

EXAMINATION FUNCTIONAL TREMOR (FT)

Carry out inspection during history taking, which itself serves as a potent cognitive distraction (reducing FT amplitude); attention directed to the affected limb may amplify the FT, as may requesting the patient to close their eyes and allow the movement to spontaneously occur.

1 PERFORMANCE TASK			
a) Assess variability	Frequency	Amplitude	Axis
• Posture-holding			
• Hands at rest			
• Finger-nose			
• Spiral drawing			
• Pouring water between cups			
• Attempts to drink			
2 PROVOCATIVE MANOEUVRES			
b) Assess distractibility	Frequency	Amplitude	Axis
<u>Cognitive</u>			
• History			
• Serial subtraction of 7 from 100			
• Months of year backwards			
• Tell a story of personal significance			
• Pouring water between cups			
• Attempts to drink			
<u>Face/Hand/Neck:</u>			
• Eye movements (non-cardinal directions)			
• Move tongue rapidly from side to side			
Poor task performance?			
<u>Upper limb:</u>			
• Sequential finger tapping (fingers named from 1 to 4, and patient given moderately complex tapping task);			
• Positional change (lying down, walking, stairs)			
• Targeting examiner's finger, as examiner moves finger from one position to another;			
• Examination of another body part			
Poor task performance?			
<u>Lower limb:</u>			
• Alternating toe-heel tapping			
• Drawing on the floor with foot			
• Positional change (lying down, walking, stairs)			
• Examination of another body part			
Poor task performance?			
c) Assess entrainability	Frequency	Amplitude	Axis
Focus on the least tremulous or non-tremulous hand at various frequencies and in different directions to the hand that is believed to have FT.			
Poor task performance?			
d) Assess weight loading	Frequency	Amplitude	Axis/ change in location
FT may <i>worsen when the patient is provided a weighted object to hold</i> ; an unusual finding for most organic tremors of central origin. However, the sign is not specific, since it may also be seen in ET and PD, particularly in severe tremors.			
e) Co-contraction	Present	Absent	
As the limb is moved passively, the examiner may feel voluntary co-contraction (rhythmic trembling). In addition, the examiner experiences variability: the patient may allow passive movements within a limited range, but the range may subsequently increase, and the apparent increase in tone diminishes or breaks down, accompanied by disappearance of tremor.			
Ballistic Movement	Pause present	No pause	
Patients are asked to perform a ballistic movement with the contralateral limb to that with FT. There is a significant reduction of tremor amplitude or cessation of contralateral tremor. May require EMG monitoring if the pause is brief.			