

Tilt Table Testing (TTT): What You Need to Know



How is POTS diagnosed?

POTS is best diagnosed through a thorough clinical history, symptom questionnaires (such as the Malmö POTS Survey), and physical testing of the heart rate and blood pressure response to standing. One of the key features of POTS is an abnormal increase in heart rate when moving upright. To assess this, there are three main types of tests:

Active Stand Test (AST)

This is the first-line test for diagnosing POTS. The person lies down for at least five minutes, then stands up on their own (without wriggling or moving their feet) while heart rate and blood pressure are measured at regular intervals over 10 minutes.

Because the person is actively standing, their leg and core muscles help support blood flow, which can reduce the heart rate response in comparison to other tests. As a result, some people who are close to the diagnostic threshold of a 30 beats per minute rise, may not meet full criteria on this test. In these cases, repeat testing or a passive tilt table test may be recommended.

Passive Tilt Table Test (TTT without medication)

In this version, the person is strapped to a motorised table which moves them to an upright position. Because no muscle activity is involved, it removes the "muscle pump" effect and shows how the body responds when blood flow must be managed without physical effort.

This type of test may be useful if symptoms persist despite a negative or borderline AST, or if the person cannot safely complete standing testing.

Provocation Tilt Table Test (TTT with medication)

This test follows the same setup as the passive version but includes medications to trigger a drop in blood pressure or fainting. This approach is typically reserved for cases of unexplained or atypical fainting and is not recommended for diagnosing POTS. The test may cause unwanted effects such as seizure activity triggered by fainting, or extended fatigue in the days following the procedure.

more overleaf

Tilt Table Testing (TTT): What You Need to Know cont'd

Is Tilt Table Testing the gold standard?

Some clinicians refer to tilt table testing as the “gold standard” because it may detect more subtle forms of autonomic dysfunction than standing tests. However, these findings rarely impact treatment decisions, and the test is not routinely necessary for diagnosis.

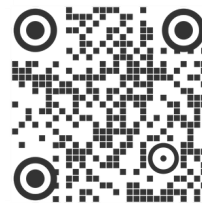
What are the concerns with TTT?

TTT is more time-consuming, costly, and harder to access than a standing test. In Australia, it requires a cardiologist to be present throughout the test, intravenous access, and specialised resuscitation equipment. The provocation version of the test may also trigger distressing or prolonged symptoms in some people.

Take-home point

A tilt table test is not required to diagnose POTS. For most people, a well-conducted 10-minute Active Stand Test combined with clinical history is sufficient. Tilt testing may have a role in unclear or complex cases, but it is not a necessary step for most diagnoses—and rarely changes treatment decisions.

For more information on performing and interpreting an Active Stand Test, please see our resource here



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