P

Pronator Drift

Maryellen Romero
Department of Psychiatry and Behavioral
Sciences, Tulane University School of Medicine,
New Orleans, LA, USA

Definition

A routine procedure in a neurological examination in which patients are asked to extend both arms anteriorly and hold them at shoulder height with the palms facing up (supine position) for at least 10 s while keeping their eyes closed. The pathological response is for one of the arms to drift (up, down, or out) and/or for the hand to begin to pronate (turn palm down). Such a response can be indicative of either an upper motor neuron lesion anywhere along the neuroaxis or from a disturbance of proprioception anywhere from the parietal cortex down. An upward or lateral drift of the arm, with or without

pronation, tends to be more suggestive of a proprioceptive than a motor (weakness) deficit, although a downward drift does not rule out a problem with proprioception.

A manifestation of upper motor neuron (UMN) disease is seen when the affected patient is unable to maintain a posture of outstretched hands held in the palms-up (supine) position with the eyes closed. In the presence of UMN disease, the hand(s) will “drift” into the pronated (palms-down) position and the arms will fall.

Cross-References

► [Neurologic Examination](#)

References and Readings

Ross, R. T. (1999). *How to examine the nervous system* (3rd ed.). Stamford: Appleton & Lange.