

Diagnostic Studies

Online Content (1H)

Unit Objectives:

- **Interpret results of diagnostic tests in relation to patient symptoms and assessment findings. (1,2)***
(*Course Objectives)

In order to receive full credit (1H class time) for this assignment, it must be completed in its entirety and submitted to the Unit 4- Diagnostic Studies Dropbox by 2/9/2026 at 0800. Any assignment not completed in its entirety will result in missed class time, and must be made up before the end of the semester.

What blood laboratory studies might be altered in an individual with a venous thromboembolism (VTE)?

ACT, aptt, INR Hgb, Hct, platelet count, D-dimer

What does an elevated D-dimer suggest?

Elevated D-dimer suggest VTE

A peripheral arteriography and/or venography can be used to detect and visualize what?

Used to assess blood flow through the arteries or veins, with a contrast media.

What problems can a transesophageal echocardiogram (TEE) detect?

Mitral valve disease, endocarditis vegetation, thrombus prior to cardioversion.

If you are the nurse assisting with a TEE, what are your responsibilities?

- **Ensure NPO for 6hr**
- **IV access for sedation**
- **Monitor VS, suction as needed.**
- **Monitor for complications.**
 - **Esophageal tear**
 - **Aspiration**
 - **Vasovagal reaction**
- **Resume eating and drinking when gag reflex returns.**

What is a Lexiscan stress test and why is it performed? What must you, as the nurse, ask the patient prior to performing the test?

A lexiscan is pharmacologic nuclear imaging, it is a chemical stress test done when the patient is unable to exercise on the treadmill. The Lexiscan stimulates the effects of exercise, the nuclear agent provides perfusion images, which are used to diagnose coronary artery disease.

The nurse must ask if the patient has had caffeine in the past 12 hours.

If you are conducting a stress test on a patient, what are some reasons to conclude or terminate the test?

- 1. Chest pain**
- 2. Sig changes in vital signs from baseline**
- 3. ECG changes indicating cardiac ischemia**
- 4. Caffeine ingestion within 12 hours**
- 5. Theophylline must be held for 24 hrs prior**

What are some things we can identify from a 12-lead ECG?

- 1. Valve structure and motion**
- 2. Cardiac chamber size and contents**
- 3. Ventricular/septal motion and thickness**
- 4. Pericardial sac**
- 5. Ascending aorta**
- 6. Ejection Fraction**

A BNP of 775 would be diagnostic for what? **Heart Failure**

There are two substances released in the blood when cardiac tissue damage occurs. Name them:

- 1. Troponin**
- 2. CK-MB**

View the following 3-minute TEE video:

<https://www.youtube.com/watch?v=9Us9mXXILSk>

In this particular case they are looking for the presence of what inside the heart?

To see if there is any blood clots in the patients heart

Optional question: When the cardiac rhythms shows on the bottom of the TEE screen, what tells you the patient is in A-fib (atrial fibrillation)?

No identifiable p waves