

Orthostatic Tremor – Information for Health Professionals

Orthostatic Tremor (OT) is a rare and progressive neurological movement disorder characterized by a rapid tremor in the legs that occurs when standing. The tremor disappears partially or completely when walking or sitting. Individuals with OT experience feelings of unsteadiness or imbalance and can cause affected individuals to immediately attempt to sit or walk because of a fear of falling. OT is a constant problem that can affect the quality of life of affected individuals. The exact cause of OT is unknown and there is no cure.

On standing for a period of time, which can vary from minutes to seconds, both legs simultaneously start to tremor causing feelings of “vibration” and a profound and disabling sense of instability. Tremors are felt in the legs, as well as the trunk and arms, and cause extreme fatigue.

The tremor is of very high frequency 13-18Hz, three times faster than in Parkinson’s Disease, and too fast to be seen by the eye. Diagnosis is by surface EMG while standing, a sound resembling a distant helicopter can be heard during auscultation over the thigh or calf during a tremor event.

Most cases of OT are idiopathic, with normal brain neuroimaging, normal laboratory work-up, and no evidence of other associated conditions. However, OT has been associated with Parkinson’s Disease, Essential Tremor and Restless Leg Syndrome.

Daily living

On a daily basis people feel stressed and frustrated with the sudden and constant disabling events that happen throughout the day. Basic daily tasks such as showering, waiting in queues, browsing shops and preparing meals are extremely challenging.

Further, the impact of the disorder on the person’s family should also be considered.

Variability

Orthostatic Tremor varies from person to person and can change from time to time - sometimes due to stress or exertion, but sometimes without any reason whatsoever. The length of time a person can stand can vary from just a few seconds to 2 or 5 minutes, this can vary throughout the day and can vary over weeks or months. Fatigue towards the end of the day is common.

Walking

In the early stages of Orthostatic Tremor, walking may not be affected too much. People may find that they walk quickly and are unable to walk slowly. However, as the condition progresses, the walking distance tends to reduce. The actual distance which can be walked will vary, and at worst people cannot walk at all.

Exhaustion

People frequently suffer from extreme exhaustion or fatigue. Basic routines such as showering and dressing can take much longer than normal and require a period of rest to recover. Even after a day of relatively little physical activity, they may feel unable to get out of a chair or needing sleep.

The effect of stress and emotion

It is recognised that stress makes tremors worse. There is a vicious cycle where the tremor gives rise to stress, and then the stress increases the tremor and so on. Feelings such as anger, annoyance, concern, frustration, and even excitement or anticipation can be a problem.

Difficulty is caused by crowded or unfamiliar places – stopping to chat, people bumping into you and not seeing somewhere to sit all give rise to panic and stress. A lack of confidence can often cause the person with OT to stop doing recreational activities they would normally enjoy.

Treatments

There is no cure for Orthostatic Tremor and not any one known treatment for the disorder. A combination of medications may be used to help relieve some of the symptoms. Such treatments have side effects, and it is important to carefully consider whether the benefits outweigh any side effects. First-line treatments are Clonazepam and Gabapentin, then Primidone, Propranolol and Pregabalin, all with limited effectiveness. Deep Brain Stimulation surgery has been successful in a few patients.

Lifestyle changes and physical aids are essential. Weight reduction may be helpful in overweight patients.

Mobility aids

Shower stools, swivel stools on castors in the kitchen, portable stools for outdoors and tripod walking sticks are helpful. People often use walkers (rollators), wheelchairs or motor scooters in later stages.