

## OBITUARY

Professor JA Simpson

30/03/1922 – 13/05/2009

Professor John (Iain) Simpson, who died recently, was an outstanding neurologist whose career was rooted in a love of neurophysiology. He was Professor of Neurology at Glasgow University between 1964 and 1987 and an honorary member of the BSCN. He was Honorary President of the Edinburgh International Congress of Clinical Neurophysiology in 2006.

Iain Simpson was born in Greenock and after a brilliant school and undergraduate career at Glasgow University he graduated in medicine with commendation in 1944. After junior hospital posts and lectureships in general medicine and neurology in Glasgow and Edinburgh, he moved south in 1953 to a fellowship in Arnold Carmichael's MRC unit at the National Hospital, Queen Square to further his interest in neuromuscular disease. He returned to Glasgow as consultant physician to the Western Infirmary, before being appointed senior lecturer in neurology at the University of Edinburgh. In 1964 he became the first professor of neurology at Glasgow University.

Iain Simpson's clinical judgement as a neurologist was always highly regarded and much sought after; it rested on the secure foundations of general medicine and neurophysiology, allied to his innate and infectious enthusiasm for the neurosciences. Despite heavy research and organisational commitments as his department grew and flourished, he held a regular EMG clinic and reported EEGs on his own patients for many years.

His research interests were wide-ranging; peripheral nerve and muscle always came first but he investigated the EEG and its correlation with neuropathology after cardiac arrest and published several papers on aspects of epilepsy and movement disorders. He will be remembered for two major contributions - on carpal tunnel syndrome and myasthenia gravis. In 1956 he was the first to use nerve conduction studies to investigate carpal tunnel syndrome, quite recently recognised as a median nerve disorder (as opposed to a root or plexus problem). Electrodiagnostic confirmation initially relied on demonstration of denervation confined to median muscles of the hand, no joke for the patient in those days of home-made EMG electrodes, distinctly larger and blunter than our modern disposable CNEs. Simpson used the new technique of motor conduction measurement to show focal slowing across the carpal tunnel; he also described the characteristic findings in deep ulnar neuropathy in a separate paper.

Simpson had long been fascinated by myasthenia gravis and in 1958 reported in *Brain* a comprehensive study of the effects of thymectomy. His seminal 1960 paper is undoubtedly the most widely cited publication in the *Scottish Medical Journal*. At that time, the cause of myasthenic weakness was far from clear. Simpson reviewed the clinical features of 440 personal patients with MG and was the first to show a clear link with known auto-immune diseases such as rheumatoid arthritis. He then hypothesised on the nature of the immunopathologic process, considering the relevance of lymphocytic inflammation of the thymus and analysing the different processes that could cause the electrophysiological features associated with myasthenic weakness. He concluded that the most likely cause was a circulating antibody, capable of competitively blocking neuromuscular transmission by occupying receptor sites on the muscle endplate – he also accurately

assessed the nature of transient neonatal myasthenia. An animal model was subsequently developed and in the early 1970s, antibodies to the acetylcholine receptor were demonstrated in MG patients, amply confirming both the auto-immune nature and the target antigen and antibody predicted by Simpson. The consequences of his paper were far-reaching - it provided a sound rationale for the use of immunosuppressive treatment and later plasmapheresis, and management of myasthenia was revolutionised.

Simpson was an excellent organiser. In addition to developing clinical neurology services in Glasgow and his new academic department, he organised and hosted the highly successful 1967 International Congress of Electromyography in Glasgow. With his neurosurgical colleague Professor Bryan Jennett and others he planned and implemented the move in 1972 from elderly and unsatisfactory quarters at Killearn, outside Glasgow, to the purpose-built Institute of Neurological Sciences in the grounds of the Southern General Hospital. He lectured widely and chaired many committees. He was Honorary Neurologist to the Army and the Civil Service Commission and from 1970-1980 he was the kind but firm editor of the Journal of Neurology, Neurosurgery and Psychiatry.

Outside neurology, Iain and his wife Elizabeth were the kindest of hosts, and he was an enthusiastic violinist, curler and bridge player. A true Clydesider, he loved most of all sailing his yacht in the Firth of Clyde and around the Western Isles.

I owe Iain Simpson a great deal; his teaching started my interest as a medical student in neurology and later in clinical neurophysiology, and he gave me my first SHO job (no formal interview in those relaxed days and he also appointed me as Jennett's SHO!). Many years later, I had the privilege of being examiner for Simpson's DSc thesis.

I close with a particular memory, Simpson's professorial ward-rounds when I was his SHO in 1973. They were impressive for many reasons: the huge numbers of personnel involved (in rough order of precedence: Simpson, the senior lecturer, the ward sister, the lecturers, the registrars, the research fellows, the visiting fellows, the SHO, the physiotherapist and finally the medical students); the length and whiteness of the white coats (also in diminishing order); the excellence of Simpson's teaching and examination technique and how nice he was to everyone; the sheer length of time it all took (especially as I had other things to do!). Most memorable was the little cohort of Simpson's "special" patients who had permission to come up to the ward on round afternoons, rather than attend the outpatient clinic with the less fortunate masses. These regulars all had very longstanding MG with many years of anticholinesterase medication before thymectomy or steroids. There they sat, comparing notes and waiting to pounce as the professor reached their corner of the ward. Most brought long lists to discuss, usually centred on the GI problems inherent in consuming industrial quantities of mestinon, but some were content merely to touch the master's hem. Speaking was usually a slow business and involved holding the chin up with one hand (all had chronic neck weakness) and placing a finger of the other hand over the tracheostomy hole. Simpson was always interested, always courteous and dealt patiently and happily with all their problems while the senior lecturer and I raged sotto voce at the damage to our personal schedules. Such severely affected patients are rarely seen nowadays, a testament to the huge improvement in treatment since Simpson's pioneering work.

Nick Murray