

PEDIATRIC SURGERY IN ROMANIA – A BRIEF HISTORY

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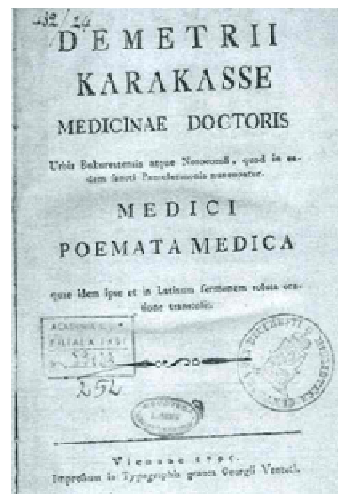
Abstract

First hospital dedicated to children in Romania was founded in Bucharest in 1858 – Grigore Alexandrescu Children’s Hospital and had two departments, Pediatrics and Pediatric Surgery, although pediatric surgery as a speciality did not exist for another nearly 20 years. Operations were performed by general surgeons. It was the first in the Balkan region. In Romania, in 1874, the Speciality of Pediatric Surgery and Orthopaedics appears by separation from General Surgery led by Professor Grigore Romniceanu. The History of Pediatric Surgery in the world is well documented especially in France where first developed. In Romania there is sparse information about the history of pediatric surgery and is concentrated more on specific personalities than the speciality itself. A thorough research and honest narration of information needs to be conducted to gather all this information on a systematic exposure as we consider the history plays an important role in the evolution of an entity.

Keywords: pediatric surgery, Romania, Timisoara, history.

Medicine in Romania. History of medicine worldwide is well documented, but in Romania there is sparse information, especially about Pediatric Surgery. The 18th century came with great advancements and development all over the world and our lands were no exception. We can say that the medicine in our country began at the dawn of the

18th century. The first hospital in *Wallachia* - *Coltea Hospital* from Bucharest, was built in 1695-1714 on the initiative of Mihail Cantacuzino under the reign of Constantin Brancoveanu. The hospital was built at the same time with *Coltea Monastery* and had 24 beds. Not long after, in 1735-1750, Grigore Ghica built *Pantelimon Monastery* and *Pantelimon Hospital*. However, there were no doctors with training in *Wallachia* at that time, and the medical staff consisted of *bărbieri and felceri*. They did, among other duties, minor surgery, dental extractions, ortopedic reductions of fractures, tatoos, circumcisions, taking blood samples or assisted births. The first – true – romanian doctor was Dumitru Luca, or Dumitru Caracaș, as was said later by the ottomans. Was born, not known very well, either in 1728 or in 1730. He graduated medicine and philosophy in Vienna from where he returned in 1782 and settled in Craiova. After few years, in 1784, he moved to Bucharest to the call of Mihai Șuțu and named the general doctor of the city of Bucharest and the head of Pantelimon hospital. Dumitru Caracaș has been constantly concerned with the care of his patients and not only. His medical preoccupations extending to the prevention of illnesses and the education of romanians for good hygiene and healthy eating. He was the one who, for example, recommended the potato culture in our country. (1)



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Nicolae Crețulescu (1812-1900) was a nobleman, direct descendent of Brâncoveanu family. Studied medicine in Nantes, France. He worked as a doctor at Colțea Hospital where he created a school of surgery. He was also a very powerful political person. After the 1848 revolution is exiled in Constantinople where he practice medicine in a military hospital. Came back in 1849 and continue his work at Colțea Hospital. Later in 1857, together with Carol Davila founded the first faculty of medicine in Romania. As a prolific political person had many important positions as Senator, President of Senate, President of The Council of Ministers, Minister of Internal Affairs, Minister of Justice, Minister of Finance, three times Prim-Minister of Romania and many others. Nicolae Crețulescu was a founding member of Romanian Academy (2,3)



Until 1828, in Bucharest were 8 doctors with a diploma, but unfortunately we did not had any medical school to train doctors or any other medical staff. This matter was about to change with the great contribution of Doctor Nicolae Crețulescu (Kretzulescu) and Doctor Carol Davila. In 1857 they created *The National School of*

Medicine and Pharmacy – the first faculty of medicine in Romania. Later this school will become Carol Davila University of Medicine and Pharmacy form Bucharest. In 1869, studies at The National School of Medicine and Pharmacy became equivalent to the studies of other faculties of medicine in France and later in Italy. (1-4)

Carol Davila (1828-1884) on his real name Carlo Antonio Francesco d' Avila was a Romanian pharmacist and doctor of French origin, born in Italy and with medical studies in Germany and France. He came in Romania in 1853 at the age of 25 at the call of Barbu Știrbei to organize Romanian medical system. He had many health problems during his life as he developed a palsy on one arm, typhus fever, anthrax and tuberculosis. Despite all his problems he remained faithful on his profession and built step by step the Romanian medical system. Only few of his accomplishments can be mention on this brief history lesson. 1857 – with the help of Crețulescu founded The National School of Medicine and Pharmacy. Created pharmaceutical and veterinary education system. Created orphanages and schools for children with disabilities. Introduced free healthcare for the poor. Because of him, the service of military ambulances and sanitary trains was prepared early and tens of thousands of lives were saved. He eradicated many epidemics. As prince Carol said to Queen Elizabeth: *Davila is everywhere you need him.* (4,5,6)



Pediatric surgery worldwide and in Romania. Pediatric surgery is relatively new in the world compared with general surgery. Midwives and nurses cared for sick children at home, and foundling homes often associated with monasteries or a cathedral looked after abandoned, unwanted children. The death rate at these institutions was high, possibly because more attention was paid to salvation of soul than the child's life. Before 19th century there were no doctors or hospitals in the world dedicated to children. Children could be admitted to adult hospitals, but most physicians felt frustrated because there was little they could do for the sick infants. In Europe, in 1614 King Louis XIII of France ordered that children to be treated separate form adults at Lyon City Hospital and a surgeon named Mosnier was assigned to the children. This separation remained unchanged in France until the end of 18th century. The first independent hospital for children in the world was opened in 1802, in Paris, France. In 1844, Paul Guersant (1800-1869) created the first Pediatric surgery department at this Hospital. At that time he wrote a book called *Notices sur la*

Chirurgie des Enfants , which is the very first known book about pediatric surgery. This remarkable book covers the full range of pediatric surgery from traumatology to the external birth defects and tumors. Paul Guersant is considered one of the pioneers of pediatric surgery. Professor Guersant noted the ability of fractured bones to mold and heal, or the ability of children to fully recover from tuberculosis. He operated hydrocele, tonsillectomies, rectal polyps, bladder stones, treated burns with cold water and glycerine dressings and if the wound would be infected he used chlorinated soda anticipating so antiseptis. He also operated cleft lip, punctured imperforated anus or performed colostomies. Guersant was truly a surgeon for the whole child. Other Children's hospitals in Europe appeared at least 30 years later, St. Petersburg – 1834, Vienna – 1837, Moscow – 1842, Prague – 1842, Berlin – 1843, Graz – 1844, Copenhagen – 1845, Munich – 1846. (7,8)

First hospital dedicated to children in Romania was founded in Bucharest in 1858 – Grigore Alexandrescu

Children's Hospital and had two departments, Pediatrics and Pediatric Surgery, although pediatric surgery as a speciality did not exist for another nearly 20 years. Operations were performed by general surgeons. It was the first in the Balkan region. In Romania, in 1874, the Speciality of Pediatric Surgery and Orthopaedics appears by separation from General Surgery led by Professor Grigore Romniceanu. Grigore Romniceanu studied medicine at The National School of Medicine and Pharmacy after which he obtained his Doctor of Medicine degree in Paris in 1869. Was a surgeon at Children's Hospital in Bucharest and the Dean at the Faculty of Medicine in Bucharest between 1887-1894. (9)

Pediatric surgery at Timisoara. Children's hospital was founded in 1902 with the support of a businessman from Arad named Antal Sailer. In 1913-1914 Pediatric Surgery Department is established with 10 beds and having Dr. Titus Rusu as Head of Department. In 1945 the hospital becomes a Univesitary Clinic led by Dr. Iosif Nemoianu and the Pediatric Surgery Department becomes Pediatric Surgery Clinic. 1950 – all subunits unite under the name Unified Clinical Hospital Nr.3 for Children led by Dr. Rosianu Ioan – Pediatric surgeon. In 1994 – the name is changed to Louis Turcanu Clinical Children's Hospital and 2 operating theaters are being built with german sponsoring. In terms of professional activity and educational progress, the Clinic evolved very much under the leadership of Professor Dr. Vasile Fufezan, a true founder of the Pediatric Surgery School. He was a true leader, revolutionized neonatal surgery in this Clinic and modernized didactic activity. Master and worthy teacher, was respected by collaborators, disciples, students and colleagues. Among his colleagues in didactic and clinical activity we name Dr. Constantin Duică, Dr. Leonida Ionescu, Dr. Mircea Socoliuc, Dr. Aurel Bulucea, Dr. Eugenia Sborea, and Dr. Pavel Tepeneu (also Head of Department). Starting 2010, a new era of pediatric surgery begun – minimal invasive surgery. First laparoscopic operation in our Clinic was performed 8 years ago by Prof. Dr. Boia Eugen with the help of Dr. Pantea Steilian (from General Surgery). Today the Clinic is equipped with 4 individual laparoscopic systems, including a 3D one. Until 2017 we had 692 laparoscopic interventions. Since 2012, under the aegis of EUPSA (European Paediatric Surgeons' Association) we organize every year qualified course of Minimal Invasive surgery training with well-known personalities from around the world with hands-on sessions. Pediatric Surgery Department is part of Romanian and International Pediatric Surgery Associations, naming SRCP (Romanian Society of Pediatric Surgery), ARCPMI (Romanian Association for Minimal Invasive Pediatric Surgery), ESPES (European Society of Paediatric Endoscopic Surgeons), EUPSA, WOFAPS (World Federation of Associations of Pediatric Surgeons).

Pioneers of Pediatric Surgery in Romania. *Professor Dumitru Vereanu (Bucharest)* was the first specialist in Pediatric Surgery in Romania and was the Head of Department at Pediatric Surgery and Orthopedics at Grigore Alexandrescu Children's Hospital. He recounts

in his book "From the Memories of a Child Surgeon" his first experience in the European scientific world - a bridge made by participating in 1960 at the International Pediatric Surgery congress in Prague. It was hard to get his passport, although he was invited at the expense of the organizers. There he presented an original Romanian contribution: esophagoplasty with a gastric tube made of the greater curvature of the stomach. It was the Gavrilu procedure. There were presented the cases operated by Professor Dan Gavrilu in children, as well as those performed with very good results by Professor Vereanu. At the congress, he met many surgeons from around the world (some knew only from the literature). This was how the bridge was established and strengthened: knowing what was new in the clinics in Europe and presenting the Romanian experience. As a note, first esophagoplasty with stomach – the Gavrilu procedure, was performed in 1951 by Professor Dan Gavrilu in a child of 14-15 years old who had a burnt esophagus. Professor Vereanu was also the one who trained Professor Pesamosca. *Professor Gabriel Ionescu (Iasi)* was the Head of Department at Pediatric Surgery of St. Mary Children's Hospital from Iasi and the Dean of Grigore T. Popa University of Medicine and Pharmacy from Iasi in the '90s, after which he left Romania and went to South Africa where he promoted Romanian pediatric surgery school as the Head of Department at Pediatric Surgery from Pretoria Academic Hospital from South Africa. His name is linked to many innovations in surgical oncology and pediatric surgery. He got in the spotlight when in 1983 participated at the operation for separation of the conjoint twins *Lina and Gherghina* – 3rd case as complexity in the world up to this day. *Professor Vasile Fufezan (1928-2000, Timisoara)* was Head of Department at Pediatric Surgery in Timisoara between 1982 and 1994. He was a true founder of the Pediatric Surgery School in Timisoara and not only. He was a true leader, revolutionized neonatal surgery in this Clinic and modernized didactic activity. Master and worthy teacher, was respected by collaborators, disciples, students and colleagues. It is best known for two personal surgical techniques, one is the use of azygos vein patch for enhancing the esophageal anastomosis in esophageal atresia repair and the other is the use of omphalocele membrane for staged closure of the defect instead of excising it and using synthetic membrane. *Professor Alexandru Pesamosca (1930 – 2011, Bucharest)* it is perhaps the most famous Romanian Pediatric surgeon. He was hated and loved at the same time by his colleagues as he used to operate any case leaving nothing for the rest, himself claimed to have operated over 45 000 cases during his lifetime. In 1970 had his doctoral thesis *Contributions in the diagnosis and treatment of ano-rectal malformations*. 1972-1984 is Head of Department at Pediatric Surgery in Grigore Alexandrescu Children's Hospital. Had written 390 scientific papers, 5 books and made 20 medical films. Between 1972 and 1975 he performed the first operations in Romania in the thoracic cavity of the newborn. Among the great Romanian and international medical personalities with whom he worked, we name Denis Pellerin, Bernard Duhamel, Ion Juvara, Dan Gavrilu and Marian Ionescu.

Performed 452 esophagoplasties with colon making it among the largest series of single institution specific procedure in the international literature. He has contributed to Portal Hypertension treatment by operating over 100 cases and performing spleen-renal, spleen-suprarenal, spleen – ovary/testis, spleen-mesenteric vascular shunts. He was a pediatric surgeon for the whole child. In the last period of his life he used to live in his office, never leaving the hospital. *Professor Iacob Iacobovici (Cluj)* was a general surgeon, but also operated children as at that time there were no pediatric surgeons. Was Head of Department at Pediatric Surgery in Grigore Alexandrescu Children's Hospital and is considered one of the founders of medical school in Cluj. He introduced the Iacobovici procedure – resection of the first rib and phrenic nerve. *Professor*

Alexandru Cosacescu (1887 - 1951) was born in a town in Buzau county and he graduated medicine in Bucharest. Although he was a general surgeon, contributed to development of pediatric surgery as he published the first course of Pediatric Surgery and was Professor of Pediatric Surgery and Pediatric Orthopedics since 1942 in Bucharest. *Professor Tudor Zamfir* known for his personal procedure of triceps brachii disinsertion in the treatment of elbow ankyloses in children. This procedure is found in the International book Campbell's Operative Orthopaedics. Other outstanding personalities who had great contributions to Pediatric Surgery in our country are *Mircea Socolescu, Toma Dicescu, Nicolae Niculescu*, but there is little to none available information about. (10, 11)

References

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| <ol style="list-style-type: none"> 1. Dan Mironescu, Istoria Universitatii de Medicina si Farmacie Carol Davila – Bucuresti, film documentar, 2015 2. Parhon, Constantin Ioan, Viața și activitatea doctorului N. Kretzulescu, București, 1944 3. Xenopol, A. D., Nicolae Kretzulescu. Viața și faptele lui. 1812-1900, Editura Socec, București 1915 4. Gheorghe Brătescu, Tinerețea lui Carol Davila editura Albatros, București, 1979 5. Sabina Cantacuzino, Din viața familiei Ion C. Brătianu, vol.I ediție îngrijită de Elisabeta Simion, Editura Albatros, București, 1993 | <ol style="list-style-type: none"> 6. Carol I al României, Jurnal, Volumul I, Editura Polirom, București, 2007 7. John G. Raffensperger, Children's Surgery – A Worldwide History, 2012 8. Robert Carachi, A History of Surgical Pediatrics, 2009 9. Lelia Zamani, Din istoria Spitalului Iubirei de Oameni – Filantropia (De la infiintare pana in anul 1940), Muzeul Municipiului Bucuresti XXV 10. S. Ionescu, Alexandru Pesamosca la sfarsit de drum, un nou inceput, Chirurgia 2011, nr. 5, 106 :685-687 11. Mircea Beurean, Societatea Romana de Chirurgie – punte de legatura cu medicina europeana, Revista Viata Medicala, Nr. 42(1344),2015 |
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