RLS – Spinal cord dysfunction: RLS and spinal cord excitability

Walter Paulus

Restless legs syndrome (RLS) is a network disorder involving the brain as well as the spinal cord. Both the pathophysiology of the spinal cord as well as treatment-oriented concerns will be addressed. Aspects such as small fibre neuropathy-induced spinal neuron denervation and lack of spinal dopamine transporter will be discussed on the background of reflex studies and therapeutic consequences, in particular with regard to dopaminergic augmentation. Recent data on a beneficial effect of spinal direct current stimulation will complete the overview on spinal mechanisms in RLS.