



André Léri (1875–1930 AD) and his legacy to neuroscience

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Introduction

André Léri (1875–1930 AD) proposed a unique test, which is still used today, for the diagnosis of L3-L4 nerve compression, the so-called “Léri’s sign” [1]. Léri was a French neurologist born in Paris (Fig. 1 and cover). He trained under Joseph Babinski, a pupil of neurologist Jean-Martin Charcot and remembered for his “Babinski reflex.” During the second half of the 19th and the early 20th century, scientific works of famous Parisian neurologists including Léri’s unique legacy to neuroscience made Paris a renowned center of neurology [2, 3]. With support of Babinski, he became a member of the Académie de Neurologie in 1904 [1]. In 1910, Léri was appointed as associate professor at the University of Paris, Faculty of Medicine [1]. Between 1914 and 1918, he led medical military hospitals [1] and wrote on such diseases as tabes dorsalis in syphilis and lipomata [4, 5]. He documented mental disorders, such as hysteria, psychosis, neurosis, psychoneurosis, and neurasthenia [1].

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Léri’s sign

Léri’s sign, an equivalent of Lasègue’s sign or the straight leg raise, is also known as the “inverted Laseque sign” and among neurologists and neurosurgeons; it is known as the “femoral nerve stretch test” or the “prone knee bending test” [1, 4, 5]. This test is used to irritate the L3 and L4 nerve roots. It is performed by lifting the patient’s leg while the leg is flexed (Fig. 1 and cover). If positive, radicular pain is experienced along the anterior lower limb [5].

Anatomical basis of Léri’s sign

Léri’s sign is used for testing of the roots of the *femoral nerve* (Fig. 1 and cover) [5]. Anatomically, it is known that the L3 nerve root provides sensation to the medial surface of the thigh and the side of the knee, while the L4 nerve root provides sensation to the front of the thigh and leg and foot. L3 also innervates quadratus lumborum, iliopsoas, and obturator externus and L4 innervates gluteus medius, gluteus minimus, quadratus femoris, quadratus lumborum, obturator externus, and tibialis anterior. In clinical practice, therefore, femoral nerve dysfunction is characterized by a loss of movement or sensation of parts of the legs and an abnormal knee reflex. Diagnostic tests include electromyography, nerve conduction tests, and computed tomography and magnetic resonance imaging.

Léri’s forgotten sign

Interestingly, there is also a forgotten physical examination sign named after Léri. In patients with hemiplegia, the “forearm sign” (passive flexion of the hand and wrist on the affected side demonstrates normal flexion at the elbow).

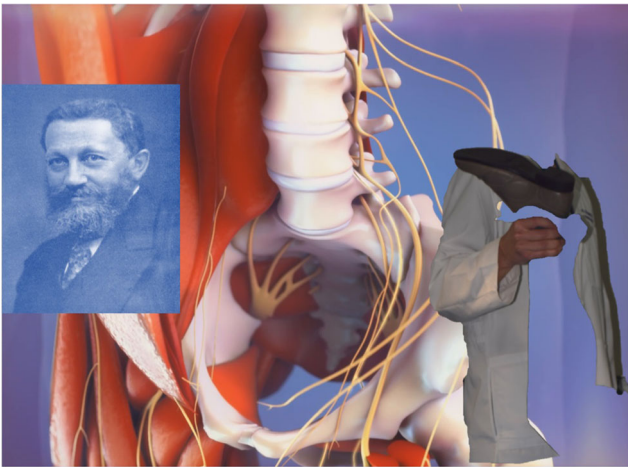


Fig. 1 and cover André Léri (1875–1930 AD), examining for his sign, and the anatomy involved with this sign

Conclusions

Léri should be remembered as contributing to our current understanding of neuroanatomy, physiology, neurology, and psychiatry.

Compliance with ethical standards

Conflict of interest The authors have no conflicts of interest to report.

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