Jean Lhermitte 1877–1959

Jean L. Lhermitte, son of an artist, was born at Mon-Saint-Père Aisne in 1877. After school at St Etienne he studied medicine in Paris, graduating in 1907. He immediately turned to neurology for both clinical training and research. Over many years he was associated with Gustave Roussy in texts on *Blessures de la moelle et de la queue de cheval*, published in 1918, and on treatment of the neuroses of wartime: *Traitement des psychonévroses de guerre*, issued in 1919; and (with Spiller) on the interneuronal ophthalmoplegia of epidemic encephalitis. Anterior interneuronal ophthalmoplegia is often referred to as Lhermitte’s syndrome.

Lhermitte’s sign

Although more properly designated a symptom than a sign, the importance of this phenomenon was brought to the neurological world by Jean Lhermitte in 1924.1 Mme D, was a cashier, 43 years old with no past or family history of note, when in July 1923:

- a few days after... an illness with abdominal pains and diarrhoea she suffered a rather violent headache accompanied by tingling in the feet and knees. At this time, walking became difficult...

In August 1923 the patient first noticed a phenomenon that she described thus: “When I try to lower my head, I feel a violent shock in the nape of my neck, and a pain like an electric shock runs through my whole body, from my neck to my feet, down my vertebral column... each flexion movement of the head or the trunk brought on this sensation... from the nape of the neck to the tips of the toes and also of the fingers. The patient could not dress herself, put on her shoes or pick up an object from the ground without carefully keeping her head in line with her trunk.

Until May 1924, the condition did not change... At this period a new and disturbing symptom appeared: marked impairment of vision of the right eye... We would like to direct attention to a particular manifestation that we believe has never been pointed out in the symptomatology of multiple sclerosis: the pains resembling an electric shock... The sensations are uncomfortable but not really painful, and closely resemble those produced by faradic current. They never occur spontaneously... but occur exclusively with movements accompanied by forward flexion of the head... These sensations are always rapid and brief, because of an instinctive reflex, the patient corrects the position...

It was described by Babinski and Dubois2 (Society of Neurology 1918) in concussions of the spine, and one of us (Lhermitte) published two observations regarding it, inserted in the excellent thesis of J Ribeton (Clinical study of pains resembling electrical shock following injuries to the neck. Thesis Univ Paris January 1919).

Lhermitte continues and emphasises two points:

- the shock like pains in direct spinal concussion as in multiple sclerosis are related not to root changes but to spinal lesions...
- Tinel accurately observed that tingling (we add the electrical sensations) produced by percussion or elongation requires that these nerves be composed of demyelinated fibres... the type of pain presents the inherent excitability of sensory fibres stripped of their insulating myelin sheath. This excitability may be evoked by direct percussion, which one applies to a peripheral nerve, or by elongation brought about by flexion of the head on the trunk.


2 Babinski J, Dubois A. Douleurs à forme de décharge électrique consécutives aux traumatismes de la nuque. *Press Med* 1918;26:64-