About 70% of people with Parkinson’s have a tremor and it is the most common visible sign of Parkinson’s.

Tremor is a form of involuntary movement (a movement that is not under conscious control). Many conditions can cause tremor; however, Parkinsonian tremor has some distinct characteristics. It is commonly called ‘pill rolling’ as people seem to be rolling a small sphere between their thumb and index finger. Often referred to as a resting tremor it most often occurs when the muscles of the hands or feet are relaxed, when they’re at rest; hence the name. Usually, the tremor decreases or disappears when the muscles of the hands or feet contract during movement and often during deep sleep. Sometimes the tremor can occur on action, perhaps while trying to hold a magazine steady (postural tremor), or during a movement like writing (kinetic tremor).

Tremors usually start in the fingers of one hand and in time can spread up the arm and even extend to other parts of the body as the condition progresses. Occasionally, Parkinson’s tremor might start elsewhere, like the foot, then spread up the leg into an arm.

After several years the tremor usually spreads to affect the other side of the body. However the tremor is often less severe than on the side first affected and this asymmetry normally persists. In some cases a tremor can also spread to include the jaw, lips, tongue and trunk.

Some people with Parkinson’s can experience an ‘internal tremor’, a feeling of tremor that is not obvious to others.

Factors that may worsen tremor

Emotions such as stress, anxiety, anger or fear can cause tremor (physiologic tremors) in all people and can worsen a Parkinson’s tremor. However, this is temporary and will settle down as the heightened emotion subsides.

Tremors can also be caused or worsened by some medications including some mental health medications and anti-nausea and anti-dizziness medications. There are also some anti-asthma drugs, lithium and the anti-epileptic sodium valproate which can heighten tremor. It is always good to discuss new medications with your doctor to see if that particular medicine can cause or worsen tremor. Never stop taking medication without consulting your doctor.

There is help for tremor

Some people with a mild tremor find that squeezing or rolling a ball, pen or similar object can help suppress the tremor.

Tremor can sometimes be suppressed effectively by medication. Levodopa (Madopar, Sinemet) can reduce or stop tremor quite effectively in some people. However, not everyone’s tremor responds effectively to levodopa even if in the same person the other ‘cardinal features’ like rigidity and slowness of movement, respond well to the drug. Current thinking is that this may be because tremor, unlike rigidity and slowness of movement, is not a direct effect of the dopaminergic deficiency present in Parkinson’s.

Dopamine agonist medications like ropinirole and pergolide also have anti-tremor effects when used alone or in combination with levodopa.

There are also some anti-muscarinic medications that can have a role to play in tremor management, for those who are intolerant of dopaminergic drugs.

In some cases Beta-blocking drugs can reduce tremor. Some people use them in small doses as required before, say, a big meeting or social occasion.

As with all medications and other treatments, advice should always be sought from your Doctor or Specialist to ensure that you are taking what will work best for you. No two people with Parkinson’s are the same and no two treatments will be exactly the same.

Surgery and tremors

In the past surgery on the thalamus was used for some people with Parkinson’s. More recently the technique known as Deep Brain Stimulation (DBS) has emerged as a treatment for tremor.

DBS involves implanting small electrodes within the brain into the subthalamic nucleus (STN) and then passing small electric currents through them. DBS of the STN improves tremor, rigidity, slowness of movement and drug-induced dyskinesia (potentially allowing a reduction in medication).

It is very important to note however that this surgery is not suitable for everybody and recipients of the operation must be carefully selected to minimise risk factors.

Treatments for tremor, including medication and especially surgical interventions, can carry problems of their own and always need to be used thoughtfully.

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**Essential Tremor**

Some Parkinson’s New Zealand members have Essential Tremor (ET). ET is the most common form of tremor and is often referred to as familial tremor or benign essential tremor.

Onset of ET is most common after age 40, although symptoms can appear at any age. Usually, ET has been present, even in milder form, for many years and there is often a family history of essential tremor. Children of a parent with essential tremor have a 50% chance of inheriting the condition. By contrast, finding another family member with Parkinson’s is rare.

Although the tremor may be mild and non-progressive in some people, in others the tremor is slowly progressive. Tremor frequency may decrease as the person ages, but the severity may increase.

ET is a hyper-kinetic disorder and is 10-20 times more common than Parkinson’s tremor. ET primarily affects the hands, less often the head and rarely the feet, although voice, tongue, legs and trunk may be affected too. Head tremor may be seen as a “yes-yes” or “no-no” motion. Unlike Parkinson’s tremor, ET appears when the hands are moving and it can be disabling, affecting fine motor skills such as shaving, buttoning clothes and feeding oneself. However, in many people the tremor is not sufficiently bothersome to require treatment.

Essential tremor is at its worst when the arms are outstretched or when holding a drink or writing, whereas a Parkinson’s tremor is usually most obvious when the arm is doing nothing and at rest (this is why it is often described as a resting tremor). Heightened emotion, stress, physical exhaustion, or low blood sugar may trigger tremors and/or increase their severity.

There are other clear differences between Parkinson’s tremor and ET; for instance handwriting. With Parkinson’s writing can become small and cramped, whereas a Parkinson’s tremor in Parkinson’s writing can become small and cramped, with ET it becomes shaky. An occasional alcoholic drink may help ET but appears less beneficial for Parkinson’s. Quite why alcohol helps with essential tremor is not well understood and overuse of alcohol could of course lead to dependence and is not recommended.