



80 YEARS SINCE THE BIRTH OF NEUROSURGERY IN ROMANIA A BRIEF HISTORICAL VIGNETTE

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The birth and development of neurosurgery as an independent specialty in Romania occurred almost simultaneously in two major university centers: Iasi and Bucharest. The promoters and creators of this new medical specialty in Romania were Prof. Dr. D. Bagdasar and Prof. Dr. Al. Moruzzi. These two titans of neurosurgery studied under great names – such as Cushing or De Martel.

Several other great surgeons have left a tremendous mark during the pioneering age of neurosurgery in Romania. Dr. D. Vasiliu, Dr. S. Ionescu or Dr. H. Askenasy are only few of the great neurosurgeons Romanian medicine had to offer. In a period when antibiotics were unavailable the diagnosis was based on clinical findings. Investigations had very high risks and the mortality was unacceptable. In these dark times Romanian neurosurgeons excelled and placed their patients' fates above their personal lives. Today, at the celebration of 80 years since the inauguration of the first completely autonomous neurosurgical unit, we pay tribute to these pioneers and feel the need to underline once more the great efforts doctors had to make so that neurosurgery in Romania would become a reality.

Romanian Neurosurgery has always had an important part to play in Central-Eastern Europe and with the efforts of new, dedicated generations, the role Romanian Neurosurgery has, will continue to expand, as many Romanian neurosurgeons now practice their fine art in most of the countries in Europe or even the United States.

Key words: Romanian Neurosurgery, Bagdasar, Moruzzi, Askenasy, Sofia Ionescu.

INTRODUCTION

Romanian Neurosurgery evolved as a self-sustaining specialty starting with the year 1935. Up until then neurosurgery was limited to sporadic interventions performed by some of the greatest surgeons. Some of those interventions were valuable achievements for those times given the resuscitation and anesthesia means available.

Antibiotics, corticoids or resuscitation were out of the question to begin with, and, even so, in 1895 N. Bardescu (1862–1937) is one of the few surgeons in the World able to perform a trigeminal ganglion resection. Other great surgeons such as Thoma Ionescu (1860–1926), Amza Jianu (1881–1962) or Iacob Iacobovici

(1879–1959) perform in this period, successful interventions for brain tumors, while Anastasievici Leonte (1853–1914) is one of the first Romanian surgeons to carry out interventions on the spinal cord.

MATERIALS AND METHODS

It goes without saying that the great fore-runners of neurosurgery received their impulse from their neurologist colleagues who were able to publish papers of great importance to Universal Medicine. Research such as those of Gheorghe Marinescu (1863–1938) (the first videographer in medical history), Nicolae Paulescu (1869–1931) (discoverer of insulin) or Grigore T. Popa (1892–1948) (discoverer of the pituitary-hypothalamic

portal system) represented great stimuli and allowed for the development of further therapeutical means for the brain and spine. In fact Nicolae Paulescu was considered by Harvey Cushing (1869–1939) to be the greatest researcher on the pituitary gland. Paulescu had published in 1908 in Paris a treatise on medical physiology (*Traite du phisiologie medicale*) in which he carefully described a possible means to access the pituitary gland through the temporal bone. N. Paulescu and H. Cushing became good friends over time.

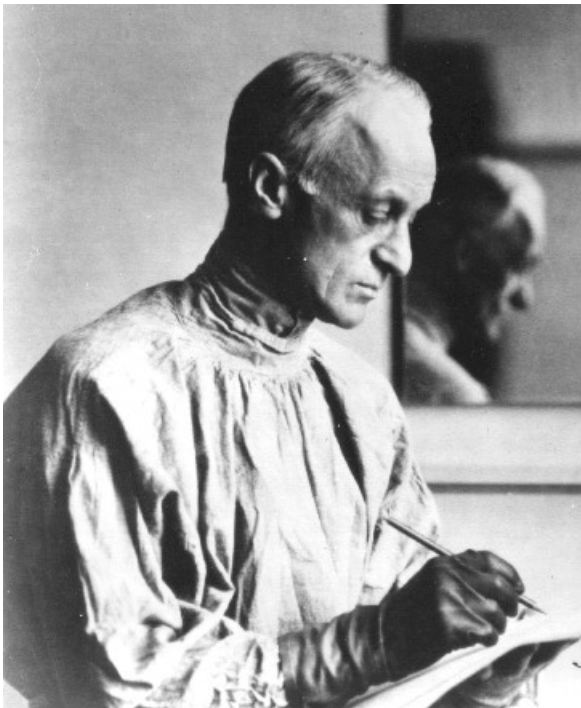


Fig. 1. Professor Harvey Williams Cushing.
Photo: Yale University School of Medicine.

The Romanian School of Neurosurgery – one of the oldest and most respected in Europe (during its glory days) – has bivalent roots. In this respect the Bucharest School of Neurosurgery draws its life-force from the United States of America – through pupils of Prof. Harvey W. Cushing (1869–1939) (Fig. 1) – such as Prof. Dimitrie Bagdasar (1893–1946) or pupils of Walter Dandy (1886–1946) – such as Dr. Dem Vasiliu. At the same time French Neurosurgery exerts a tremendous influence on Romanian Neurosurgery, especially given the fact that Thierry De Martel's pupil, Prof. Alexandru Moruzzi (1900–1957) was one of the founders of the neurosurgical center in Iasi, one of the largest cities in Romania.

Professor D. Bagdasar (Fig. 2) developed his skills under renowned masters such as Gh. Marinescu, D. Noica (1869–1937) or N. Butoianu (1876–1935). After being recommended by Professor Paulescu to Professor Cushing he travelled to Boston where he studied the tenets of neurosurgery from Cushing himself. He was without any doubt one of Cushing's best disciples. In one of his notes Cushing himself noted Bagdasar's hard work and dedicated energy. One of the historians of the World Federation of Neurosurgical Society describes Bagdasar as Cushing's honorary assistant and emphasizes the fact that Bagdasar used to sit at Cushing's right during official dinners.

Bagdasar worked in Cushing's clinic in Boston between 1927 and 1929. During the day he studied the basic principles of neurosurgery and neuropathology and during the nights he studied English to better communicate with his mentor and patients.

Arrived back in Romania, Bagdasar started his activity in 1929 and in 1935 he managed to open a completely autonomous neurosurgical unit in the country, in Bucharest. As the clinic evolved over the years it became one of the most important and most respected neurosurgical centers in entire Europe.



Fig. 2. Professor Dimitrie Bagdasar.

The Neurosurgical Clinic in the city of Iasi was born 2 years before its counterpart in Bucharest, within the “Socola” hospital for the mentally ill. Thus, the first neurosurgical department in Romania was born in Iasi with the direct support of Prof. L. Balif (1892–1967) and Prof. Alexandru Moruzzi (1900–1957) (Fig. 3) (who than became the first coordinator of the Neurosurgical Clinic in Iasi).

Prof. Alexandru Moruzzi’s neurosurgical training took place in Paris, under the direct guidance of Prof. Thierry De Martel. Prof. Moruzzi graduated the Medical School of Paris, and, despite his modest material resources he distinguished himself both as a medical extern and intern.

Between 1929 and 1930 he served under Professor De Martel and once returned to Romania, in 1930, he worked as a surgeon in Professor A. Jianu’s clinic at the Caritatea Hospital of Iasi.

There are various historical mentions of Professor Moruzzi’s personal material donations for his patients enabling them to continue their treatment. He visited Prof. Herbert Olivecrona’s clinic on various occasions and in 1935 he competed against D. Bagdasar and D. Vasiliu for Chief of Neurosurgery at the Central Hospital of Bucharest.

Alexandru Moruzzi and Dumitru Bagdasar both scored the same number of points, however, as Bagdasar had a longer surgical experience than Alexandru Moruzzi, the evaluation commission (which included: Prof. Butoianu, Prof. A. Jianu, and last but not least Prof. L Balif) decided that Bagdasar should be Chief of Neurosurgery in Bucharest. Professor Moruzzi passed away at the age of 57 during a plane crash in Paris. He left behind a remarkable neurosurgical legacy and will always be known as the incontestable founder of modern neurosurgery in Romania. His relentless work and academic endeavours have totally modified the thinking process in neurosurgery in Romania.

Harden Askenasy (1908–1975) (Fig. 4), the founder of Israeli neurosurgery, was also born in Romania in 1908 and studied medicine in Paris between 1927 and 1934. He studied neurosurgery under Clovis Vincent at Hospital de la pitie, in Paris and under Harvey Cushing, in Boston. He returned to Romania in 1939. As the Second World War erupted he was a field medic in

Transnistria and in 1944 he became chief of Neurosurgery at the Caritas Hospital in Bucharest.



Fig. 3. Professors A. Moruzzi (left) and L. Balif (right).

In 1948, Prof. H. Askenasy leaves Romania and travels to Israel where he becomes the founder of the first Israeli school of Neurosurgery at the Beilinson Hospital. He was a close friend of Ben Gurion and his fame as a great surgeon and clinician soon reached Europe. Patients who had received no chance of healing from European doctors traveled to Israel to find their cure in Professor Askenasy’s clinic.



Fig. 4. Professor Harden Askenasy.

Dr. Sofia Ionescu (1920–2008) (Fig. 5) the first woman neurosurgeon in the World developed

her skills in Professor Bagdasar's clinic starting with her early years as a medical student.



Fig. 5. Dr. Sofia Ionescu – the first woman neurosurgeon in the World.

Sofia Ionescu-Ogrezeanu was born in Fălticeni, a small city in the North-East of a Romania, in 1920. She graduated the Faculty of Human Medicine of Bucharest in 1945, and had the opportunity to study under great figures such as Francisc Rainer (1874–1994), Nobel Prize Laureate – Prof. George Emil Palade (1912–2008), Prof. Alfred Rusescu (1895–1981), Prof. N. Ionescu-Sisești (1888–1954) and many others.

She spent her student years in the clinic, during a time that wore the stamp of the Second World War. Wounded soldiers and civilians filled the beds of every hospital and required all the available hands. The war found her attending for patients in more than three hospitals in her native town. Her desire to better prepare for Neurology made her decide to undergo her summer internship in Professor Bagdasar's clinic in 1943. This event marked her first contact with “the golden surgical team”, led by Professor Dimitrie Bagdasar.

During her 47 year-long career, Dr. Sofia Ionescu found the time to teach others while

always coming up with creative solutions to the ongoing challenges. Between brain surgery in the morning, and spine surgery in the afternoon, being a wife and a mother of two, Dr. Sofia Ionescu found the time for research and publishing, which was, as she amusingly stated, done under a strict schedule, between two and four a.m.

After becoming a consultant, she started writing at a rate of two or three articles per year, published both in the country and abroad. Even after her retirement, she continued with her writing, with articles in Romanian medical journals.

DISCUSSIONS

The shape of the Romanian Neurosurgery as we know it today comes as a reward for all the efforts of highly driven individuals. Among them are Prof. C. Arseni (1912–1994) (Bucharest); Prof. N. Oblu (1912–1995) (Iasi); Prof. T. Iacob (1920–1975) (Cluj); Prof. V. Miclaus (1919–1977) (Timisoara); Prof. D. Miskolczi (1894–1978) (Tg. Mures). Their disciples – Prof. A. Constantinovici (Bucharest); Prof. L. Danaila (Bucharest); Prof. M. Rusu (Iasi) and last but not least Dr. S. Ionescu (1920–2008) (the first woman neurosurgeon in the World) reorganized the structure of Romanian neurosurgery, and in 1982 founded the Romanian Society of Neurosurgery.

They made history through the records they've held, their innovations, the surgeons they trained and their dedication towards the goal of saving lives. This paper comes as a testimony of the importance held by Romanian neurosurgery worldwide. It brings into attention the people and the values that drove them towards building a better tomorrow.

As proof of the important legacy Romanian Neurosurgery has, we mention Romanian contributions to development of neurosurgery in North Korea and Israel, the importance of Prof. Ladislau Steiner's (1920–2013) continuous work in developing Gamma Knife Surgery and last but not least, the long lasting partnerships Romanian neurosurgeons have with some of their more renown peers.

CONCLUSIONS

Romanian Neurosurgery has always had an important part to play in Central-Eastern Europe

and with the efforts of new, dedicated generations, the role Romanian Neurosurgery has, will continue to expand, as many Romanian neurosurgeons now practice their fine art in most of the countries in Europe or even the United States.

There are currently 25 neurosurgical units in Romania which cover the entire neurosurgical spectrum of pathologies. In Bucharest alone there are 7 neurosurgical units, 4 of them being tied to the “Carol Davila” University School of Medicine there. Throughout the 25 neurosurgical units in Romania there are a total of 302 neurosurgeons, residents included, all completely dedicated to the queen of the surgical specialties – neurosurgery.

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