doi: 10.20471/acc.2018.57.s1.01

HISTORY OF UROLOGY AT THE SESTRE MILOSRDNICE UNIVERSITY HOSPITAL CENTER

Boris Ružić^{1,2}, Josip Katušić¹, Borislav Spajić^{1,2}, Ante Reljić¹, Alek Popović¹, Goran Štimac¹, Igor Tomašković^{1,3}, Šoip Šoipi¹, Danijel Justinić¹, Igor Grubišić¹, Miroslav Tomić¹, Matej Knežević¹, Ivan Svaguša¹, Ivan Pezelj¹, Sven Nikles¹, Matea Pirša¹ and Borna Vrhovec¹

¹Department of Urology, Sestre milosrdnice University Hospital Center, Zagreb, Croatia; ²School of Medicine, University of Zagreb, Zagreb, Croatia; ³Faculty of Medicine, J.J. Strossmayer University of Osijek, Osijek, Croatia

SUMMARY - The history of Croatian urology clearly shows its affiliation to the medical and civilizational circle of the Western world. The Department of Urology at the Sestre milosrdnice University Hospital Center is the oldest urology institution in the Republic of Croatia. The Department was established in 1894, when the new Sestre milosrdnice Hospital was open in Vinogradska cesta in Zagreb. It was then that doctor Dragutin Mašek founded the so-called III Department, which, in addition to treating urology patients, also treated patients with conditions of the ear, nose and throat, eye diseases and dermatologic conditions. Dragutin Mašek had already realized that medicine would soon be divided into fields and had assigned younger doctors joining the III Department to specific fields. As a result, urology was given to Aleksandar Blašković, who founded the first independent department of urology in Croatia in 1926. In 1927, he was appointed Professor of urology at the Zagreb School of Medicine, where he established the first department of urology and was giving lectures and practicals. Under his leadership, the Department of Urology was given the status of a Clinic, a teaching department, the first of its kind in Croatia. Owing to all his activities in the field of urology, the history remembers him as the "father of modern Croatian urology". Over the course of the following years, department chairs had changed, but luckily for the patients, approach to work had not. Conscientiousness, trust, competence and charity. After all, charity is the idea that the hospital carries even in its name, after the Sisters of Charity who had founded it. In all the decades, the Department of Urology has been following global development paths, objectively legging behind top facilities in the world by only a few years. Overall professional and scientific urology activities culminated in 1998, when the Clinic became the Reference Center of the Ministry of Health of the Republic of Croatia for prostate cancer, and in 2011, when it became the European Board of Urology Certified Center. All that has been achieved could not have been done without wholehearted help and cooperation of the nurses, as well as every other department employee from the beginnings of urology until today. Despite its rich history, the Department does not rest on laurels. Today, it is a modern urology department together with its European role models.

Key words: Sestre milosrdnice University Hospital Center; Mašek's III Department; Doctor Aleksandar Blašković; Department of Urology, Sestre milosrdnice University Hospital Center

Introduction

This year, the Department of Urology of the Sestre milosrdnice University Hospital Center marks the 20th anniversary of becoming the Reference Center of Correspondence to: Boris Ružić, MD, PhD, Professor of Urology, Department of Urology, Sestre milosrdnice University Hospital Center, Vinogradska c. 29, Zagreb, Croatia

E-mail: boris.ruzic@kbcsm.hr

Received February 1, 2018, accepted May 1, 2018

the Ministry of Health of the Republic of Croatia for prostate cancer. The anniversary is an opportunity to remember the past of this oldest urology institution. As Eugen Kvaternik (1825 - 1871), Croatian writer and politician once said: "The future cannot be built without knowing one's own past."

Foundation and development of Sestre milosrdnice Hospital in Frankopanska Street and Ilica

The beginnings of urology profession in Croatian medicine can be traced back to the 19th century. The Catholic Church and Zagreb Kaptol played a significant role in the development of the early institutions that cared for the poor and later hospitals.

The first public general hospital was built on Jelačić Square in Zagreb in 1804, under the management of the Hospitaller Order of the Brothers of St. John of God or Merciful Brothers. The order consisted of laymen who were not priests. The Hospital had a total of 32 beds and admitted only male patients. Hospitalization of women was avoided, even though a contract obligated them to admit female patients. This, allegedly, countered the rules of the Order. The real reason, though, was lack of money and space².

Cardinal Juraj Haulik (1788 - 1869), the head of Zagreb Kaptol, had a new church and monastery built in 1844 in Frankopanska Street (Fig.1).



Fig. 1. Cardinal Juraj Haulik (1788 – 1869)

It included a female teacher education school, a kindergarten and a hospital under the protection of the Company of Sisters of Charity of Saint Vincent de Paul. From today's point of view, the hospital would be considered a hospice. Vincent de Paul (1581 – 1660), a humble and merciful priest from France, dedicated his entire life to serving those on the edge of society: abandoned children, the poor, the sick, the old and the imprisoned (Fig. 2.).



Fig. 2. Vincent de Paul (1581 – 1660) and Sisters of Charity

He organized the nuns into a single order and made it possible for them to work outside the convent for the first time. After the canonization of Vincent, the Sisters of Charity have continued to use his name³. The number of sisters continued to grow every year and their activities soon started to spread beyond the French borders. The history of Croatian Sisters of Charity began in 1845, when six nuns came to Zagreb from the Austrian Province of Tyrol at the invitation of Zagreb Cardinal, Juraj Haulik. The sisters were to work in the convent and the hospital as teachers and nurses. The hospital opened its doors in 1846 as a small hospital for women. It had only twelve beds. It was called Sisters of Charity of Saint Vincent de Paul Hospital (Fig. 3.).

Treatment was free and was paid for from various foundations. According to the population census, there were 16.657 people living in Zagreb that year. The hospital was run by mother superior. The successful



Fig. 3. Hospital Sisters of Charity of Saint Vincent de Paul in Frankopanska Street

work of the sisters in Zagreb did not go unnoticed and people's faith in their selfless work grew. A decision of the Municipal Authorities from 1869 ordered the hospital to be moved out of the space it was using. The decision was motivated by an increased number of patients and the opinion that having both a hospital and a school in the same building is "inappropriate". The hospital in Frankopanska Street was open for 25 full years - from 1846 to 1871. However, public health interests and teaching standards required the school and the hospital to be separate. Following the decision of the Municipal Authorities, Sisters of Charity bought a single-family home in Ilica 83, on what was then the outskirts of Zagreb, in 1871 and turned it into a hospital (Fig. 4.).

Today, the building is home to Slava Raškaj Educational Center, which provides services to children with impaired hearing, the deaf, people with speech



Fig. 4. General State Hospital in Ilica 83

impairments and children with impairments concerning the voice-speech-language communication. The hospital had 200 beds. It was called "General State Hospital", implying that the state was in charge of funding it. In 1873, it was proclaimed a public hospital. This meant that it now admitted all patients, both men and women, who were either referred to it or checked in themselves, if the physician decided that they needed medical help. The government paid for all hospital costs. The hospital had a superintendent in charge of two services: Running the hospital and managing the Sisters⁴.

The hospital soon built a good reputation and the number of patients grew constantly. Zagreb now had 30.830 people. At that time, individual hospital departments were known by numbers, which denoted the order in which the departments were set up. In 1885, the hospital had two departments: the internal (or I Department 1) and the surgical (II Department). Both were run by doctor Ivan Kosirnik. Alongside surgical conditions, the diseases of the eye, the diseases of the ear, nose, and throat, skin diseases, diseases of the urinary system, venereal diseases and diseases of the female genitalia were treated at the II Department. The department was run by doctor Teodor Wickerhauser (1858 – 1946), who graduated from the medical school in Vienna⁵. The hospital had only 4 rooms for surgical patients treated at the II Department. The first outlines of urology specialty are mentioned in 1885, when the diseases of the urinary system are mentioned as a separate group⁶.



Fig. 5. Dragutin Mašek (1866 – 1956)

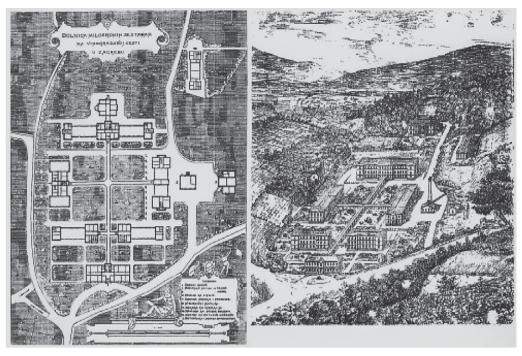


Fig. 6. Kuno Waidmann: Sisters of Mercy Hospital in Vinogradska cesta – site plan and perspective (published in »Viesti in`inira i arhitekta«, 1897)

Doctor Wickerhauser had 6 assistant physicians, including doctor Dragutin Mašek (1866 – 1956), who started working immediately after graduating from medical school in Vienna (Fig. 5.).

A new building was furnished in the yard of the hospital, which now counted 300 beds. 25 nurses worked at the hospital at the time. "Diagnoses book" and "head notes" were introduced. It was soon clear that the hospital was too small for all patient needs, especially as the building was also used by the State Maternity Ward, Midwifery School and the Institute for the Deaf and Mute. A decision to build a new hospital at a different location was therefore made in 1893. The hospital in Ilica Street was open for 23 years (1871 - 1894). State Government bought the entire hospital building from the Sisters of Charity and gave it to the Midwifery School and the State Maternity Ward (the maternity ward and the midwifery school will later relocate to a newly constructed building in Petrova Street, on the so-called Peter's Cemetery) and to the Institute for the Deaf and Mute. With the money they got, Sisters of Charity bought Villa Socias with a large garden, on the road which lead to the vineyards, on what was once the old cemetery for the poor, between Vrtlarska Street and Vinogradska Street.

Sisters of Charity of Saint Vincent De Paul General Hospital in Vinogradska cesta (1894–1948) and the beginnings of urology specialty

In 1893, Sisters of Charity started the construction of a new, modern hospital, based on the designs of the German architect Kuno Weidmann (1845 – 1921). The street where the hospital was located was named after the vineyards surrounding it, Vinogradska cesta (*Vineyard Road*) (Fig. 6.).

Eight patient pavilions and eight ancillary buildings were constructed, all connected to each other underground. The Hospital had 400 beds, 7 physicians, own central heating and gas lighting. It had an orchard catering to its own needs, a farm where animals were bred and a slaughterhouse.

When the construction was finished in 1894, the Hospital was considered to be the largest, most beautiful, state-of-the-art hospital in this part of Europe. It was named Sisters of Charity of Saint Vincent De Paul General Hospital⁷ (Fig. 7.).

Mašek's III Department

Immediately after the Hospital opened its doors, the number of patients, as well as the intensity of sur-



Fig. 7. Hospital in Vinogradska cesta (taken in 1906, published in »Sestre milosrdnice«, Zagreb, 1998)

gical work started to grow rapidly, particularly in doctor Wikerhauser's II Surgical Department. The II Surgical Department therefore had to be divided at the end of 1894. Doctor Wikerhauser kept that which was dearest to him, namely surgery and gynecology, within the II Department, while his "number two", doctor Dragutin Mašek, founded the III Department, for the surgical treatment of other diseases. These included the diseases of the eye, diseases of the ear, nose, and throat, skin diseases, diseases of the genitourinary system and venereal diseases. The term "venereal diseases" soon changes to "genitalia", which could be seen as a description closer to the urology specialty. We can, therefore, rightfully claim that the origins of urology specialty in Croatian medicine are recorded in 1894, when the new Sisters of Charity Hospital was opened in Zagreb, in Vinogradska cesta, which included Mašek's III Department. The Department had 60 beds.

It is interesting to note that, at the time, the surgeries of the upper urinary tract (kidneys and ureters) were performed at the surgical department (II Department), while surgeries of the lower urinary tract (bladder, prostate and urethra) and genitalia were performed at Mašek's III Department. The doctors on the III Department were no strangers to urological pathology, as they had extensive practice. It was recorded that by 1899, doctor Mašek had performed over 100 cystostomies. The most common indications were kidney

stones and tuberculosis, later followed by prostatic retention cysts. The procedure itself was considered a large one, with records of surgeries resulting in deaths⁸.

In 1895, the Austro-Hungarian Emperor Franz Joseph II visited the Hospital and was impressed by both its size and decoration. He stated that it was one of the most modern hospitals in the Monarchy.

The beginnings of urology specialty were quite modest, in a limited space, with deficient instruments and few staff members. Despite of it all, urology discipline slowly separated from general surgery.

High level of development of urology of the time, the knowledge of prostate anatomy and etiology of prostate diseases, as well as of surgical and palliative treatment modalities is impressive. The treatment of benign prostate enlargement was considered "sexual surgery" and implied vasectomy and castration, with claims that the prostate shrinks by half and softens 25 days after the surgery. Doctor Mašek was against this treatment, believing it to be a thing of the past. After that came prostatectomy, perineal at first (1903). This was followed by transvesical approach, more difficult, dangerous and rarer at the time. The procedure was performed in spinal anesthesia, despite high mortality rates (up to 13%). Some surgeons performed it in a single stage, while others advocated two stages. In 1910, doctor Mašek published the article "Of transvesical prostatectomy", where he stated that he had performed 30 transvesical prostatectomies with primary suturing of the bladder. That same year, doctor Blašković wrote about bladder ruptures and their treatment. In 1910, doctor Čačković performed prostatic hypertrophy radiation and reported improvement of symptoms with the application of x-rays⁹.

The journal *Liječnički vjesnik*, published by the Croatian Medical Association, mentioned the terms "urology" and "urologist" for the first time in 1900.

In 1901, the Department of Ophthalmology separated from the III Department. The new Department gave the first president of the Medical Chamber in 1923 (doctor Kurt Hühn). The Sisters of Charity Hospital bought an x-ray machine only six years after Wilhelm Röntgen published his images for the first time (1895). The machine was located at the surgical department, and the first images were of fractures and luxations. In 1906, Doctor Miroslav Čačković (1865 - 1930), the first one to deal with roentgenology, showed x-ray images of bladder and kidney stones with exposure time of 60-70 seconds. After the diagnosis, Mašek performed nephrotomy and removed the kidney stone.

Shortly after moving into the new space, the Hospital started spreading, extending and subdividing. Electrical lighting was introduced in 1904. The Hospital had a fully equipped pharmacy.

Endoscopy era soon started for the needs of the III Department and the physicians working with urological issues. Namely, in 1906 the Hospital acquired a cystoscope. Before cystoscopes, the bladder in women was examined by dilatation of the urethra using an instrument called Hegar, and the bladder was explored by finger. In men, it was the palpation through the rectum and exploration by a probe (1900). Cystoscopy was listed as a surgical procedure and was performed 4 times in 1906.

In 1907, the Sisters of Charity Hospital employed a young doctor, Aleksandar Blašković (1882 – 1953), straight from medical school (Fig. 8.). He was born in Varaždin and studied medicine in Budapest and Vienna. Immediately after employment he was assigned to the III Department, with doctor Mašek. In 1910, 31 physicians worked at the Sisters of Charity Hospital.

In 1913, Dragutin Mašek became president of the Medical Association of Kingdom of Croatia-Slavonia and remained in the position until 1919. He strongly advocated the founding of the School of Medicine in Zagreb¹⁰.

During World War I (1914 - 1918), the Sisters of Charity Hospital found itself in very dire circumstanc-



Fig. 8. Aleksandar Blašković (1882 – 1953)

es. It was overwhelmed by the wounded. Numerous doctors were mobilized. Seeing as how there were no nursing schools in Croatia at the time and very few nuns, during the first years of the war the doctors hurriedly trained volunteer nurses¹¹.

Founding of the School of Medicine in Zagreb (1917)

Chronic lack of medical staff of all kinds, and particularly of physicians, was particularly felt during World War I, due to their mass mobilization. Budapest and Vienna hindered the initiative to establish a medical school in Zagreb for decades, fearing a class of intellectuals independent of authority. Feeling that the moment is right, in 1917 Ban Antun Mihalović (1868–1949) ordered the founding of the School of Medicine in Zagreb. By imperial decree, the first three full professors of the School of Medicine were appointed,







Fig. 9. Founders of the School of Medicine: Wickerhauser, Čačković and Mašek

all of whom were doctors from the Sisters of Charity Hospital. These were the royal consultant, Dr Teodor Wickerhauser, Dr Miroslav Čačković and *primarius* Dragutin Mašek (Fig. 19.).

At the first faculty meeting of the School of Medicine in 1918, Professor Dr Miroslav Čačković was elected the first dean and Professor Dr Dragutin Mašek vice-dean¹².

Sestre milosrdnice Hospital between two world wars (1918 – 1939)

After World War I (1918) and the administrative division of former Yugoslavia, the health care system was centralized. All the decisions were made in Belgrade. The hospital continued its work, although with great difficulty. It was named Sisters of Charity of Saint Vincent de Paul General Hospital and was an accredited private institution.

Under the new Health Care Act, the head of hospital was in charge only of the nuns, while the Hospital was required to have a special administrator appointed by the archbishop's advisory body (Nadbiskupski duhovni stol). Therefore, from 1919 onwards, the duty of the Hospital administrator was taken over by priests who managed the hospital until 1934.

It was already clear to Dragutin Mašek that medicine would soon be divided into narrower fields, so he assigned specific fields to the new doctors arriving to the III Department. Thus, in 1919, urology was taken over by Aleksandar Blašković, and otorhinolaryngology was managed by Mašek. Doctor Mašek was the head of the III Department for 25 years (1894 – 1919).

Urology had developed and progressed from the original science of general surgery to the extent that it became an independent profession. In Croatia, it was acknowledged as a speciality under the Act on Medical Specialities from 1921.

Dr Blašković introduced an array of surgical procedures very soon after their application began internationally. In 1921, he performed the first Coffey's bilateral ureterosigmoidostomy and in 1924 the first perineal prostatectomy. He was the first in Croatia to perform Millin's retropubic prostatectomy in 1946. He published some 15 articles on various fields of urology. Owing to all his activities in the field of urology, the history remembers him as the "father of modern Croatian urology".

The first independent Department of Urology (1926)

In 1926, Dr Aleksandar Blašković established the first independent Department of Urology in Croatia in Sestre milosrdnice Hospital. In the beginning, the department had 20 beds. After becoming an independent department, surgeons started performing procedures on the upper urinary tract as well. The Department operated professionally, accompanied by scientific work. It performed extremely well, and Blašković selflessly transferred his knowledge and professional secrets to his younger colleagues. In 1927, he was appointed honorary Professor of urology at the School of Medicine in Zagreb, where he founded the first department of urology.

Two important events marked the year 1934 at Sestre milosrdnice Hospital. First, the Sisters of Charity took back the management of the hospital and Hospital administrators were appointed by the decision of the Superior General (*Vrhovno poglavarstvo družbe*). The other important event took place at the urology department. The year 1934 can be marked as the beginning of endoscopic surgeries. After obtaining the instrument, doctor Blašković performed the first transurethral resection of the prostate (TURP), only three years after it was performed by Joseph McCarthy (1874 – 1965) in the USA. Transurethral surgeries of the prostate and urinary bladder tumours were accepted in the Hospital as a standard method, much earlier than in other larger health care facilities in Europe¹³.

The first Urology Clinic in Croatia (1943)

During World War II, when numerous soldiers were also treated at the Hospital, its progress was stopped. Hospital departments in which teaching was done were titled "educational departments" or "clinics", as necessary and as proposed by the School of Medicine. In 1943, under Aleksandar Blašković's management, the Department of Urology was granted the status of a Urology Clinic, the first one of its kind in Croatia. During World War II, Blašković was head of the department of urology at the School of Medicine and became a full professor in 1944. Due to pressures from Belgrade, the Department of Urology at the School of Medicine was abolished in 1945, ending professor Blašković' teaching career. The Hospital's

Urology Clinic was also abolished and Blašković was stripped of his professor title. He managed the Department of Urology as *primaries* until 1951^{14,15}.

National Hero Dr Mladen Stojanović General Hospital (1948 – 1991)

The Hospital saw the end of World War II in very poor condition. At first it was considered whether it should be abandoned and demolished or turned into a social institution for the elderly. It was still owned by the Sisters of Charity of St. Vincent de Paul, right until 1948, when, under the Act on the Nationalization of Property, it was placed under the management of the people's government bodies and named "National Hero Dr Mladen Stojanović General Hospital". Doctor Mladen Stojanović (1896 - 1942) worked at the Hospital for some time. Sisters of Charity were banished from their own hospital. Patients were then cared for by the cleaning staff and other personnel trained for the task. The Hospital became an independent institution of the Municipal People's Committee which took over the funding^{16,17}.

Urology after World War II

Blašković retired in 1951. He had managed the Department of Urology for 32 years (1919 – 1951). After him, the Department of Urology, which later became the Urology Institute, was managed by *primarius* Bogoslav Barac (1907 – 1990). At the time, the department had two locations. Barac managed to bring the entire Department to a single location, where the Department of Urology is located even today. Despite political pressures and the fact that he was not a member of the Communist Party, Barac managed to keep urology as a separate Department. Throughout his work, he never stopped anyone from acquiring new professional and scientific knowledge, which resulted in further development of the Department.

In 1957, Urology Section was established within the Croatian Medical Association. In 1971, the Hospital became a university hospital as a teaching base first of the School of Dental Medicine and later of the School of Medicine, as well. It was called Dr Mladen Stojanović University Hospital¹⁸.

After 28 full years at the position of the head of urology, Dr Barac retired in 1979.

The management of the Department of Urology was taken over by Ruder Novak (1925 – 2015), grandson of the Croatian writer, Vjenceslav Novak. He graduated from the School of Medicine in Zagreb, specialized in surgery and urology and, was elected full professor in 1975. Having undergone training in various urology centers in Europe, doctor Novak introduced radical kidney, bladder and prostate tumour surgeries into clinical practice, and became our most respected expert in the field of surgery of the urethra. At the time, urology was a well-established profession, so by 1980 almost every hospital in Croatia had a urology department and at least one urology specialist. In 1981, the Department of Urology in Vinogradska Hospital was promoted to the status of a Clinic of the School of Medicine of the University in Zagreb for the second time in its history. Prof. Novak introduced new surgical techniques for kidney stone surgery, percutaneous surgery, and founded the paediatric urology section. The Clinic building underwent large-scale reconstruction in 1984. The surgical area was renovated. It now has three operating theatres, one of which is endoscopic. Intensive care unit with 8 beds and a urology polyclinic were built. Spatial conditions were improved, especially in terms of patient comfort. At the time, the Clinic had two interdisciplinary centers - the Center for Urinary Bladder Cancer and the Renal Lithiasis Center.

As professional activities advanced, scientific work started gaining more importance. The Clinic has a long tradition of organizing scientific and professional symposiums. Until 1991, a three-day symposium called "Urology Days" had been held for eleven years in a row, and all the lectures were published in the journal *Anali*, published by the Dr Mladen Stojanović University Hospital. The gathering had always been attended by numerous international authorities from the field of urology. Professor Novak managed the Clinic until 1990. Dr Ivo Kraljić was appointed new Head of Clinic.¹⁹

Sestre milosrdnice University Hospital (1991) and urology during the Croatian War of Independence (1991 – 1995)

In 1991, the hospital's former name was restored - Sestre milosrdnice University Hospital. At the celebration marking the event, Mother Superior said: "We



Fig. 10. Heads of the Department of Urology through the history

were here, we are here and we will always be here", implying their spiritual presence. Since 1993, the Hospital, as a clinical institution, is state owned. The Governing Council consisting of 9 members elects hospital directors.

The Hospital played an important role in the Croatian War of Independence from 1991 to 1995. It played its part in the organization and provision of health care on more than one level. It treated the wounded coming from smaller medical centers or directly from the battle field. It established mobile surgical teams that covered the entire war-afflicted territory of Croatia. When war operations and the front line moved closer to Zagreb, war hospitals were organized in the towns of Velika Gorica and Samobor. In the first years of the independent Croatian state, urology professionals exhibited high levels of professionalism in difficult times and were one of the first to offer their services to the Ministry of Health^{20,21}.

From the Center of Excellence for Prostate Tumours (1998) to the European Educational Center (2011 and 2017)

All professional and scientific activities culminated in 1998, when the Clinic became the Reference Center for Prostate Tumours of the Ministry of Health of the Republic of Croatia. Due to cooperation with other hospitals' clinics, knowledge about prostate cancer improved, enabling the Clinic to become the leading institution for this pathology.

Assistant Professor Ivo Kraljić, PhD, spent 10 years as head of the Clinic, right until the end of 1999. In 2000, Prof. Ognjen Kraus, PhD became the new head of the Department of Urology. Professor Kraus started working at the Urology Clinic in 1972. Among other, he worked in paediatric urology, so he managed the Urology Paediatric Section from 1977. Prof. Kraus is

associate professor at the School of Medicine in Zagreb. The Urology Clinic organized a number of international symposiums. In 2001, at the Endourology Symposium, it presented the endoscopic surgical technique, its achievements and potentials, in the light of the fact that it is the Clinic with the longest tradition in endoscopic surgery, dating back to 1934. In 2002, the Clinic organized the International Symposium on Prostate Cancer, and, in 2004, the Third Urology Symposium on Lymphadenectomy, under the auspices of the European Association of Urology (EAU). The reconstruction of the Clinic's building continued, in an effort to make it a place where patients can be accommodated with comfort and dignity. In 2006, largescale construction works were undertaken on the reconstruction of patient areas on the ground floor and the first floor and of the polyclinic. The result is work space and patient facilities in line with the standards of our time²².

Prof. Ognjen Kraus led the Urology Clinic until the end of 2010. In 2011, Prof. Davor Trnski, PhD, associate professor at the Department of Urology at the School of Medicine in Zagreb, became Head. Back in 1985, Prof. Trnski was the first to introduce percutaneous kidney-stone surgery, only three years after Dr Marberger from Vienna performed the first surgery of this kind. The following years saw an expansion of percutaneous kidney surgery coupled with continuous advancement in medical technology. Throughout his career, Prof. Trnski focused on radical surgery of malignant diseases of the urinary tract and endoscopic surgery, which he performed with great skill and precision, simultaneously selflessly passing his knowledge onto younger generations. The Clinic staff actively participate in national and international gatherings, do scientific work, publish numerous articles in national and international journals and advance in their careers (Fig. 10.).



Fig 11. Staff and residents of the Department of Urology

The European Board of Urology, which operates within the European Association of Urology, certifies individual European urology clinics for implementing standardized residency training programs in urology. In 2011, the Urology Clinic of the Sestre milosrdnice University Hospital Center became the first and only certified clinic in Croatia, to a five-year period. In other words, the Clinic meets all the criteria for being a residency training center for urology residents from all over Europe. The quality of the Clinic's work is evidenced by the fact that its certification was renewed in 2017, until 2022.

Prof. Davor Trnski was head of the Clinic from 2011 until 2015, when he was succeeded by the author

of this text, Prof. Boris Ružić, PhD, who worked as Assistant Hospital Director (2008 - 2012), and since 2016 is the President of the Croatian Society of Urology. Parallel to professional activities, scientific work is becoming increasingly important at the Clinic. We continue to improve urology activities, educating our younger colleagues (Fig. 11.).

None of this could have been accomplished without the wholehearted support and cooperation of the nurses and other employees of the Clinic, from its very beginnings to this day.

Today, the Urology Clinic of the Sestre milosrdnice University Hospital Center is a modern tertiary care medical facility, where the most complex urological procedures are performed using state-of-the-art medical equipment (Fig. 12.).

Where are the Sisters of Charity today?

Since the Hospital's founding, great attention has been given to the nursing profession and nursing care. This important part of medical care has always been provided at a very high level. One of the reasons is most certainly the fact that the Hospital was managed by the Sisters of Charity for 88 years (1846 – 1919 and 1934 – 1949). They were not only hospital's owners, but also the first nurses taking care of patients and assisting doctors.



Fig 12. Sestre milosrdnice University Hospital Center today

At the moment of writing this article, there are only two nuns working at the Sestre milosrdnice University Hospital Center, out of the twenty-six trained nurses currently employed in the other hospitals, retirement homes and hospices. The nuns have left, but their spirit lives on in the Hospital.

Conclusion

Mašek and Blašković laid the foundations for urology in Croatia. Urology profession built on these foundations. Over the years, department heads had changed, but luckily for the patients, approach to work had not. Despite its great history, the Clinic does not rest on the laurels of its predecessors. Today, it is a modern urology department together with its European role models.

This paper does not list all the events or all the persons who worked quietly and contributed to the professional and scientific advancement of urology. This particularly refers to those doctors who were never heads of the Clinic, and to other health care professionals and non-medical staff who worked together to promote the reputation of the Department of Urology and of the Hospital. It also does not mention those whose contribution is important, but who still work at the Hospital - we leave it to future generations to judge them.

At the end of this stroll down the Vinogradska Hospital's Department of Urology and calling out to eternity and all those great individuals who have left their mark in history, I am pleased to leave this text to serve as guidance even after we and the main actors of this paper are gone.

Therefore, I would like to thank all our predecessors who had continuously transferred their knowledge and surgical experience onto us, encouraged us and believed in us.

Acknowledgments

The authors declare that there is no conflict of interest regarding the publication of this article.

The authors received no funding for preparing this manuscript.

References

- Eugen Kvaternik. Politički spisi: rasprave, govori, članci, memorandumi, pisma, Znanje, Zagreb, 1971.
- Maruševski O. Zagrebački biskupi i nadbiskupi. Zagreb: Školska knjiga, 1995.; 461.
- Sveti Vinko Paulski (Internet). Družba sestara milosrdnica sv. Vinka Paulskog – Zagreb; 2017. Available from: http://www.milosrdnice.hr/novosti/o-nama/utemeljitelji/sveti-vinko-paulski/.
- 4. Šarinić P, Štenger Ž. Između Haulikovog hospitala i Mašekovog III. odjela. Liječ Vjesn Zagreb, 1975; 97:533-535.
- 5. Thaller L. Teodor Wickerhauser. Liječ Vjesn 1933; 55:466-471.
- Zdravstveno izviešće Javne opće bolnice milosrdnih sestara, Liečnički viestnik 1885.; 7:93.
- Sto pedeseta obljetnica Kliničke bolnice "Sestre milosrdnice" 1846. – 1996. Nakladnik Klinička bolnica "Sestre milosrdnice", Zagreb, 1997.
- 8. Šarinić P, Štenger Ž. Je li Mašek Blaškovićev Odjel bio III ili IV? Liječ Vjesn, Zagreb 1975.; 97:715-717.
- Godišnje izvješće Bolnice milosrdnih sestara u Zagrebu, III. odjel, Liečnički viestnik 1896.; 18:74.
- Gušić B. Prof. dr. Dragutin Mašek (1866. 1956.). Liječ Vjesn 1956.: 78:197-9.
- Kraljić I. Izvorište Hrvatske urologije u Bolnici milosrdnih sestara u Zagrebu. Vlastita naklada Zagreb, 1999.
- 12. Medicinski fakultet. Proglas o imenovanju dr. Teodora Wickerhausera, dr-a Dragutina Mašeka Bosnodolskoga i dr-a Miroslava pl. Čačkovića Vrhovinskog za redovite javne profesore Medicinskog fakulteta. Liječ vjesn 1918; 4: 180-181.
- Šarinić P. Pabirci iz naše urološke prošlosti (1877 1918). Liječ vjesn 1970.; 92:1435-42.
- 14. Krivec O. Sjećanje na prof. A. Blaškovića. Liječ vjesn 1970.: 92:204.
- Bazala V. Bolnica sestara milosrdnica u Zagrebu (povodom skore 100-godišnjice osnutka bolnice). Liječ Vjesn 1942; 64:343.
- Klinička bolnica "Dr. Mladen Stojanović" Zagreb 1845-1985.
 Anali KB M. Stojanović, Zagreb 1985: 135-137.
- Hudolin V. Klinička bolnica "Dr Mladen Stojanović" Zagreb 1985. Zagreb, Klinička bolnica "Dr Mladen Stojanović".
- Krivec O. Organizacija urologije u SR Hrvatskoj. Lijč Vjesn 1969; 91:533.
- 19. Novak R. Povijesni razvoj urologije. 1845-1985 KB Dr. M. Stojanović Zagreb 1985.
- Kraljić I. Urology in the Sestre milosrdnice University Hospital 1894. – 1994. Acta Med Croat. 1996.; 50:49-52.
- Kraljić I. The Mainspring of Croatian Urology. Acta Clin Croat 1997; 36:3-14.
- Klinička bolnica Sestre milosrdnice. Sto pedeset peta obljetnica: 1846. – 2001. Nakladnik Klinička bolnica Sestre milosrdnice, Zagreb 2001.

Sažetak

POVIJEST UROLOGIJE U BOLNICI SESTARA MILOSRDNICA

B. Ružić, J. Katušić, B. Spajić, A. Reljić, A. Popović, G. Štimac, I. Tomašković, Š. Šoipi, D. Justinić, I. Grubišić, M. Tomić, M. Knežević, I. Svaguša, I. Pezelj, S. Nikles, M. Pirša i B. Vrhovec

Prošlost hrvatske urologije jasno određuje njezinu pripadnost medicinskom i civilizacijskom krugu zapadnoga svijeta. Klinika za urologiju KBC "Sestre milosrdnice" najstarija je urološka ustanova u Republici Hrvatskoj. Osnovana je 1894. kad je otvorena nova Bolnica sestara milosrdnica u Zagrebu u Vinogradskoj ulici. Te je godine dr Dragutin Mašek osnovao tzv. III Odjel na kojem su se operativno zbrinjavali osim uroloških bolesnika, bolesnici sa bolestima uha, grla i nosa, sa očnim i dermatološkim bolestima. Dragutin Mašek već tada je vidio da će se medicina uskoro dijeliti na uža područja, pa je dolaskom mlađih liječnika na III. odjel njima prepuštao određena područja, tako da je urologiju preuzeo Aleksandar Blašković koji 1926. godine osniva prvi samostalni odjel za urologiju u Hrvatskoj. Imenovan je 1927. za profesora urologije na Medicinskom fakultetu u Zagrebu gdje osniva prvu katedru za urologiju i vodi predavanja i vježbe. Pod njegovim vodstvom Odjel za urologiju dobio 1943. godine status Klinike za urologiju, prve u Hrvatskoj. Temeljem svih tih aktivnosti na urološkom području povijest ga pamti kao "oca moderne hrvatske urologije". U godinama koje slijede čelnici urologije su se mijenjali, a svjetonazor u radu na sreću bolesnika ne. Savjest, povjerenje, stručnost i milosrđe. Uostalom, to je znamen koji bolnica nosi u svom imenu. Svih tih desetljeća Klinika za urologiju je pratila suvremene svjetske pravce razvoja, objektivno kasneći tek nekoliko godina za vrhunskim ustanovama u svijetu. Cjelokupna stručna i znanstvena urološka djelatnost kulminira 1998. godine, kada Klinika postaje Referentni centar za tumore prostate Ministarstva zdravstva Republike Hrvatske i 2011. godine kada je postala Centar obuke Europskog odbora za urologiju (European Board of Urology). Sve postignuto ne bi se moglo ostvariti bez svesrdne pomoći i suradnje medicinskih sestara i drugih djelatnika klinike od prvih početaka urologije do današnjih dana. Unatoč bogatoji prošlosti, Klinika ne živi na uspjesima svojih prethodnika. Danas je ta urologija zajedno s njezinim uzorima europska moderna urologija.

Ključne riječi: Bolnica sestara milosrdnica; Mašekov III. odjel; Dr. Aleksandar Blašković; Klinika za urologiju KBC Sestre milosrdnice