

Tilt-Table Test

Introduction

Patients may have unexplained recurrent symptoms of dizziness or loss of consciousness. There are many causes. One common cause is vasovagal syncope, which is a disease of the autonomic nervous system. The mechanism is a sudden drop of blood pressure or heart rate or both, in response to adrenergic stimulation. Tilt table test is used to diagnose vasovagal syncope. Patient lying on a stretcher will be tilted up to almost standing position. This, together with the use of drugs, can act as an adrenergic stimulation to provoke vasovagal syncope.

Importance of Procedure

Tilt Table test is used in diagnosing vasovagal or orthostatic syncope. Once the diagnosis is confirmed, specific treatment can be considered. If you refuse this test, it may be difficult to understand the cause of your symptoms. There is no alternative test that is specific in diagnosing vasovagal syncope, although there are tests that may detect other causes of your symptoms.

Pre-Procedure Preparation

- The test is often performed as an outpatient procedure.
- You have to omit drugs as instructed by your doctor.
- Preferably you should be accompanied by relatives or friends.
- Fasting for 4-6 hours before the test is necessary.
- Our staff will explain to you and your relatives the details of the procedure together with the possible risks and complications. You have to sign an informed consent.
- Intravenous line will be inserted.

The Procedure

- You need to lie down on the tilt table in a horizontal position.
- You will be secured with restraining strap.
- Nursing staff will monitor your electrocardiogram and blood pressure regularly.
- After a period of time, you will be tilted up to a nearly vertical position. You may be required to keep this position by standing on a footboard, for few minutes.
- If you develop symptoms like dizziness or syncope, or your blood pressure drop, we will immediately lie you down and stop the test. You should recover quickly.
- If you do not develop these signs and symptoms, we may add intravenous adrenergic drug (usually isoprenaline) at increasing doses and repeat the test 2-3 more times. You may experience palpitation or nausea during intravenous infusion of drug.
- Alternatively, we may administer a fixed dose of nitroglycerine to you sublingually in upright position before repeating the test. You may experience headache or nausea.
- The examination room will be equipped with necessary equipment for emergency resuscitation.

Post-Procedure Care

- You will be asked to rest for 20-30 minutes after the test before you are allowed to leave.

Risks and Complications

- The procedure carries certain risks.
- It may cause transient cessation of heart rhythm.
- The drugs infused may cause arrhythmia or heart attack.

Remarks

- It is hard to mention all the possible consequences if this procedure is refused.
- The list of complications is not exhaustive and other unforeseen complications may occasionally occur. The risk quoted is for general reference only.
- If a complication developed, another life-saving procedure or treatment may be required immediately.
- If there are further concerns about this procedure, please feel free to contact our medical staff.

Reference

1. ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope: A Report of the ACCA/AHA; Task Force on Clinical Practice Guidelines and the Heart Rhythm Society; 136 (5) e25–e59.
2. ESC Guidelines for the diagnosis and management of syncope. Eur Heart J 2018, 39 (21); 1883–1948