

Tremor – rhythmic oscillation of a body part due to intermittent muscle contractions.

Common Tremor Types include:

Rest tremor: occurring most prominent at rest, **Postural tremor:** on assuming a range of normal postures, **Kinetic or Action tremor:** when actively reaching for a target or in movement & **Dystonic tremor:** occurring predominantly or exclusively in certain postures or during tasks or actions

- Many normal individuals have physiological tremor that typically manifests as a mild high frequency postural action tremor. Up to 10% of individuals have an **enhanced physiological tremor (EPT)** often in association with anxiety, psychological stressors, fatigue, or underlying metabolic disturbance (e.g. hyperthyroidism, vitamin B12 deficiency, electrolyte disturbance etc), drugs (valproate, lithium, thyroxine etc), respiratory compromise (CO₂ retention), during acute infections & toxins (alcohol, methamphetamines etc)
- EPT usually does not require specialist neurological review.

Differential based on clinical time course

- **Acute** (seconds-hours) –ED referral
 - Stroke
 - Central demyelination
 - CNS infection
 - Toxin & stimulant drug exposure/overdose
- **Subacute** (weeks to months)
 - Exposure to toxins/medications/illicit drugs
 - Nutritional deficiency (eg B12)
 - Metabolic derangements (eg DM)
- **Chronic or insidious** (months-years)
 - **Parkinsonian rest tremor** – seen in Parkinson’s disease (PD) usually associated with other cardinal signs of bradykinesia, extrapyramidal rigidity & postural instability. About 20-30% of PD patients do not present with or develop significant rest tremor. This tremor type can also be seen in atypical parkinsonian syndromes.
 - **Essential tremor** –postural or action tremor often asymmetrical at onset in the upper limbs & often associated with cerebellar signs.
 - **Dystonia tremor** – often only present in certain postures or during certain tasks & movements eg writers cramp, facial tics, cervical dystonic tremor. Often associated with dystonic postures & can be present in Parkinson’s disease.

Red Flags

- 🚩 Acute onset (mins-hours), especially unilateral tremor.
- 🚩 Rapidly progressive symptoms and signs (days – weeks), especially if associated with acute or subacute onset of other focal neurological signs



Information Required

- Presence of Red flags (ED referral)
- Duration
- Family history of tremor, Parkinson’s disease or dystonia
- Prior medical history
- Current, and any relevant prior medications
- Metabolic: thyroid function, BGL, electrolytes, LFTs
- Alcohol intake
- Illicit drug history, especially stimulant drugs
- Family history of tremor, Parkinson’s disease etc
- Relevant examination findings
- Relevant psychiatric history, many mild baseline tremors are significantly exacerbated by severe anxiety and other psychiatric conditions.

Investigations Required

- FBE, EUC, LFTs, TFTs, fasting glucose, B12, folate, thiamine & CRP. In at risk patients conduct blood EtOH and urine illicit drug screens.

On the basis of the information provided, the patient will be triaged to consultation.

Fax Referrals to Neurology

Referral – in the absence of red flags direct referral to Neurology Outpatients
“Movement Disorder clinic” FMC

- Flinders Medical Centre Fax: 8204 4059

Suggested GP Management

- Tremor predominant Parkinson’s disease is often mild so it is often appropriate to hold off dopaminergic therapy till specialist review to allow other subtle parkinsonian signs to be assessed.
- Essential tremor can often be addressed with beta-blockers such as propranolol starting at dose of 10mg bd and slowly increasing to 40mg bd.

Clinical Resources

- Hauser, S. (2013) Harrison’s Neurology in Clinical Medicine. 3rd ed. McGraw Hill education.
- Burn, D.J. (2013) Oxford textbook of Movement disorders. Oxford University Press.

Version	Date from	Date to	Amendment
1.0	September 2014	September 2016	Original
2.0	September 2016	October 2018	Removal of RGH details
2.0	October 2019	October 2021	No changes



OUTPATIENT GP REFERRAL GUIDELINES NEUROLOGY

Southern Adelaide Local Health Network (SALHN)

3.0	December 2022	December 2024	Fax number updated
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