



Essential Tremor (ET)

# Leg tremors versus restless leg syndrome

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There are many conditions that can cause tremor in the legs, including Parkinson's disease (PD), ET, and orthostatic tremor. At least half of all patients with PD have tremor involving their feet or legs, usually present when they are sitting or lying. Typically the "rest" tremor associated with PD is usually accompanied by other PD symptoms such as slowness of movement (bradykinesia), stiffness of muscles (rigidity) and gait and postural difficulties.

ET chiefly involves the hands, but may also involve the head, voice, and other body parts, including the legs. In our series of 350 ET patients, 13.7% had involvement of the legs. Leg tremor associated with ET is rarely troublesome for the patient, although it can be a source of marked embarrassment. Both PD and ET tremors can interfere with driving because of the rhythmic pressure applied to the gas pedal or brake.

Orthostatic tremor is probably the most disabling form of leg tremor. It is hardly visible to the naked eye, although it can be easily palpated or recorded by EMG. The tremor is typically present when the patient is standing, and is often perceived by the patient not as a tremor, but as an uncomfortable sensation or leg cramps while standing. The sensation is relieved immediately after sitting or lying down.

Tremor in the legs can lead to a perception of leg restlessness, and as such it can be confused with Willis-Ekbom disease (WED), also known as restless legs syndrome (RLS). This disorder is relatively quite common, but it is frequently not recognized (even by physicians), and it is often wrongly attributed to simple anxiety. WED/RLS may occur alone as a familial (hereditary) disorder. It may also occur as a complication of PD as well as peripheral neuropathies.

Although other body parts may be involved, the symptoms of WED/RLS are generally confined to the lower limbs. In addition to the sensation of restlessness, patients often complain of a "creepy-crawly" sensation and feelings of "pins and needles" in the legs. These disagreeable sensations, called "paresthesias", usually occur at night, but they may also be present during daytime hours. As a result of the daytime restlessness, patients are unable to sit still and may not be able to travel long distances in the car or sit still on an airplane.

Nearly all patients with WED/RLS have associated "periodic limb movements in sleep", manifested by rhythmic leg twitches occurring one to four times per second. These "periodic limb movements in sleep" may produce kicking movements and as such are usually more bothersome to the bed partner than to the patient. The feelings of restlessness and leg discomfort can be temporarily relieved by walking about, massaging or stretching muscles, and doing leg exercises. Levodopa, dopamine agonists, benzodiazepines and narcotic analgesics often relieve the symptoms of WED/RLS.

**Learn more about WED/RLS at [www.willis-ekbom.org](http://www.willis-ekbom.org)**

**Contact the Willis-Ekbom Disease Foundation at 507.287.6465 or [info@willis-ekbom.org](mailto:info@willis-ekbom.org)**



#### Our Mission:

The IETF funds research to find the cause of essential tremor (ET) that leads to treatments and a cure, increases awareness, and provides educational materials, tools, and support for healthcare providers, the public, and those affected by ET.