A MODERN PERSPECTIVE ON SOME OF THE MOST HIGHLY CITED JNNP PAPERS OF ALL TIME

Nerve fibre degeneration in the brain in amyotrophic lateral sclerosis

Martin R Turner

NERVE FIBRE DEGENERATION IN THE BRAIN IN AMYOTROPHIC LATERAL SCLEROSIS
Author: Smith MC
Year published: 1960
Number of times cited: 95

An advertisement in The New Scientist dated 9 May 1957 read: “Technician or junior technician required for histology in neuropathological work. Some knowledge of photography an advantage. Salary according to experience. Apply in writing stating age and experience Dr Marion Smith, National Hospital for Nervous Diseases, Queen Square, London WC1”. Three years later the Glasgow trained neuropathologist (1910–1996) and President of the British Neuropathological Society published a paper entitled ‘Nerve fibre degeneration in the brain in amyotrophic lateral sclerosis’, based on detailed post-mortem examination of seven cases.

Cerebral involvement in amyotrophic lateral sclerosis (ALS) was already recognised. Seventy years prior, Gowers noted that upper motor neuron predominance, as well as the much rarer exclusively upper motor neuron phenotype termed primary lateral sclerosis, may also have significantly slower progression. Her observation of degenerating fibre tracts projecting to the thalamus is in keeping with the in vivo demonstration of particularly prominent microglial activation here.2

References