room of the Serbian Medical Society. A new portrait of Professor Subotić, made in Vienna, was placed in the ceremonial hall of the Dean's Office of the Medical Faculty, with his biography in the background. Additionally, lectures about him were held, and the most comprehensive bibliography was compiled.

Picture 2. Doctor Vojislav Subotić (in the middle) - the cornerstone of the Faculty of Medicine in Belgrade



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