

Past and present of the children's electroencephalography in Toruń

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Abstract

The beginnings of children's electroencephalography in Toruń can be seen in the period after the Second World War. On 15th May 1945 scientific researchers from the Faculty of Medicine of Stefan Batory University in Vilnius came to Toruń in hope of recreating the faculty at NCU (Nicolaus Copernicus University). The assistant professor Janina Hurynowicz started the organisation of the Neurophysiology and Comparative Physiology Institute at the Faculty of Mathematics and Natural Sciences of the newly created NCU. In 1949, along with the liquidation of the Institute's Branch, the Central Regional Psychic Health Centre was created, where the management was taken over by Prof. Hurynowicz. Thanks to the efforts of Hurynowicz, one of the first EEGs in Poland came to Toruń. It was an American Rham 6. The students of Hurynowicz in the field of EEG were the professors Leszek Janiszewski, Władysław Traczyk and also Juliusz Narębski, who after the death of Hurynowicz was managing the laboratory for children and teenagers. The students of Prof. Narębski were Genowefa Olearczuk and Wanda Waczyńska. In 1987 the first EEG laboratory for children was organised in the Specialist Clinic in the Children's Hospital in Toruń by the chief of the Developmental Neurology Clinic Marian Łysiak, PhD, M.D. The lab was managed by Jolanta Kujawska. She underwent trainings in the first EEG Laboratory for Children and Teenagers in Poland organised in the Mother and Child Institute in Warsaw in 1950 under the supervision of Prof. Anna Koślacz-Folga and Michaela Pakszys, M.D. In 1988, after having been moved to the newly built children's hospital complex of the Children's Hospital and

the obtaining of a modern Pegasus, the children's EEG made another leap in its development. Kukawska qualified for the licence (1994).

Key words: EEG diagnostics in Toruń, EEG Laboratory for children.

Within a hundred-year history of electroencephalography the discipline itself became commonly acceptable [1]. Many years later its younger sister, children's electroencephalography, started to evolve. Its development took place after the WWII [2]. The war paradoxes of human and institutional fates caused that the beginnings of the specialisation should be seen behind the medical universities. On 15th May, 1945, along with the transport of emigrants from Vilnius, numerous scientific researchers from the Faculty of Medicine of Stefan Batory University came in hope of recreating the faculty in Toruń.

The assistant professor Janina Hurynowicz, M.D. (1894-1967), 51 then, was particularly passionate about the idea [3]. Soon she started the organisation of the Neurophysiology and Comparative Physiology Institute at the Faculty of Mathematics and Natural Sciences of the newly created Nicolaus Copernicus University in Toruń. In 1946 the Branch of the National Institute of Psychic Hygiene in Warsaw was created by the Ministry of Health. Among the others the care of children and teenagers belonged to the tasks of the Institute. In 1949 along with the liquidation of the Institute's Branch, the Central Regional Psychic Health Centre (Centralna Wojewódzka Przychodnia Zdrowia Psychicznego) at 24/26 Mickiewicza Street was created, where the management was taken over by Prof. Hurynowicz.

In 1949 one of the first EEGs in Poland was introduced, Rham 6, one of those that were brought from the USA by Kazimierz Dąbrowski, a friend of Prof. Hurynowicz. The most distinguished students of the professor in the field of EEG were the professors Leszek Janiszewski, Władysław Traczyk and also Juliusz Narębski (1927-1995), who after the death of Huryno-

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wicz was managing the laboratory for children and teenagers. He was born on 5th January, 1927 in Włocławek. Next year his parents with three kids moved to Vilnius, where his father was working as a city's main architect till 1937 and later as a professor of interior design at the Faculty of Arts of Stefan Batory University. After the war he came to Toruń with his family and other researchers from Stefan Batory University. The father, Stefan Narębski, took the position at the Faculty of Arts of the newly created Nicolaus Copernicus University. Juliusz Narębski, the son, studied at Medical University in Gdańsk (1947-1952). His first 9-month training he took in the Instituto Superiore di Sanita in Rome in the laboratory of neuropharmacology and biochemistry led by Prof. Ernest B. Chain (Nobel Prize Laureate) and Prof. V. G. Longo. He wrote PhD thesis in 1960 in the Institute of Animal Physiology at the Faculty of Biology and Earth Sciences, NCU, by the title of *The Bioelectrical Functions (EEG) of Rabbits in Latent Repetitive Anaphylactic Shocks during Chronic Allergic States* („Czynność bioelektryczna mózgu (EEG) królików w poronnych powtarzanych wstrząsach anafilaktycznych w toku przewlekłych stanów uczuleniowych”). The supervisor of the thesis was Prof. Hurynowicz. In 1965 Narębski received a postdoctoral degree on the basis of the thesis *The Analysis of Electroencephalographic Brain Reversible Mechanisms of Anaphylactic States* („Analiza elektroencefalograficzna mózgowych mechanizmów odwracalnych wstrząsu anafilaktycznego”). He became an associate professor in 1975 and he became a full professor at the Institute of Animal Physiology, NCU, in 1989. The professor was an active member of various societies and scientific committees. Since 1968 he was a member of the Physiological Sciences Committee of the Polish Academy of Sciences and in the frames of this project he was a member of the Clinical Neurophysiology and Epilepsy Committee; since 1972 he was a member and founder of European Sleep Research Society; since 1984 he was a member of the Board of Polish Society of EEGraphy and Clinical Neurophysiology of the 1st term. In the period of 1984-1992 he was the chairman of the Sleep Research Section and since 1992 he was the organiser and the first chairman of the Polish Society of the Sleep Research.

In his scientific research he much appreciated the co-operation with X. Kopystecki, PhD, M.D., the chief of the Department of the Central Medical Technology Centre (Oddział Centralnego Ośrodka Techniki Medycznej) in Białystok. The result of their work was a doctoral thesis supervised by Prof. Narębski (06.05.1976). He was an author or co-author of numerous works [4-8,10-12]. In 1993 he was distinguished with the Diploma and the Medal of Honour of Napoleon Cybulski [11,12].

The students of Prof. Narębski were the graduates of the Faculty of Biology and Earth Sciences, NCU. Genowefa Olearczuk, M.A. was doing researches on the 8 channeled Galileo system, Italian, and Wanda Waczyńska, M.A. was working on a more modern 16 channeled Medicor, Hungarian. The interpretations of the EEG investigations of children were taken care of by Prof. Narębski.

From 1998 the management of laboratory was taken over by Stanisław Izdebski, M.D., a specialist in psychiatry. He had a very modern for the times Schwarzer PM 32 Digital system with a computer enabling a traditional paper and electronic data

recording. The laboratory was doing three thousand EEG investigations annually, children from Toruń and the region accounting for 40%.

Meanwhile, in 1987 thanks to the initiative of the chief physician of the Children's Hospital in Toruń and the chief of the Developmental Neurology Clinic Marian Łysiak, PhD, M.D., an EEG laboratory for children was organised in the hospital. The lab had a 16 channelled Medicor. The chief position of the lab was given to Jolanta Kujawska, M.A., a graduate of the Faculty of Biology and Earth Sciences, NCU, Toruń. Her first contacts with EEG had taken place during the studies, while attending lectures of Prof. Narębski and later in the lab managed by him where she had started her first job in children's electroencephalography. Her further education had been provided by Prof. Anna Koślacz-Folga, M.D. and Michaela Pakszys, PhD, M.D. [13-18].

Prof. Koślacz-Folga was the organiser and the chief of the first Polish Electroencephalographic Laboratory for Children and Teenagers in the Mother and Child Institute in Warsaw, created in 1950, as well as the first chairman of the Developmental Electroencephalography Section.

Till 1988 the hospital provided the investigations only for children under 3-years-old. This year, after having been moved to the newly built children's hospital complex on the Skarpa housing estate, the lab underwent a consequent development. On 14th June, 1993, the lab received a modern EEG system, Pegasus EMS, made in Austria. In 1994 Kukawska was given the licence. The average number of the investigations in the years 1987-2006 oscillated around 1400 annually. In 2004 the dream of Prof. Janina Hurynowicz, the creator of Torunian electroencephalography, came true. As a result of the fusion of Ludwig Rydygier Medical University in Bydgoszcz and Nicolaus Copernicus University in Toruń, Ludwig Rydygier Collegium Medicum of Nicolaus Copernicus University came to existence [19].

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