How is tremor in dystonia treated?

Tremor in dystonia does not always need treatment, as in many cases it is mild. For patients with tremor causing interference with daily tasks and social embarrassment treatment is warranted. The main treatments are oral medications, which may include beta-blockers (eg. propranolol), benzodiazepines (eg. clonazepam), anticholinergics (eg. trihexyphenidyl), dopaminergic drugs (eg. levodopa) and anticonvulsants (eg. topiramate). For dystonic head tremor (tremulous spasmodic torticollis), botulinum toxin injections into neck muscles are often beneficial. Voice tremor in laryngeal dystonia (tremulous spasmodic dysphonia) or jaw tremor may also respond well to botulinum toxin injections targeting the involved muscles. For patients with severe tremor in dystonia that has failed to respond adequately to medications or botulinum toxin, deep brain stimulation (DBS) surgery usually provides effective tremor control.

Doctor Stephen Tisch,  
Consultant Neurologist

Help us help people with Dystonia by becoming a member, assisting with fundraising or joining/starting up a support group.

Go to our website or contact the association directly for information.
What is Tremor in Dystonia?

Dystonia is a disorder characterised by involuntary muscle contractions causing abnormal movements, postures and tremor. For some patients with dystonia, tremor is the dominant symptom. Tremor in dystonia can involve different parts of the body in different patients. Some patients may have tremor in several different body regions. Tremor in dystonia is an important symptom, because it may cause considerable interference with daily activities, communication and social interaction.

What parts of the body can be affected by tremor in dystonia?

The upper body is most commonly affected by tremor in dystonia. Some patients experience a tremor of the head, which is often side to side, or sometimes up and down or in varying directions. Head tremor in dystonia may be associated with involuntary pulling of the head and neck in a particular direction (spasmodic torticollis or cervical dystonia) and a high proportion of patients with spasmodic torticollis/cervical dystonia have some head tremor, even if it’s not a major problem for them. Head tremor in dystonia goes by several terms but is usually referred to as either dystonic head tremor or just dystonic tremor. Dystonic upper extremity tremor often affects one side more than the other, is worse with certain positions or particular tasks and when under pressure, for example signing a document in front of people. Dystonic upper extremity tremor can interfere with a range of tasks including handwriting, eating and drinking resulting in disability and social embarrassment. Sometimes dystonic tremor is very task specific and only appears when a particular task is performed; for example, handwriting (primary writing tremor) or golf putting (putting yips).

Another important site of tremor in dystonia is the vocal tract. Dystonia may affect vocal cord muscles (laryngeal dystonia/spasmodic dysphonia) and cause tremor of the voice. Voice tremor in dystonia can make speech less intelligible and cause social embarrassment. For other dystonia sufferers, tremor of the mouth, lips, jaw, tongue or palate can impact negatively on speech and communication.

How is tremor in dystonia diagnosed?

Tremor in dystonia is usually diagnosed by a neurologist with expertise in movement disorders. The diagnosis is mainly clinical, based on interview and examination but may be supported by appropriate investigations including blood tests, genetic testing, brain MRI and electrophysiological studies. The diagnosis of tremor is more straightforward in patients who have other dystonic symptoms (such as sustained muscle contractions) in the body part affected by tremor or another body part. When tremor is the only feature of dystonia, the diagnosis of dystonic tremor is more challenging and somewhat controversial. However, most movement disorders neurologists recognise dystonic tremor as a neurological condition, based on its characteristic clinical features and differentiate it from essential tremor, another benign tremor disorder. The overlapping features of tremor in dystonia and Parkinson’s disease can also make diagnosis difficult. Occasionally, patients with dystonic tremor can appear very similar to tremulous Parkinson’s disease, however, unlike Parkinson’s disease, tremor in dystonia is not degenerative nor does it shorten life expectancy.