

## 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 2/12/2024 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)?

Lab studies that may be altered in an individual with a venous thromboembolism ACT, aPTT, INR, Hgb, Hct, and platelet count.

What does an elevated D-dimer suggest?

An elevated D-dimer suggests a VTE.

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

These are used to detect and visualizes atherosclerotic plaques, occlusions, aneurysms, venous abnormalities, and traumatic injuries.

What problems can a transesophageal echocardiogram (TEE) detect?

TEE can detect mitral valve disease, endocarditis vegetation, and thrombus prior to cardioversion.

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

Ensure the patient is NPO for 6 hours, ensure there is IV access for sedation, monitor vital signs, suction as needed, allow the patient to resume eating and drinking when the gag reflex returns, and monitor for complications like esophageal tears, aspiration, and vasovagal reactions.

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?

Lexiscan stress test is a chemical stress test done when a patient is unable to use the treadmill. It is performed to diagnose someone with coronary artery disease. The patient must stop all caffeine intake 12 hours prior to the test, as the nurse I must ask to ensure they have not had any caffeine. As the nurse I also need to ensure the patient has not taken theophylline 24 hours prior to the test.

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

1. Chest pain
2. Significant changes in vital signs from their baseline vitals
3. ECG changes indicating cardiac ischemia
4. Shortness of breath
5. If the patient becomes dizzy or lightheaded

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

1. Conduction problems
2. Dysrhythmia
3. Hypertrophy
4. pericarditis
5. Ischemia or Infarction
6. Drug effectiveness

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?

They are looking for the formation of blood clots in the 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)? The waves were smaller in size and there was no P wave which is seen in afib.