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## Aleksej Yakovlevich Kozhevnikov (1836–1902)



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Aleksej Yakovlevich Kozhevnikov (1836–1902) is mainly known for his description in 1894 of “epilepsia partialis continua”, today referred to as Kozhevnikov’s epilepsy [1]. He made several other important contributions to neurology. Moreover, he can be considered the ‘father of Russian neurology’ because of his appointment in 1869 in Moscow to the newly created chair in neurology and psychiatry (13 years before Charcot at the La Salpêtrière) and his pivotal role for the development of this discipline in Russia.

Kozhevnikov, the son of a military officer, was born in 1836 in Ryazan, the same city in central Russia where 13 years later the physiologist Pavlov would be born. In 1853 he went to Moscow, where he obtained his degree in medicine in 1858. In 1860 he became assistant in internal medicine at the Moscow University Hospital. At that time the department was directed by Varvinskij, who played a crucial role in directing Kozhevnikov’s attention towards diseases of the nervous system. In 1865 Kozhevnikov completed a doctoral thesis in which he demonstrated that the underlying pathology of tabes dorsalis and of Duchenne’s ‘ataxie locomotrice progressive’ are identical [2]. From 1866 to 1869 he visited academic institutions in Berlin, Würzburg, Vienna, Munich, Paris, London, Geneva and Berne. He attended lectures by

Charcot and Griesinger, and worked in the laboratories of von Kölliker, du Bois-Reymond and Virchow. During this period he published two remarkable studies on the course of pyramidal and cerebellar nerve fibers including the transition from the Purkinje cell bodies into myelinated nerve fibers [3, 4]. In 1869 he was nominated ‘Privatdozent’ and appointed to the newly created chair of neurology and psychiatry. The conditions at the beginning of his work at the Novo-Ekaterininskij Hospital were difficult owing to shortages of space (initially only 19 beds), personnel, equipment and finances. Kozhevnikov had to give lectures in hospital corridors or directly at the bedside. In 1871 he was appointed as extraordinary professor and in 1881 as ordinarius (full professor) of neurology. Kozhevnikov was, as usual in his time, both a neurologist and a psychiatrist. He felt, however, that a separation of the two disciplines was necessary for the development of each. In 1889, relatively early compared with other European countries, Kozhevnikov gave the direction of the psychiatric division of his department to his favourite pupil Korsakov, who became the ‘father of Russian psychiatry’ and the first to describe (1887–1891) the amnesic syndrome in alcoholics. Kozhevnikov died in 1902 at the age of 66 from metastatic prostatic car-

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cinoma, from which he had suffered for a considerable time.

Most of Kozhevnikov's scientific publications were on clinical topics and, whenever possible, he applied the anatomico-clinical correlation method. In several papers on amyotrophic lateral sclerosis (ALS) he demonstrated degeneration of corticospinal fibers in the brainstem and hemispheres, contradicting Charcot's view that degenerative changes were restricted to the spinal cord [5]. Kozhevnikov's description of pyramidal cell loss in ALS [6] was of particular clinical importance because it proved that the origin of the pyramidal tract was confined to the precentral gyrus. In a monograph on aphasia in 1874 Kozhevnikov gave a detailed description of a case of sensory aphasia, though without anatomical verification [7]. A monograph on lathyrism was based on his experiences with 140 patients during the epidemic in the district of Saratov (winter 1891–1892) [8]. In 1892 Kozhevnikov opened a neurological museum in his clinic, to which he devoted much energy and means. This unique collection of neuropathological specimens, anatomical diagrams, illustrations and photographs had increased to 1500 exhibits at the time of his death; unfortunately it was destroyed during the Soviet period.

On the 21<sup>st</sup> January 1894, Kozhevnikov described to the Moscow Society of Neurology and Psychiatry the condition that perpetuates his name. In four patients seen between 1883 and 1893 he had seen "... constant clonic convulsions in strictly defined parts of the body", "epilepsia corticalis sive par-

tialis continua". These convulsions fluctuated in intensity and could develop into generalised epileptic seizures. Purely on clinical grounds Kozhevnikov postulated a chronic and localized inflammatory process within the motor cortex and recommended surgical removal as the only therapeutic option. In 1895 he published his findings in a German journal [9]. In the following years several further observations appeared on this new syndrome (e. g. Spiller and Martin in 1909, Wilson in 1928). Russian authors identified Russian spring-summer tick-borne encephalitis in Siberia as a cause of *epilepsia partialis continua*.

Kozhevnikov wrote the first textbook of neurology in Russia in 1883. In 1890 he was among the founding members of the Moscow Society of Neurology and Psychiatry, over which he presided until his death. In 1901 he founded the first Russian journal of neurology and psychiatry (Korsakov's 'zhurnal neurologii i psichiatrii') and became its first editor-in-chief. This journal has remained the leading Russian neurological journal until today.

The exceptional position that Kozhevnikov holds in Russian neurology is reflected also by the eminence of his pupils. To the so-called 'Moscow Neurology School' (in contrast to the 'St. Petersburg School' around Bekhterev) belonged Korsakov, Rot, who in 1895 described entrapment of the lateral femoral cutaneous nerve and coined the name *meralgia paraesthetica*, Darkshevich, who described the small nucleus in the midbrain now called after him, and Rossolimo. In his obituary Rot remembered Kozhevnikov as a highly intelligent,

honest, unassuming and very conscientious man, who devoted all his energy and time to work and science without concern for his own health [10].

■ **Note:** A. Y. Kozhevnikov should not be confused with Dr. A. M. Kozhevnikov, who was also a well-known neurologist in Moscow (specialist in neuroinfections, particularly syphilis) and who was among the 27 physicians called at Lenin's sick-bed.

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