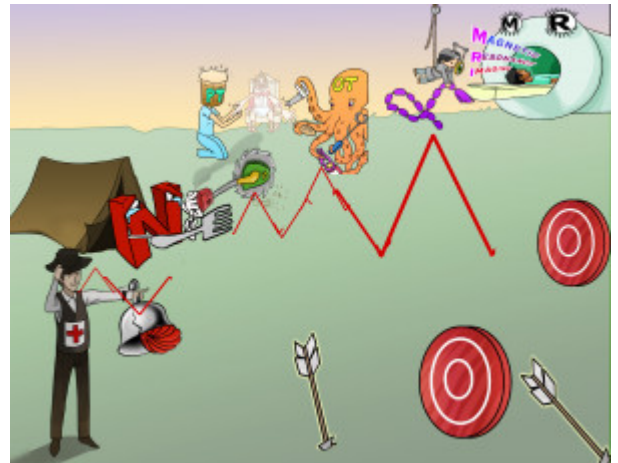


Intention Tremor



PLAY PICMONIC

More Apparent With Goal-Directed Movements Such as Using Eating Utensils

Holding eating utensils

One of the key features of intention tremor is that it becomes more apparent with goal-directed movements such as using eating utensils or pointing. This is also true of other kinetic/action-related tremors such as essential tremor, however intention tremor is distinguished by the characteristic low-frequency, high-amplitude, and tendency to overshoot and undershoot the target.

High-Amplitude, Low-Frequency

High-amplitude, low-frequency lines

Intention tremor is characterized as being high-amplitude and low-frequency, meaning the affected extremity will deviate a relatively large distance from the intended path in long, slow waves that are easily noticeable due to their large amplitude.

More Apparent as Extremity Approaches Target

Waves getting broader closer to target

Another pathognomonic characteristic of intention tremor is the worsening of the tremor as the extremity approaches its intended target. For example in a patient performing finger-to-nose testing, their finger will deviate more wildly and broadly as it approaches either the examiner's finger or their own nose.

Overshooting and Undershooting

Arrows overshooting and undershooting target

Another characteristic feature of intention tremor is the tendency of the affected limb to overshoot or undershoot its target. For example, in finger to nose testing a patient attempting to touch the examiner's finger may either shoot their finger far beyond that of the examiners, or stop it far short of the examiner's finger.

Pathogenesis

Ipsilateral Cerebellar Damage

Holding out cracked cerebellar-bell in same arm that has tremor

Intention tremor is typically caused by damage to the ipsilateral cerebellum. The cerebellum aids in movement, specifically in processing and providing constant feedback that allows for continuous correction during action. Damage to the cerebellum therefore disrupts the nervous system's ability to make these corrections. Damage to the cerebellum affects the ipsilateral limb because outgoing cerebellar nerves cross twice before reaching their target in the motor cortex. This damage can result from anything causing a lesion to the brain, including stroke, trauma, and neurodegeneration.

Diagnosis

Neurologic Exam

[Examiner with nerve](#)

Intention tremor can generally be diagnosed with a thorough neurologic exam that will exhibit the characteristics described above.

MRI

[MRI Machine](#)

While not necessary for the diagnosis of intention tremor, MRI can be helpful in defining the neurologic pathology causing it.

Treatment

Physical or Occupational Therapy

[Fizzy Therapist / Octopus Therapist](#)

There is no established pharmacologic or procedural treatment for the management of intention tremor. Rather, a common approach to treatment is to help patients manage these symptoms by working with physical and occupational therapists.