

- 45 Mannuzza S, Klein RG, Truong NL, Moulton JL 3rd, Roizen ER, Howell KH, et al. Age of methylphenidate treatment initiation in children with ADHD and later substance abuse: prospective follow-up into adulthood. *Am J Psychiatry* 2008; **165**: 604–9.
- 46 Lee CT, Chen VC, Tan HK, Chou SY, Wu KH, Chan CH, et al. Suicide and other-cause mortality among heroin users in Taiwan: a prospective study. *Addict Behav* 2013; **38**: 2619–23.
- 47 Russell AE, Ford T, Russell G. Barriers and predictors of medication use for childhood ADHD: findings from a UK population-representative cohort. *Soc Psychiatry Psychiatr Epidemiol* 2019; **54**: 1555–64.
- 48 Rucklidge JJ. Gender differences in attention-deficit/hyperactivity disorder. *Psychiatr Clin North Am* 2010; **33**: 357–73.
- 49 Lichtenstein P, Larsson H. Medication for attention deficit-hyperactivity disorder and criminality. *N Engl J Med* 2013; **368**: 776.



Psychiatry in history

Neuroanatomical explorations of the human mind: the legacy of Albert W. Adamkiewicz (1850–1921)

Fabian-Alexander Tietze , Marcin Orzechowski  and Florian Steger 

Albert Wojciech Adamkiewicz, born on 11 August 1850, was a Polish physician whose pioneering research in neuroanatomy made him the eponym of the great anterior radiculomedullary artery. Despite his notable achievements in neurology, his critical engagement with psychodynamic theories of mental states and disorders is commonly ignored in research. This year we commemorate the 100th anniversary of his death.



Fig. 1 Albert Wojciech Adamkiewicz (1850–1921). Reprinted from Skalski JH, Zembala M. Albert Wojciech Adamkiewicz: the discoverer of the variable vascularity of the spinal cord. *Annals of Thoracic Surgery* 2005; **80**: 1971–5. © Elsevier 2005, reproduced with permission.

Adamkiewicz studied medicine in Königsberg, Breslau and Würzburg and became full professor at the Jagiellonian University in Cracow in 1879. Following a controversy about his claim to have discovered an antiserum against a carcinogenic parasite, for which he could not provide sufficient evidence, he resigned his professorship and left Cracow for Vienna in 1891. Little is known about his work as chief physician at the Clinic for Neurology at the Rothschild Hospital in Vienna, as most biographical studies on Adamkiewicz concentrate on his achievements in neuroanatomy. Until the end of his career, Adamkiewicz remained a controversial figure in the medical profession and published polemic articles against Viennese medical society. Interestingly, he also critically engaged with the newly established theory of psychoanalysis and tried to set a naturalistic exploration of human thought against the psychodynamic approach developed by Sigmund Freud (1856–1939). A neurological case study that Adamkiewicz published in 1887 received a sarcastic review by Freud, who tried to explain the case's casuistry using his own theory of hysteria. During his time in Vienna, Adamkiewicz elaborated a theory of human thought in which he tried to synthesise his findings from neuroanatomy with central theorems of psychoanalysis, such as psychosis and the unconscious. In 1902 he conceived a neurophysiological theory of unconscious thought in which he distinguished between neuroanatomical correlates of the unconscious and consciousness. Adamkiewicz held that if normally inactive, and therefore unconscious, cortical areas did not regulate their own neural activity, psychotic states can follow and voices might be perceived without external stimulation. His hypothesis was an early anticipation of present explanations of intrinsic neural activity in states of perceptual hallucinations.

The oeuvre of Adamkiewicz includes around 90 research articles and 10 monographs, which he published in Polish, German, French and even Latin. His late work has been overshadowed by scientific controversy but deserves renewed attention. It shows his efforts to provide a neuroanatomical grounding for mental disorders, making him an undervalued precursor of neuropsychiatry. Adamkiewicz died in Vienna on 31 October 1921, aged 71.

© The Author(s), 2022. Published by Cambridge University Press on behalf of the Royal College of Psychiatrists

The British Journal of Psychiatry (2022)
220, 72. doi: 10.1192/bjp.2021.143