

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)?

- D-dimer
- INR
- pTT

What does an elevated D-dimer suggest?

- A blood clot has formed and may be breaking down.

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

- Visualizes how well blood flows through the arms and legs. It can detect thrombi and atherosclerosis.

What problems can a transesophageal echocardiogram (TEE) detect?

- Blood clots or masses in heart
- Tear in the lining of the aorta
- Mitral valve disorders

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

- Evaluate pt history, especially esophageal varices, stricture or obstruction. Ensure informed consent is signed, verify allergies, home medications, especially blood thinners. After the procedure, obtain vitals, and verify return of gag reflex.

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?

- IV medication that increases blood flow through the heart and arteries during a stress test. Lexiscan is used when a patient cannot perform a standard stress test with physical demands. You should ask the patient if they have COPD or difficulty breathing, as lexiscan can increase shortness of breath. It can also increase the risk of seizures, so the nurse should ask the patient if they have a history of seizures or epilepsy.

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

1. ST or QRS changes
2. Drop in systolic of 10mmHG or more
3. SVT, PVC, heart block or brady arrhythmias
4. Fatigue, SOB, wheezing
5. Increasing CP

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

1. arrhythmias
2. cardiac ischemia
3. acute myocardial infarction
4. ventricular hypertrophy
5. pericarditis
6. old myocardial infarction

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. creatinine kinase (CK)

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?

- Blood clots in the heart due to the patients atrial fibrillation before they cardiovert the patient into a normal rhythm.

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)? Fibrillatory waves, no p wave and irregular QRS