

Fukuda Step Test (Fukuda, 1959)

1. Two concentric circles (.5 and 1 meter radii) with 15 degree angle divisions
2. Subjects were blindfolded with their arms flexed at 90 wearing no shoes
3. Subjects stepped in place 100 times in a quiet room with low light (the examiner can not speak during the testing)
4. Most subjects tested (n = 500) stayed in the original position
5. Forward progression of up to 3 meters was seen
6. Up to 30 degrees to the right or left was considered to be normal with 50 steps
7. Backward movement was rarely seen in people without disease
8. Patients with peripheral lesions tend to deviate to one side: with a central disorder the patient has large side to side excursions

Ask the subject to raise their arms to 90 degrees, close their eyes and march in place for 50 steps. Try to stay in one place. Note if the patient moves and in what direction. This test assists in the clinical picture but is not always reliable.

Positive Fukuda: distance traveled is > 50 cm. (19.7 in.).
Herdman, S.J. (2007). Vestibular Rehabilitation. Philadelphia: FA Davis, 3rd ed.

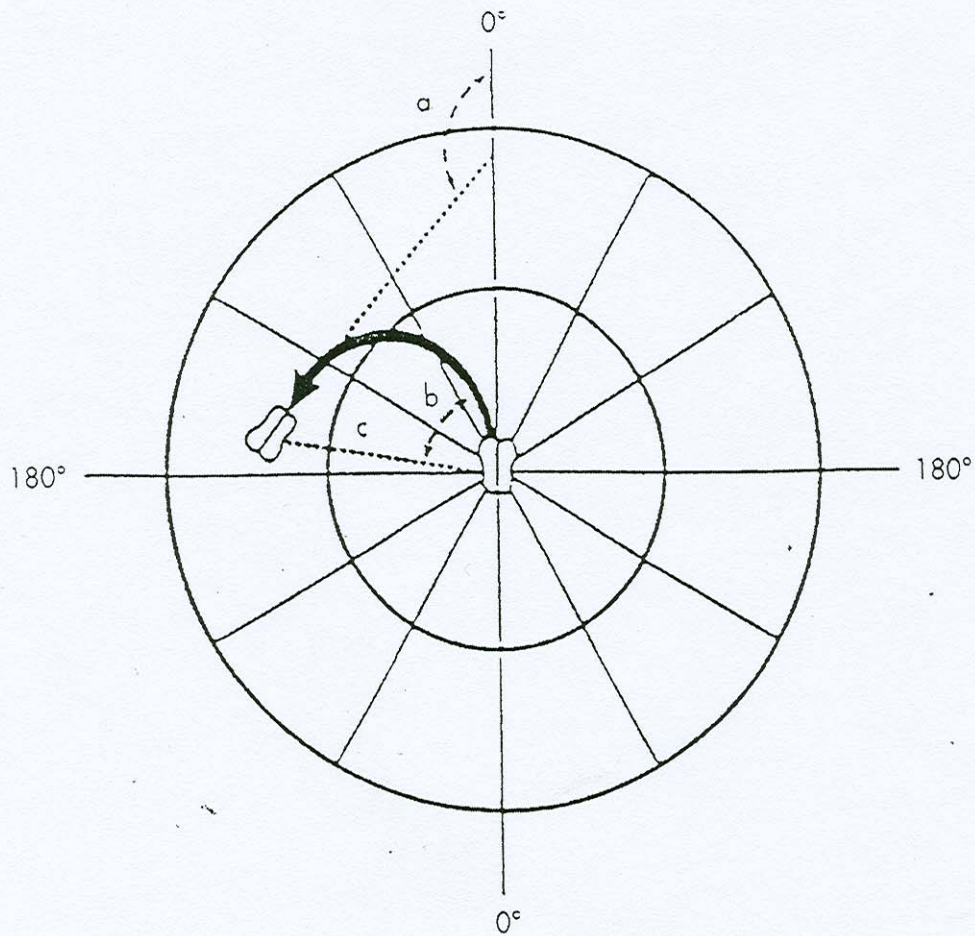


Fig. 28-15. The Fukuda stepping test for peripheral vestibular clients uses a floor grid to detect the extent of drift that occurs during an eyes-closed stepping task. (Reprinted from Newton R: *Brain Injury* 3:335. 1989.)

Adapted from: Umphred DA. *Neurological Rehabilitation*. 3rd ed. St. Louis, MO: Mosby, Inc. 1995.