

Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

Washington Heights-Inwood Genetic Study of Essential Tremor (WHIGET) Tremor Rating Scale protocol for Videotaped Examination

While subject is seated:

- 1. Hands resting in lap for 15 s
- 2. Arms held at 90° for 15 s (arm sustention)
- 3. Arms held in wing position for 15 s
- 4. Pouring water from one cup to another (cups should be standard size and at least three quarters filled; 8 transfers)
- 5. Bring a spoon of water from lap level up to mouth and back again; repeat 7 additional times
- 6. Drinking water from a full glass; repeat 7 times with each hand
- 7. Finger-nose-finger on right 8 times
- 8. Finger-nose-finger on left 8 times
- 9. Open and close right hand 10 times
- 10. Open and close left hand 10 times
- 11. Alternatively pronate and supinate right hand 10 times
- 12. Alternatively pronate and supinate left hand 10 times
- 13. Tap right foot 10 times
- 14. Tap left foot 10 times
- 15. Jaw at rest for 5 s
- 16. Mouth open for 5 s
- 17. Sustained phonation: first "AAA" for 10 s, then "EEE"
- 18. Head while patient is seated for 10 s
- 19. The examiner will test the passive tone of each arm and leg and comment on this on the videotape
- 20. Drawing 2 Archimedes spirals with each hand (subject should make at least 6 full circular motions)

While subject is standing:

- 21. Hands hanging at sides for 10 s; videotape legs too
- 22. Walking 20 ft and turning

23. Tandem gait for 10 steps

Scoring Instructions

Criteria for ET:

- 1. On examination, a +2 postural tremor of at least 1 arm (a head tremor may also be present, but is insufficient for the diagnosis)
- 2. On examination, there must be
- a. a +2 kinetic tremor during at least 4 tasks or
- b. a +2 kinetic tremor on 1 task and a +3 kinetic tremor on a second task; tasks include: pouring water, using a spoon to drink water, drinking water, finger-to-nose, and drawing a spiral
- 3. If on examination the tremor is present in the dominant hand, then by report it must interfere with at least 1 activity of daily living (eating, drinking, writing, use of hands); if on examination, the tremor is not present in the dominant hand, this criterion is irrelevant.
- 4. Medications, hyperthyroidism, alcohol, or dystonia are not potential etiologic factors
- 5. Not psychogenic (bizarre features, inconsistent in character, changing, subject is distractable, other psychiatric features on examination)

Criteria for probable ET (1 and 3-5 must be true; also, either 2a or 2b must be true):

- 1. On examination, a +2 postural tremor of arms may or may not be present
- 2. (a) Same as 2 above
- (b) Head tremor is present on examination
- 3. Tremor in the dominant hand may or may not interfere with at least 1 daily activity
- 4. Medications, hyperthyroidism, dystonia, or alcohol are not potential etiologic factors
- 5. Not psychogenic

Criteria for possible ET:

1. On examination, a +2 kinetic tremor must be present on 3 tasks

2. No other stipulations

Tremor Ratings (0 to +3):

0 = no visible tremor

- +1 = low-amplitude/barely perceivable tremor *or* intermittent tremor
- +2 = tremor is of moderate amplitude (1-2 cm) *and* usually present; it is clearly oscillatory
- +3 = large-amplitude (>2 cm), violent, jerky tremor resulting in difficulty completing the task due to spilling or inability to hold a pen to paper

Note from the Neurology Working Group: Please see Louis et al. (2001) for discussion on the addition of a tremor rating of 4.

Protocol source: https://www.phenxtoolkit.org/protocols/view/131301