

WHAT IS...

Essential Tremors

an under recognised condition

Presented By Paul Drake

An initiative of the Lions Club of Stanthorpe Inc



**It is often under diagnosed,
not recognised, or ignored**

**ET is the most common
movement disorder
in the community,**

**presently up to 5%
of the population
over the age of 60**

**It is not associated with
PARKINSON'S DISEASE,
and is up to
8 times more common...**

**Affecting up to 800,000
Australians**

SO WHAT IS ESSENTIAL TREMORS 'ET'?

ET...

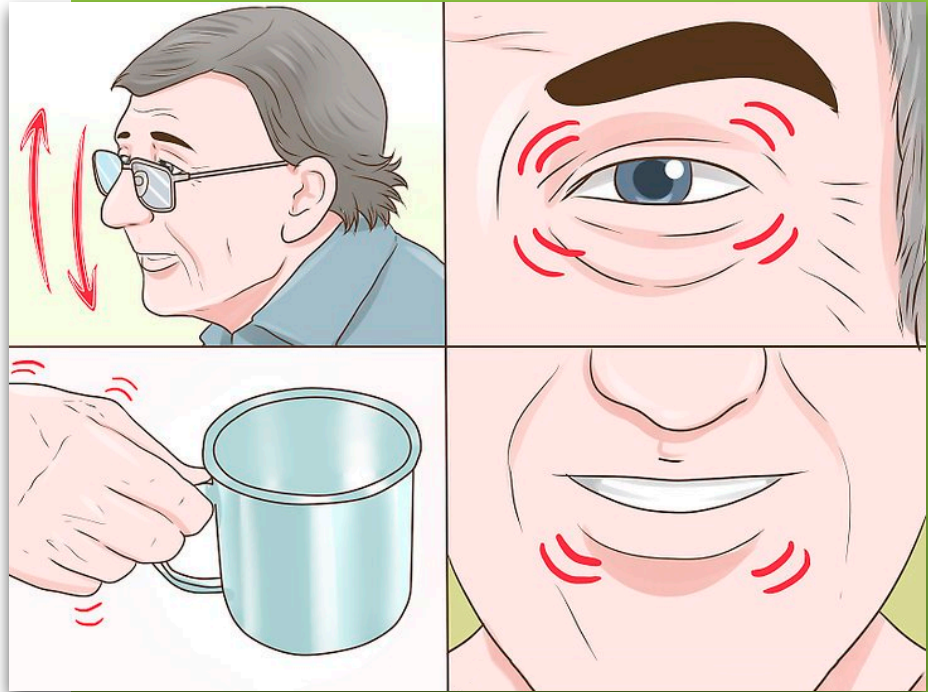
- a shake or temor
- generally noted to the hands and arms
- may involve any body region
- vocal changes



OTHER COMMON FORMS OF

ET...

- Head Shakes
- Eye Shakes
- Lip Shakes
- Hand Shakes



**ET can develop at any age,
including childhood,
but becomes increasingly
common with advancing age**

**Symptoms can range from
mild to severe**

There is NO CURE!

WHAT PEOPLE WILL ASSUME

WHEN THEY SEE PEOPLE WITH SHAKES

THAT YOU...

- have Parkinsons
- are on drugs
- have been drinking
- extremely nervous



CLASSIFICATIONS & COMPARISON OF TREMORS

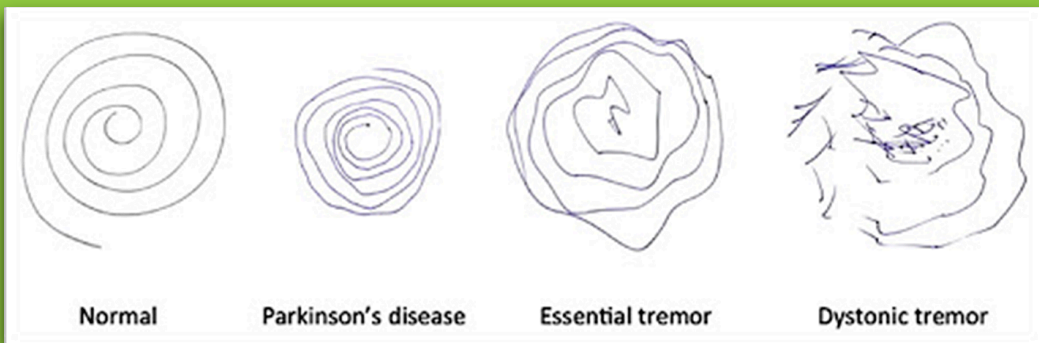
ET...

Classification of tremors

- Tremors can be classified as either “**at rest**” or “**during action**”
- They can be separated by frequency, amplitude, and the presence of other neurological signs



A SIMPLE TEST TO SEE THE EFFECTS OF ET



ET VS PARKINSON'S DISEASE VS PHYSIOLOGIC TREMOR

ET is an action tremor

- Mid frequency (4-12 Hz), Low Amplitude, Worse with Movements
- 1-5% population

Parkinson's Disease by comparison is a rest tremor.

- Low frequency (3-6 Hz), High Amplitude
- Associated rigidity and cog-wheeling
- 0.1 % population

Physiologic tremor

- All people exhibit physiologic tremor – a benign high frequency, low amplitude, postural tremor
- This may be demonstrated when holding a piece of paper on the outstretched hand

**ET is always most pronounced
when the hands are being used,
whereas in Parkinson's Disease
the hands usually shake most
when at rest and less
when they are being used**

KEY OBSERVATIONS

ET...

- Usually bilateral
- Generally hands and forearms
- Gradual and progressive onset
- Positive family history
- Acute reduction of tremor amplitude in response to alcohol is typical
- May be aggravated by drinks containing caffeine



GENETICS

ET...

- ET is familial in 50% of cases, and the cause is unknown in the remainder
- If ET runs in the family, each child with an affected parent will have a 50% chance of inheriting the disorder



CHALLENGES

ET...

Simple tasks, that we take for granted, can become tiresome, difficult, and frustrating.

- making or drinking a cup of tea
- drinking soup
- playing a musical instrument
- using a mouse / typing
- using a remote control
- using tools and many more simple tasks



This often effects tasks that we have looked forward to in retirement, or tasks that we may have been quite highly skilled at.

These symptoms can result in symptoms of isolation and social withdrawal

TREATMENT OPTIONS

ET...

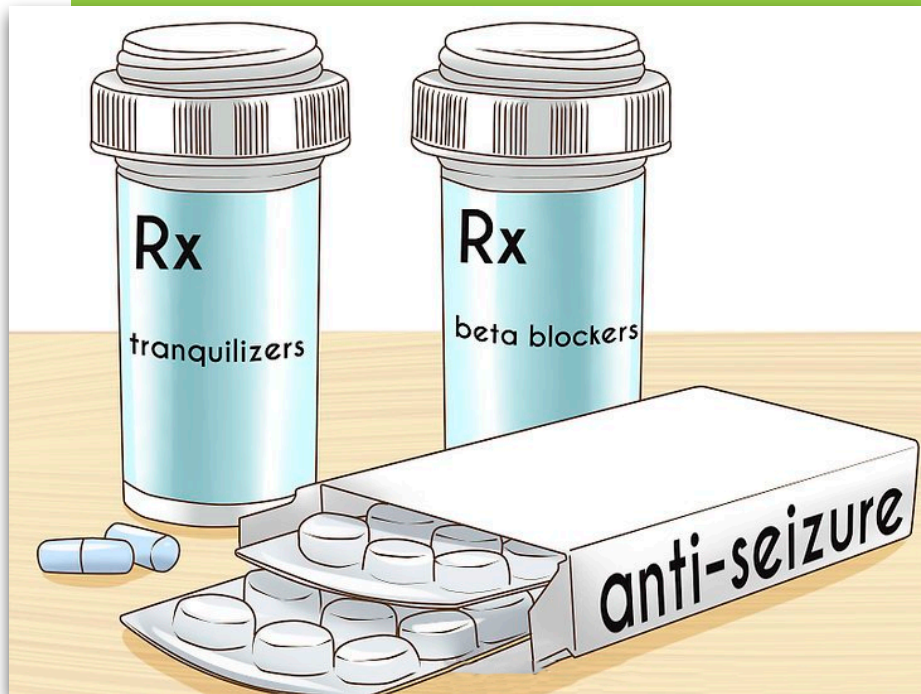
- After excluding other diseases, many people do not require treatment.
- Medications
- Surgical options
- Non-invasive surgical options.
- Psychological support
- Support groups
(*Lions Club Initiative*)



FIRST LINE TREATMENTS

ET...

- Medications may help in approximately 50% of cases.
- Propranolol (Beta Blocker) is the mainstay of treatment (contraindicated in Asthma)
- Primidone (anti epileptic) is equally effective but may cause side effects such as nausea and fatigue.
- Anti-anxiety medications (alprazolam)
- Others - gabapentin / topiramate have shown some promise



SURGICAL OPTIONS

ET...

Thalamotomy

- A neurosurgical procedure where a small hole is drilled into the skull and a tiny probe inserted into a part of the thalamus which is containing cells that cause or drive the tremor



SURGICAL OPTIONS

ET...

Deep brain stimulation

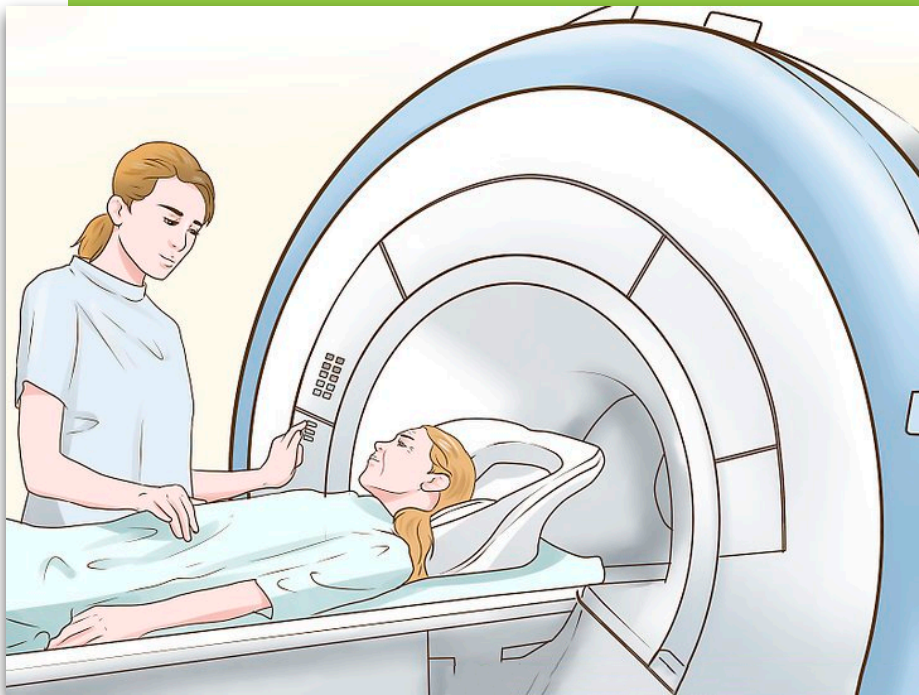
- Involves drilling a small hole in the head and inserting a permanent electrode into the thalamus or other region causing tremor.
- This is then connected via a wire to a pacemaker box located in the chest region.
- Same risks as open thalamotomy but also carries risks related to the hardware such as hardware infection.
- The pacemaker box can be rechargeable or fixed cell and generally will need replacement sometime between 3 and 15 years



NON SURGICAL INTERVENTIONS

ET...

- MRI focused USS procedures are a new “non-invasive” procedure
- Indicated in Medication Refractory Tremor
- Involves using USS waves that interact at a single point in the thalamus to destroy the tremor causing cells.
- The response is immediate, and the patient conscious throughout the procedure.
- Limitations - out of pocket costs / ? sx / ? duration of action.



PROGNOSIS

ET...

- While ET can gradually worsen over time, the progression is generally slowly progressive
- It is unusual that it should be severely disabling



REFERRAL PATHWAY

General Practitioner

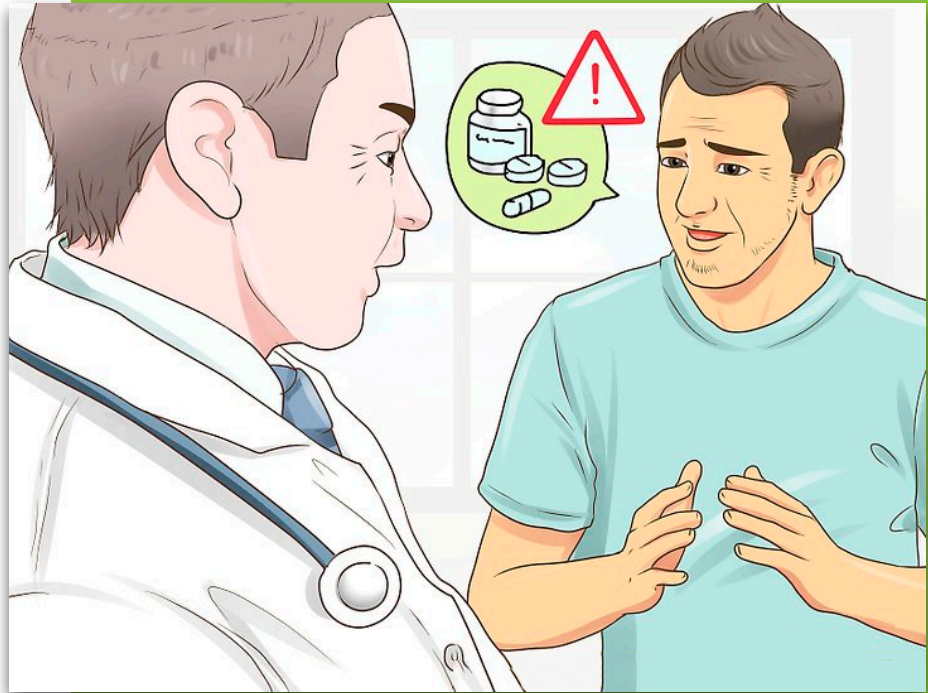
- first port of call
- first line investigations and work-up
- initial medications

Neurologist

- confirm / refine diagnosis
- second line medications
- referral for non-invasive surgical options

Neurosurgeon

- surgical options



AWARENESS & SUPPORT GROUP

Awareness

- To inform people and community about ET
- Let people know getting the shakes may not always be what they may fear the most... (Parkinson's)
- To make people aware that there is support and information available

Support Group

- Share knowledge and information
- Give people an opportunity to get together with others that are have the same condition without being embarrassed
- Give people an opportunity who self isolate from groups, the ability to go out and be social
- Help those who support partners with ET



AWARENESS & SUPPORT GROUP

What we are doing

- Regular morning teas / lunches
- Social media group for our group
- Share knowledge & latest trends

How you can help

- If you know of someone that has the shake, let them know about the Lions Club ET Awareness & Support Group

