

## Alexandru D. Rădulescu

### the founder of the Romanian orthopedic school in Cluj

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*Academician Alexandru. Rădulescu*

The great Romanian Union from 1918 had the effect of passing the University of Cluj-Napoca under the authority of the Romanian state. The reorganization of the University of Cluj-Napoca set in motion the whole Romanian society, especially the academic field. The representative Romanian intellectuals released a series of organizational suggestions regarding the background and content of the education system that was going to be applied in the third University from Romania.

Based on the Decree no. 4031, on 1st October 1919, in Cluj-Napoca was founded the University of Higher Dacia, that included also a Faculty of Medicine. The first rector of the Higher

Dacia University was Sextil Pușcariu and the first lecture in Romanian was held on 3<sup>rd</sup> November 1919, entitled "The Duty of Our Life" by Vasile Pârvan. The first Dean of the Faculty of Medicine was Professor Iuliu Hațieganu, who on 7<sup>th</sup> November 1919, presented the first course in Romanian language at the Medical Clinic I entitled "Icterus catarrhalis", held in the enthusiasm and excitement of the audience formed by students and doctors, as well as others famous scientist from Cluj-Napoca.

Professors from all over the country, especially from Bucharest, came to Cluj to complete the lack of teachers. Dr. Alexandru Rădulescu was an important member of the Romanian surgery and then orthopedic society and the founder of the Orthopedic School in Cluj.

Alexandru Rădulescu was born in Focsani on 10<sup>th</sup> September 1886. Between 1905-1911 he attended the courses of the Medical Faculty from Bucharest, having as professor the famous surgeon Toma Ionescu. He became an external physician during 1908-1910 and then an internal physician during 1910-1914. In 1913 he was elected president of the Association of Medical Students.

In 1916 he participated to the First World War with the rank of sub-lieutenant doctor and ends the war with the rank of captain. He was decorated with the Order of Queen Maria and the Star of Romania with a military ribbon, as commander. In 1919 he was sent as chief of the surgical team in Hungary where the local fights were still going on. Then he went to Cluj-Napoca, where he was appointed as a deputy (lecturer) at the Surgical Clinic of Prof. Iacob Iacobovici.

In 1920 he published a series of cases: medullary compressions caused by fractures, Pott disease, intradural lipoma. In 1921 he was named director of the Regina Maria Surgical Orthopedic and Tuberculosis Hospital recently opened in Cluj-Napoca.

The Orthopedic Hospital in Cluj was a shattered building, a former asylum of blinds, and Al. Rădulescu transformed it into a modern 60-bed building. Until 1940, in this hospital, he had a rich osteoarticular traumatology activity, supported by a scientific and publishing activity appreciated by many specialists. This hospital also included a prosthesis studio, orthosis and orthopedic footwear, physio-kineto-therapy compartments, ergo-therapy and a school for infirm children requiring long-term hospitalization. The whole organization of the hospital demonstrated the advanced concepts of the young doctor Rădulescu in the field of rehabilitation of the motor deficiencies.

In his speech held in 1923, in the presence of the Queen Mary at the inauguration of the Orthopedic Hospital of Cluj-Napoca, Al. Rădulescu spelled out his scientific belief: *"I will seek from all my powers so this Romanian hospital will be a scientific and cultural factor, forcing me to make a small specialized school around me, keeping intact the soul contact with science, which also warms me and is a good companion for a lifetime. From this I assure you that I will not prevent any contrariety."*

The famous French surgeon Fred Albee, who visited the hospital, considered it a complex and exemplary institution. Orthopedic Hospital becomes a modern building with 120 beds.

Here, Rădulescu also carried out exemplary work for the development of the Romanian prosthetics industry at the level of the world technique. The prosthetic and orthosis studio was the first in our country. In the same year, he operated for the first time a Pott disease using his original technique, practicing a spine synthesis with autologous rib graft.

His scientific activity in Cluj-Napoca is represented by:

1. 1921 spine synthesis technique (published in Press Medical then La revue d'Orthopedie);
2. 1923 presents the results obtained after simple or plastic laminectomy with costal graft in six cases of medullary compression at the Surgical Society of Paris;
3. 1924 Delbert technique - osteosynthesis of a femoral neck pseudarthrosis with a fibular graft;
4. 1925 published in Paris the monograph "Greffes et transplant osseux chez l homme";

5. He is named member of the French Society of Orthopedics and Traumatology and correspondent for Romania of the Revue of Orthopedique Surgery Journal;
6. 1926 – made remarks about congenital anomalies of the spine (Klippel Feil syndrome, cervical ribs, supernumerary vertebrae);
7. 1927 published in Cluj the first specialized journal in the country „The Journal of Orthopedics and Infantile Surgery” and organized the first Romanian Orthopedic Society, in 1935. On this occasion, in the opening speech, Prof. Mouchet of Paris said: *“a great nation like Romania where surgery is so brilliantly represented, needs to have an orthopedic journal capable of perfecting students' education and spreading across the border the observations and discoveries of his masters, and Dr. Rădulescu taking the initiative to create this journal, deserves to be encouraged and congratulated.”*
8. Between 1928-1933 he published a series of three monographs at the *Cartea Românească* Publishing House in Cluj, entitled: Small surgery and surgery pathology elements, awarded by the Romanian Academy; Medullary compression; Generalities of osteoarticular tuberculosis;
9. In 1935 he imagined an original technique of solving hip ankyloses by curved osteotomy of the coxal bone;
10. Presented original surgical procedures for the treatment of post-polio sequelae in Vienna at the international orthopedic congress;
11. In 1939 he published in Cluj-Napoca the first Romanian Surgical Orthopedy Book, 998 pages in which all the essential aspects of the specialty were systematized for the first time and all the current operative techniques were presented, some of which were original: arthrosis of the ankle, process of treatment for syndactyly, spine synthesis, a particular type of intertrochanteric osteotomy (in console), triple osteotomy of the knee, extra-articular shoulder and hip arthrodesis, hallux valgus cure, etc.

In 1940, following the political events from Europe, he moved from Cluj-Napoca to Bucharest where he founded the first orthopedic hospital, located in Nerva Traian Street, in the place of an old hospital named „Love for the people”. The hospital is then moved to Cotroceni in 1945 and becomes the Inner Hospital 303.

In 1948 at the age of 62, he made his retirement papers. At the same time, the first department of orthopedics and traumatology was established at Brâncoveanu Hospital and at the insistence of the collective he accepted the professor title of the department.

In 1957 Alexandru Rădulescu (figure 1) was elected member of the Romanian Popular Republic's Academy.

In 1957 he was elected member of the French Academy in Paris. During this period, he published together with other distinguished orthopedic doctors, many specialties books and monographs.

He was a PhD coordinator for many doctoral papers, among which we quote the doctoral thesis of Mr. Acad. Prof. Univ. Dr. Nicolae Gorun entitled: "Genetic malformations in congenital deformities caused by limb deficits".

Among the important papers published after moving from Cluj-Napoca:

- 1951 "The flat foot" with Nicolae Robănescu
- 1954 "Treatment of chronic fistulized osteomyelitis" with Alfons Dorthemer
- 1955 "Problems of bone pathology" with Gabriela Broșteanu, Clement Baci, Alfons Dorthaimer, Nicolae Robanescu
- 1956/1957 Published in 2 volumes of "Surgical Orthopedics" with Alice Rădulescu and Clement Baci
- 1960 "Pseudarthrosis" with Prof. Iazicov in Moscow and Andrei Voinea
- 1964 "Knee" with Clement Baci
- 1967-1968 Publishes in 2 volumes "Osteoarticular traumatology" with Constantin Arseni, Clement Baci, Al. Simionescu, O. Troianescu, A. Varna, N. Robănescu
- 1975 "Bone graft transplantation" with Gh. Niculescu and O. Ciugudean.
- 1978 "Difficulties, attitudes and risks in the diagnosis and treatment of the locomotor apparatus trauma" with Gh. Niculescu and Dumitru Baci.

He had an impressive activity in all its plans. An enthusiastic practitioner, a good organizer with modern concepts, possessing remarkable teaching skills, he published more than 200 scientific papers and 18 monographs.

He was member of numerous scientific societies, such as: SICOT, SOFCOT, Romanian Society of Orthopedics, Medical Sciences Society of Cluj, Surgery Society of the locomotor apparatus.

*"My goal was to raise the orthopedic surgery in our country to the place it deserves and to fight for the Romanian accomplishment to be cherished, respected both in our country and abroad."*

He was self-taught: *"I did not travel, he said, I only made voyages and studies. You don't need to be self-taught anymore- it would be a mistake - you have a place to learn from."* He was a school opener, an excellent pedagogue, an emeritus professor, an excellent clinician and author of many surgical procedures that have his name.

Now, 100 years later since the Great Romanian Union, Prof. Al. D. Rădulescu deserves all the honor and consideration for his contribution, being considered as a pioneer of Romanian orthopedics and the founder of the Romanian Orthopedic School in Cluj and our country.

He died on 11 April 1979 at the venerable age of 93 years.