MUSC MEDICAL UNIVERSITY

Lab Tests and Results

Adenosine deaminase measurement, pleural fluid

What is this test?

This test measures the amount of an enzyme called adenosine deaminase in pleural fluid[1][2][3][4]. It is used when a pleural effusion (build-up of fluid around the lung) caused by tuberculosis is suspected[5][6][7][8][2][9][10].

Why do I need this test?

Laboratory tests may be done for many reasons. Tests are performed for routine health screenings or if a disease or toxicity is suspected. Lab tests may be used to determine if a medical condition is improving or worsening. Lab tests may also be used to measure the success or failure of a medication or treatment plan. Lab tests may be ordered for professional or legal reasons. The following is a possible reason why this test may be done:

TB

When and how often should I have this test?

When and how often laboratory tests are done may depend on many factors. The timing of laboratory tests may rely on the results or completion of other tests, procedures, or treatments. Lab tests may be performed immediately in an emergency, or tests may be delayed as a condition is treated or monitored. A test may be suggested or become necessary when certain signs or symptoms appear.

Due to changes in the way your body naturally functions through the course of a day, lab tests may need to be performed at a certain time of day. If you have prepared for a test by changing your food or fluid intake, lab tests may be timed in accordance with those changes. Timing of tests may be based on increased and decreased levels of medications, drugs or other substances in the body.

The age or gender of the person being tested may affect when and how often a lab test is required. Chronic or progressive conditions may need ongoing monitoring through the use of lab tests. Conditions that worsen and improve may also need frequent monitoring. Certain tests may be repeated to obtain a series of results, or tests may need to be repeated to confirm or disprove results. Timing and frequency of lab tests may vary if they are performed for professional or legal reasons.

How should I get ready for the test?

A thoracentesis is a procedure that requires written consent. Review the consent form with the healthcare worker and ask any questions that you have before signing the consent form. Tell the healthcare worker if you have a medical condition or are using a medication or supplement that causes excessive bleeding. You should also report if you have a history of allergic or other reactions to local anesthetics. You may need to have blood tests and a chest x-ray performed before the thoracentesis.

How is the test done?

Pleural fluid is the fluid in between the membrane linings of your lungs. A procedure called a thoracentesis is done to get a pleural fluid sample for testing. A healthcare worker will first need to locate the fluid that needs to be sampled. This is done by a chest x-ray, ultrasound, or by percussion (rhythmically pounding the chest wall). Once the fluid is located, a healthcare worker may hold up the arm on the same side where the procedure will be done. Your skin will be cleaned with antiseptic, and a local anesthetic is injected to numb the area. A needle will be inserted into the fluid pocket. Fluid samples are then drawn out using a needle attached to a syringe. When a large enough sample is collected, the needle will be removed. A thoracentesis may be done with or without the assistance of ultrasound or CT scan.

How will the test feel?

The amount of discomfort you feel will depend on many factors, including your sensitivity to pain. Communicate how you are feeling with the person doing the procedure. Inform the person doing the procedure if you feel that you cannot continue with the procedure.

Before a thoracentesis, a local anesthetic is given to the procedure site to numb the area. You may feel mild discomfort or stinging when the numbing medicine is injected. You may still be able to feel pressure or discomfort during the procedure. Your procedure site may be sore for several days.

What should I do after the test?

After a thoracentesis, a bandage will be secured over your procedure site and pressure held until the bleeding or fluid leakage stops. You may receive a chest x-ray to check for complications. The chest x-ray may be repeated to look for the return of fluid in the lung. Follow your healthcare workes instructions for changing your bandage and other wound care. Tell your healthcare worker immediately if you have a new onset of difficulty breathing, shortness of breath, chest pain, weakness, fatigue, fever, or dizziness. Also immediately tell your healthcare worker if you have increased bleeding or drainage from the procedure site.

What are the risks?

Pleural fluid: A procedure called a thoracentesis is done to collect a pleural fluid sample for testing. Common risks of a thoracentesis include bleeding and bruising at the puncture site and pneumothorax (collapsed lung). If you have a medical condition, or are using a medication or supplement that causes excessive bleeding, you are at a higher risk of bleeding from the puncture site. Rare risks include hemothorax (blood in the chest cavity), pulmonary edema (accumulation of fluid in the lungs), and venous air embolism (air bubble in a vein). Your liver or spleen may be damaged by the needle used during the procedure. The person doing this procedure may need to perform it more than once. Talk to your healthcare worker if you have any concerns about the risks of having a thoracentesis.

What are normal results for this test?

Experts do not agree on what normal results are for this test.

What follow up should I do after this test?

Ask your healthcare worker how you will be informed of the test results. You may be asked to call for results, schedule an appointment to discuss results, or notified of results by mail. Follow up care varies depending on many factors related to your test. Sometimes there is no follow up after you have been notified of test results. At other times follow up may be suggested or necessary. Some examples of follow up care include changes to medication or treatment plans, referral to a specialist, more or less frequent monitoring, and additional tests or procedures. Talk with your healthcare worker about any concerns or questions you have regarding follow up care or instructions.

Where can I get more information?

Related Companies

American Lung Association
Centers for Disease Control and Prevention

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