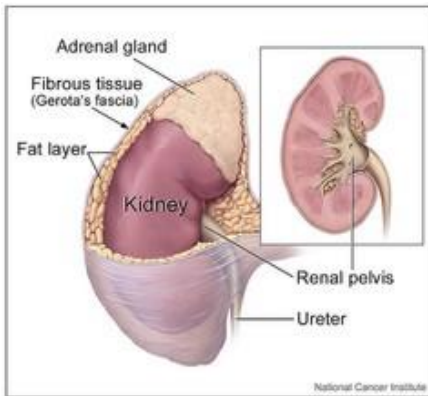


ACTH Stimulation Test



Your pituitary gland is a pea-sized gland located at the base of your brain. It produces many hormones, including ACTH - adrenocorticotropic (*uh-dree-noh-kawr-ti-koh-trop-ik*) hormone.

ACTH stimulates your adrenal glands, which sit on top of your kidneys and release hormones including cortisol and adrenaline.

These hormones help you respond to stress in a healthy way and support your immune system.

What is the ACTH (cosyntropin) stimulation test and why might I need it?

The ACTH stimulation test is used to diagnose and/or measure if you have:

- adrenal insufficiency (morning or random low blood cortisol levels that cause symptoms like fatigue, hyperpigmentation, dizziness)
- high potassium levels
- low blood sugar levels

If you are currently taking cortisol replacement (hydrocortisone), your doctor may order this test to determine if you need to continue taking cortisol replacement.

How do I prepare for test?

You will need to fast for 8 hours before the test. You may have water, but not coffee, tea, or other beverages containing caffeine or calories. The best time to do this test is before 10 am in the morning. Your provider might advise you to stop taking certain medications for 24 hours before the test. Common medications that can affect cortisol levels include (not a complete list):

- steroid medications
- male hormones
- birth control pills
- estrogen
- amphetamines
- lithium
- phenytoin (anti-seizure drug)

It's important to make sure your doctor knows about all the medications you're taking, including over-the-counter drugs, vitamins, and supplements.

Where do I go to get the test done?

The test will be scheduled at a specific date and time. At your scheduled appointment day and time, go to the Assessment and Treatment Center (ATC) on the 2nd floor of the main hospital to have the test performed.

Remember, this test needs to be performed in the morning before 10 am.

What happens during the test?

- ✓ A blood sample will be taken at the start to measure your baseline cortisol level.
- ✓ We will give you an intravenous (IV) injection of cosyntropin, a synthetic portion of ACTH. This hormone should trigger the adrenal glands to produce cortisol.
- ✓ Blood samples will then be taken after 30 minutes and after 60 minutes. These samples will reflect your cortisol levels after your body has had time to react to the injection.

You will typically get the results of your ACTH stimulation test in one to two weeks.

What do the test results mean?

Your blood's cortisol levels should rise from the cosyntropin we gave you if your adrenal glands are working as they should. Test results may vary slightly, so talk to your doctor if you are concerned.

If your blood cortisol levels are below the acceptable range after the test, it may mean that you have an adrenal condition such as acute adrenal crisis, Addison's disease (your adrenal glands are not making enough hormones), or hypopituitarism (your pituitary gland is not making enough hormones). Your doctor will discuss your test results with you.