



## The genesis and development of the Lodz otolaryngology

Joanna Sułkowska<sup>1</sup>

<sup>1</sup> University of Social Sciences, Poland

### Summary

The purpose of this article is to outline the circumstances of the origins and the development of the school of Lodz otolaryngology. The origins of otolaryngology treatment in Lodz date back to the early years of the twentieth century. The following years resulted in the creation of four centers of research and teaching. They derive from a common root, which was the Department of Medicine of Ear, Nose, Throat and Larynx, University of Lodz (today 1<sup>st</sup> Department of Otolaryngology of Medical University of Łódź, Clinic of Otolaryngology and Laryngological Oncology, Norbert Barlicki Medical University Hospital No. 1) founded in 1945. The dynamic development of the institutional and scientific Lodz otolaryngology stems from the process of increasing specialization in medical disciplines, as well as getting a better access to treatment and science, which happily became the participation of contemporary Poles. The history of Lodz otolaryngology is inextricably intertwined with the development of our city and the beginnings of insurance treatment in Poland (Kasa Chorych, Ubezpieczalnia Społeczna), with further changes in the functioning of social welfare.

### Key words

history of otolaryngology, Lodz laryngology treatments, history of Lodz otolaryngology

*So, what brings profit to contemporary people monumental meditation on the past, dealing with the classicism of earlier times? It adds that the size of which existed once, in any case possible once was, and so once again it will be possible; boldly walks his way, because now doubt that it fell on weaker hours, if not demands can impossibility, she had to resign from the field.*  
– Friedrich Nietzsche [1]

## Introduction

Medicine is a science based on experience, is empirical, meaning that all hypotheses and theories that scientists set themselves, are verified. Huge is also the importance of practical medical disciplines. This begs the question of whether today's doctors with access to the latest discoveries in biology, genetics, biophysics, biochemistry, and genetic engineering, using medical robots as an aid in surgical procedures in the field of multi-specialty physician, like: cardiac surgery, neurosurgery, orthopedics, otorhinolaryngology need historical analysis [2]. It seems that today's physician does not need to know the history of their own discipline to be a good specialist, effectively diagnose and treat their patients. The contradiction to this thesis, however, is expressed by many scientists and practitioners in the field of medicine. Almost all the works of medics begin with a look at the past. The analysis of historical development and institution building is undoubtedly useful for the modern doctors, since it allows faster and better understanding of the problem [3]. Knowledge of the achievements of their field gives the possibility of setting new paths for explorative research. Today's medicine presents us with a number of very complex ethical issues [4]. It is hard to imagine today a discussion about equal access to medical services, the problems of birth control, abortion, in vitro methods supporting infertility treatment, or euthanasia without reference to the opinion of seniors who are a kind of oracle for our conduct [5]. For Władysław Kopaliński ethos is „the guiding criteria, ideals, bothering a group of community” [6]. The authority of scientific ethos was formed, which consists of patterns of honest, competent and professional occupation [7]. Otorhinolaryngology (Greek ous - ear, rhinos - nose, larynx - voice box, logos - science), the word is a relatively young medical specialty dedicated to the diagnosis and treatment of diseases of the nose (rhinology), pharynx, larynx and ears (otology). In the mainstream of its interests is also phoniatics whose domain are disorders of voice and speech and audiology focused on

physiology of the sense of hearing and the diagnosis and rehabilitation of hearing disorders, laryngological oncology [8]. Also, the surgical treatment in the specialty including surgery of ear, salivary glands, nose and paranasal sinuses, tongue, throat, larynx, and esophagus, reconstructive surgery, skull base surgery [9]. Lodz academic otolaryngology has turned seventy. Its development resulted in the birth of four leading centers of research and academic teaching, which are derived from a common trunk, Department of Medicine Ear, Nose, Throat and Larynx of University of Lodz (today 1<sup>st</sup> Department of Otolaryngology Medical University, Clinic of Otolaryngology and Laryngological Oncology, Norbert Barlicki Medical University Hospital No.1) founded in 1945. In 1958 the Department of Otolaryngology, Military Medical Academy has been created (now 2<sup>nd</sup> Department of Otolaryngology, Medical University of Lodz, Department of Otolaryngology, Oncology, ENT, Audiology and Phoniatics located in the University Clinical Hospital No 2. Military University Central Hospital) [10]. In 1970 the Institute of Pediatric ENT Department of Pediatrics, Medical University of Łódź (since 2002 Department of Otolaryngology, Audiology and Phoniatics Institute of Medical University) was established. In 1987 a unit for children was created by the Department of Polish Mother's Memorial Hospital (since 1998 Otolaryngology ICZMP). Creators and medical staff of these centers were the staff and students of the Department of Ear, Nose, Throat and Larynx Lodz, then Medical Academy and the University of Lodz. Polish Society of Otolaryngology has been running for almost a hundred years. It was created in 1921. It was the ninth medical scientific society in Poland. The first one was created in 1820 as Polish Medical Association [11]. Since 1992, the full name of the association is the Polish Society of Otolaryngologists - Head and Neck Surgeons (PTORL). Academic achievements, research, transfer of knowledge and experience and uniting the ENT environment deserve immense respect and recognition [12]. Lodz branch operates dynamically as Otolaryngologists Society gathering most of ENT from the province for meetings, conferences and conventions concentrated on learning and disseminating the new diagnostic and therapeutic methods, improving their medical knowledge, which is a required procedure for every doctor. Polish otolaryngology for children began to grow up early, as early as 1895 with a foundation of the first 7-bed pediatric otorhinolaryngology department in Warsaw Children's Hospital [13]. Lodz otolaryngology for children represented by

the Clinic of Otolaryngology, Audiology and Phoniatics of Medical University, as well as municipal wards proudly maintains the traditions of care for children with upper respiratory tract and ears diseases [14]. Birth of Lodz otolaryngology The origins of ENT treatment in Lodz date back to the early years of the twentieth century. According to the department address calendar „Residents of Lodz” in 1900 practiced 5 and in 1913 - 11 ENTs [15]. They exercised care of the sick mostly on an outpatient basis. One of them was Jerzy (Uri) Rosenblatt (b. 1872), the Vice-President of the City Council of Lodz, member of the State of the Polish Kingdom, one of the founders of the Lodz Jewish Charity Association, Society of Music and Literary, conducting from the 1899 study at Piotrkowska 35 [16]. Difficult conditions of ENT treatment were associated with the lack of staff of this specialty not only in Lodz, but in the whole Polish territory. In 1917, the territory of the Polish Kingdom was populated with 12 000 000 inhabitants and there were only 57 beds in otolaryngology (50 in Warsaw and only 7 in hospitals outside the capital). In Lodz in 1917 Poznanski's Hospital offered only 4 ENT and ophthalmology beds, and the Children's Hospital of Anna Maria (now Janusz Korczak, on Pilsudski 71 Street) had only 3 beds of that profile [17]. In 1906 the Ears and Throat Outpatient with subdivision of otorhinolaryngology in the aforementioned Anna Maria hospital was established. The first heads of the unit in 1913 were - Dr. Jan Pieńiążek (1871-1943) and Dr. Bruno Czaplicki (1884-1964). In 1919, Dr. B. Czaplicki organized and for many years managed the 4th Otolaryngology Division of District Military Hospital (now Clinical Hospital WAM, Żeromskiego 113), a branch that was associated for many years, managed by Dr. Daniel David Helman (1875-1942), one of the few otiatric specialists in Poland. He announced in Polish and German the pioneering work in this field of medicine: “Some remarks about the role of the organism in crude green in inflammation of primary external auditory meatus and the case of subacute mastoiditis cured by Bierła”. In the interwar period they created new branches of otolaryngology. In 1925, at the Leonia and Izrael Poznanski Hospital Foundation the „Jewish” Department of Surgery with the subdivision of ofotorhinolaryngology was established. The head physician was Dr. Dawid Rabinovich (1870-1942) [18]. He collaborated earlier with laryngologist - Dr. Ludwik Przedborski (1857 - 1911), one of the initiators of the construction of a hospital for the mentally ill, the chairman of the Section of Education Department of Lodz, Warsaw Society of Hygiene, vice

president of the Museum of Science and Art, of which he was also a patron. In 1931 there also functioned a 30-bed Otolaryngology Unit of President Moscicki Sickness Hospital for Lodz City (now Norbert Barlicki Medical University Hospital, Kopcińskiego 22 Street). The head physician of this unit was Dr. Jozef Imich [19]. Dr. Benedykt Dylewski who came from Stefan Batory University of Vilnius - headed the unit in the years 1936 - 1939. The department was founded by Dr. Weissbrum as the Division of Public Otolaryngology Municipal Hospital in Radogoszcz, Zgierska 170 Street. Dr. B. Dylewski also conducted educational activities [20]. In the 30s of the twentieth century the otolaryngologist Dr. Albert (Abram) Mazur (b. 1893), a graduate of the Universities of Prague, Vienna and Graz, one of the organizers „Ezras Ilmim” Lodz Society for Helping Deaf worked in Lodz [16]. According to the Yearbook of Medicine for the years 1933/1934 nineteen doctors specializing in ENT practiced in Lodz (tab. I) [21].

TAB. I. ENT doctors practicing in Lodz in 1933 -1934.

Doctor	Place of practice
Altenberger OttonGustaw	Cegielniana 47 Street
Bronikowski Kalikst	Ewangelicka 17 Street
Czaplicki Bruno	Piotrkowska 120 Street
Fuks Fred Zenon	Piotrkowska 200 Street
Helman Daniel (Dawid)	Piotrkowska 68 Street
Icykson Józef	Południowa 9 Street
Imich Józef	Moniuszki 1 Street
Klaczko Majer	Piotrkowska 99 Street
Liberski Józef Marjan	Pomorska 78 Street
Małowist Szymon	Gdańska 37 Street
Mazur Albert (Abram)	Piłsudskiego 65 Street
Neuman Jakób	Zachodnia 57 Street
Rabinowicz Dawid	Zielona 3 Street
Rakowski Zygmunt	11-go Listopada 9 Street
Rosenblatt Jerzy	Piotrkowska 35 Street
Rozenfeld Izaak	Zawadzka 8 Street
Weissbrum Dawid	Śródmiejska 7 Street
Wołyński Abram	Piotrkowska 121 Street
Żebrowski Aleksander	Pusta 13 Street

Own study based on the Yearbook of Medicine of the Republic of Poland 1933 / 34.

In November 1924 upon the initiative of Dr. Jan Pieniżek the Section of Otolaryngology Society was established in Lodz. It initially counted 10 members, and the board members in the years 1924-1926 were: Chairman Dr. Dawid Rabinowicz, vice-chairman, Dr. Brunon Czaplicki, secretary Dr. Kalikst Bronikowski, Treasurer Dr. Dawid Weissbrum. The society held meetings every two months to read papers on the experience in the diagnosis and treatment of ENT patients, discuss news in the literature, including the Polish ENT Review, subscription to which was mandatory for all members. In the years 1926-1928 Dr. Dawid Helman chaired the society (1875-1942). He was a doctor in the 31 Kaniowski Rifle Regiment, head of the Department of Otolaryngology District Hospital in Lodz. From 5 November 1939 Dr. D. Helman was a member of the Council of Elders in the Lodz ghetto, he headed the Municipal Department of Health, was also deputy supervisor of the Eldest of the Jews - Ch. M. Rumkowski.

With the development of Lodz hospitals, they created new centers of otolaryngology which employed doctors who were members of the Society. In the pre-war period many interesting scientific works have been published, whose authors were specialists from Lodz [22]. Ravages of war interrupted the work of the Society, but the tradition of meetings and exchange of experiences between professionals survived. Lodz Branch of the Polish Otolaryngology Society was reactivated as the initiative of the members of the team, just four months after the creation of the Department. The first meeting took place on 5 February 1946. The inaugural session was attended by 15 people. They chose the Main Board: Chairman: Prof. Dr. H. Lewenfisz-Wojnarowski, Vice-Chairmans: Prof. Dr. B. Dylewski, Dr. B. Czaplicki, Secretary: Dr. W. Łukomski, treasurer Dr. St. Kmita [23]. The creation of the Department of Otolaryngology in Lodz at the end of the Second World War, November 15, 1945 was established in the Department of Ear, Nose, Throat and Larynx Medicine, University of Lodz [24]. Its first headquarters was the hospital of Bonifraters, Kosynierów Gdyńskich 61 Street. Prof. Dr. Henryk Lewenfisz - Wojnarowski (1894-1956) who arrived from Warsaw was the organizer and first director in the years 1945-1952 [25]. He co-organized the Department with a prominent nose and throat specialist, former Professor of Stefan Batory University in Vilnius, Dr. Jan Szmurło (1867-1952). He was balneologist, historian of medicine, and also director of the Library of Medical University of Lodz and head

of the Department of History of Medicine and the Medical University of Lodz and Medical University [26]. The first seat of the Department of Ear, Nose, Throat and Larynx was Hospital of Bonifraters located on the Kosynierów Gdyńskich 61 Street. The Hospitaller Order of St. John of God, in Latin *Hospitalarius Ordo Sancti Joannis de Deowas*, founded by Saint John of God in 1540 in Granada, in 1571, was approved by Pope Pius V. From in 1586 one of the vows made by the monks is to serve the sick. The Order was brought to Poland in 1609. The first Polish Bonifraters monastery was founded in Cracow, where the Cracow merchant Valerian Montelupi offered a tenement for the needs of the convent. The first 12 hospital beds and a church were created there [27]. The idea of the hospital of Bonifraters was born in Lodz in 1924, when the Provincial Jan Misiak turned to the Curia for a consent to build a hospital. After obtaining the approval on 24 November 1924 the monks bought from Julia and Tomasz Dębowski grounds at Kosciuszko 4 Street on Chojny (today's Kosynierów Gdyńskich 61). On August 26, 1928 bishop Wincent Tymieniecki (1871 - 1934) dedicated the cornerstone of the emerging building [28]. The architectural design was done by a well-known architect Jozef Kaban. The resulting building was supposed to host hospital with outpatients: dental, surgery, GP, laryngology, pediatric and maternity clinic. Eventually, the building was opened in 1935 [15]. Its construction took more than 10 years and was funded by contributions from workers, sales and support headquarters bricks convent. Similar treatment centers operated then in Krakow and Katowice. The monks' motto was to „serve the poorest in accordance with the principles and rules of the Order” [29]. After the outbreak of World War II, the hospital was taken over by Germans, and from 1945 it served the needs of the city, and soon received the name of Dr. Jozef Brudziński. On the World Day of the Sick, February 11, 1996 on the occasion of 500 anniversary of the birth of St. John the Divine and the 70 anniversary of the Order of Bonifraters hospital in Lodz was restored to its pre-war name and character. In December 1945 it held the first lecture for the students given by prof. Dr. H. Lewenfisz - Wojnarowski „The importance of the knowledge of otolaryngology for each physician and individual specialists.” Clinical library was created, the beginning of which were gifts from private individuals ( Dr. Mieczyslaw Mazur and widow of Dr. Kalikst Bronikowski) and German books. Also in 1946 upon the initiative of Clinic employees, Łódź Branch of the Polish Otolaryngology Society was reactivated [30]. In

1947 the clinic was moved to a modernly equipped rooms on the second floor of the hospital building (now Clinical Hospital No. 1, Medical University, Kopciński 22 Street) [31]. The hospital was created upon the initiative of prof. Dr. Vincent Tomaszewicz (1876-1965) [32]. It was built by the Regional Association of Health Funds (Kasa Chorych) in Lodz and opened by the President of Polish Republic Ignacy Moscicki on April 25, 1930. At that time it was the most modern inpatient care center in Poland. The author of the hospital buildings was the architect of the city - engineer Wieslaw Lisowski (1884-1954), and its construction was entrusted to Nestler and Ferrebach [33]. The U-shaped building facade faces the street and its two side wings extend into the courtyard. In less than two years in the hospital building there were 420 beds, it run the departments: of surgery, headed by acting director of the hospital, Prof. Dr. W. Tomaszewicz; internal, chief of which was associate professor Solomon Mine; neurological led by a colonel, associate professor Wladyslaw Dzierżyński; gynecological managed by physician Dr. Franciszek Ksawery Gawroński; laryngological, the head physician was Dr. Jozef Imich and optical under the direction of Dr. Ryszard Sokolowski; and a reconnaissance, designed for uninsured people who required specialist diagnosis in the hospital. Laboratory of radiation was led by Dr. Stefan Keilson, bacteriological and anatomopathologic laboratory was managed by Dr. Rafalina Ściesińska and dissecting laboratory – by Dr. Kazimierz Ściesiński [15]. Medical staff were graduates of medical faculties from Krakow, Warsaw and other academic centers of the country. The idea of the creators of the hospital was his „classlessness”. All hospitalized, regardless of religion and social status, were offered the same conditions of stay and treatment [34]. Despite its size, the hospital was still not able to accommodate all those in need. After the establishment of the Social Insurance in 1937, it was decided to build a new south wing of the building. Its opening took place on 1 June 1938. The hospital had 690 beds then. The first director of the hospital was the initiator of its construction, prof. Dr. Wincent Tomaszewicz, who held the office from May 1930 to May 1933. Then, the hospital directors were as follows: 1933-1934 by Col. Dr. Stefan Miłodrowski, 1934-1936 Dr. Stanislaw Marian Gąsiorowski, 1936-1938 Dr. Stefan Bujalski, and at the outbreak of the World War II, Dr. Jerzy Edmund Suffczyński. In 1938, the hospital employed 361 people, including 43 doctors, 121 nurses, 12 administrative employees, 185 technical and physical employees. It was the largest inpatient resort, out of the 19 bran-

ches of the Social Insurance in Poland [33]. After the liberation of Lodz on January 19, 1945 the hospital became again an institution of the Social Insurance and received a new patron, Norbert Barlicki (1880-1941), an activist of the Polish Socialist Party [35]. On the basis of the Regulation of the Minister of Health of 10 December 1955, concerning the teaching hospitals it became a subdivision of the Medical University of Lodz, and received the name: Norbert Barlicki Clinical Hospital No. 1. (Clinical Hospital No. 1), and, since 2003 Lodz Norbert Barlicki Medical University Hospital No. 1, located on Kopcińskiego 22 Street. From the creation of the Department of Ear, Nose, Throat and Larynx Faculty of Medicine, University of Lodz its staff were doctors, whose aim was to save the life and health of patients, as well as concern for the scientific development of this field of medicine.

### Summary

Fast institutional and scientific development of Lodz otolaryngology stems from the process of increasing specialization of medical disciplines. The complexity of the subject of study requires the creation of centers of research and teaching focused on specific issues. The history of Lodz otolaryngology is inextricably intertwined with the development of the industrial city, of tying the beginning of treatment and insurance in Poland (Kasa Chorych, Ubezpieczalnia Społeczna) with dynamic industrialization. Lodz, not having a pre-war tradition of academic scientific achievements created it in close connection with the practice. The creation of the University of Lodz, the Medical Academy and the Medical University of Lodz, led to the creation of research centers in the field of otolaryngology. The process of development of scientific research and implementation of new diagnostic and therapeutic methods made possible by science, which bound to the center of Lodz.

### Bibliography

1. Nietzsche F. Niewczesne rozważania, [w:] O historii, pod red. A. Łaskiego, Oficyna Naukowa, Warszawa 2001, s. 97.
2. Szczeklik A. Katharsis, Wyd. Znak, Kraków, 2002, s. 58.

3. Imiela J. *Medycyna, moja miłość*, Wydawnictwo Literackie, Warszawa, 2012, s.47.
4. Wulff. HR, Pendersen SA, Rosenberg R. *Filozofia medycyny*, Wydawnictwo Naukowe PWN, Warszawa 1993, s. 13.
5. Piątkowski J. *Etyczne problemy w medycynie a biologiczna natura człowieka*, Farenheit, 2006, 50, s.17.
6. Kopaliński W. *Słownik wyrazów obcych i zwrotów obcojęzycznych*, Wydawnictwo Muza SA, Warszawa, 2000, s. 159.
7. Janczewski G. *Problemy medycyno – prawne otolaryngologa pełniącego ostry dyżur*, [w:] *Ostry dyżur. Otolaryngologia*, Wyd. Alfa - medica-press, Bielsko –Biała 2003, s. 8 – 14.
8. *Wielki Słownik Medyczny*, Wyd. Lekarskie PZWL, Warszawa, 1996, s. 954.
9. Olejniczak I, Bojanowska- Poźniak K, Gryczyński M. *Zarys rozwoju otolaryngologii w medycynie*. *Otolaryngologia* 2006; 5(2): 71-75.
10. Olszewski J. *Jubileusz 55-lecia Klinii Otolaryngologii i Onkologii Laryngologicznej z Zespołem Pracowni Audiologicznych i Foniatrycznych. Jubileusz 10.lecia II katedry Otolaryngologii UM w Łodzi*, *Magazyn Otolaryngologiczny* 2014; T.13,1, (49): 5-10.
11. Gierek T. *Przemówienie Przewodniczącej Zarządu Głównego Polskiego Towarzystwa Otolaryngologów Chirurgów Głowy i Szyi na uroczystości otwarcia XXXVIII Zjazdu PTORL*. *Otolaryngologia Polska* 1999; 53(30): 37.
12. Cieszyńska J, Tretiakow D, Kuczkowski J, Siebiert B. *Forum Medycyny Rodzinnej* 2014; 8(5): 25.
13. Gryczyńska D. *Laryngologia dziecięca*, [w:] *Zarys historii otolaryngologii polskiej 1879-1995*, pod red. B. Latkowskiego, Wyd. AM w Łodzi, Łódź 1996, s.133-134.

14. Gryczyńska D. Otolaryngologia dziecięca, Wydawnictwo Alfa-mediacapress, Bielsko- Biała, 2007, s.9
15. Fijałek J, Indulski J. Opieka zdrowotna w Łodzi do roku 1945. Studium organizacyjno-historyczne, ss. 118, 377, 346.
16. Kempa A, Szukalak M. Żydzi dawnej Łodzi. Słownik biograficzny. Tom I. Oficyna Bibliofilów, 2001, s. 75 - 130.
17. Hertz M. Sprawa oddziałów oto-laryngologicznych w szpitalach miejskich, Medyczna Kronika Lekarska 1917; T. 52, nr 30.: 382-383.
18. Kierzek A. Otorinolaryngologia w okresie zaborów-Lwów, Poznań, Łódź, Magazyn Otorinolaryngologiczny 2016; T.15, 3 (59): 103.
19. Barciński J. Oddziały i lecznictwo ambulatoryjne – Łódź, [w:] Zarys historii otolaryngologii polskiej w latach 1879-1995, op. cit., s. 27.
20. Kurnatowski A. Profesorowie i docenci wydziałów medycznych Uniwersytetu Łódzkiego i Akademii Medycznej w Łodzi 1945 - 1964, Wyd. UM w Łodzi, Łódź, 2003, s. 52..
21. Konopka S. Rocznik Lekarski Rzeczypospolitej Polskiej, 1933/34. Zakład Graficzny DRUKPRASA, Warszawa, 1933, s. 419 – 443.
22. Czaplicki B. Wspomnienia o działalności Sekcji Łódzkiej Polskiego Towarzystwa Oto – Laryngologicznego w okresie 1921 – 1939, z archiwum dr Anny Pajor.
23. Protokoły posiedzeń Oddziału Łódzkiego PTORL – materiały wewnętrzne.
24. Sułkowska J, Gryczyński M. Z historii łódzkiej otolaryngologii. Otolaryngologia Polska 2004; T.58, 6: 12221 – 1226.
25. Janczewski G. Tworzyli polską laryngologię Henryk Lewenfisz – Wojnarowski. Magazyn Otolaryngologiczny 2004; T. 3, nr 10: 36.

26. Zabłocki S. Otolaryngolodzy polscy – uczestnicy Powstania Warszawskiego, *Magazyn Otolaryngologiczny* 2004; 6: 24.
27. Historia chrześcijaństwa, pod red. T.Dowley'a, Oficyna Wydawnicza „Vocatio”, Warszawa, 2002, s. 550.
28. Budziarek M. Łodzianie, *Wyd. Literatura*, Łódź, 2000, s. 32 – 35.
29. List Konwentu O.O. Bonifratrów do Rady Miejskiej w Łodzi z dnia 1.10.1930 podpisał przeor Konwentu OO Bonifratrów O. Eustachy Miłkołajewski, Akta m. Łodzi, sygn. 18766.
30. Katedra i Klinika Otolaryngologiczna, „*Annales Academiae Medicae Lodzensis*”, 1970, T.13, supl. 6, s. 335-344.
31. Sylwanowicz L, Latkowski B. *Kronika Kliniki Otolaryngologicznej w Łodzi część I. Lata 1946 – 1973.*
32. Sadowska A. Wybitny chirurg pierwszy dziekan. Życie i działalność prof. dr med. Wincentego Tomaszewicza, op. cit., s. 41-42.
33. Goldstein J, Fijałek J, Sadowska A. Historia Szpitala Klinicznego Nr 1 im. Norberta Barlickiego, „*Annales Academiae Medicae Lodzensis*”, 1980; 21(20): 33-42.
34. Noszczyk W. *Zarys dziejów chirurgii polskiej*, Państwowe Wydawnictwo Naukowe, Warszawa, 1989, s. 307.
35. Albert A. *Najnowsza historia Polski 1914 – 1993*, Wydawnictwo „Świat Książki”, Warszawa, 1995, s. 185.

### **Address for correspondence**

dr n. med. Joanna Sułkowska  
University of Social Sciences,  
Gdańska 121 Street, Lodz  
email: jsulkowska15@wp.pl