

Aldosterone blood test

Definition

The aldosterone blood test measures the level of the hormone aldosterone in blood.

Aldosterone can also be measured using a urine test.

How the Test is Performed

A blood sample is needed.

How to Prepare for the Test

Your health care provider may ask you to stop taking certain medicines a few days before the test so that they don't affect the test results. Be sure to tell your provider about all the medicines you take. These include:

- High blood pressure medicines
- Heart medicines
- Nonsteroidal anti-inflammatory drugs (NSAIDs)
- Antacid and ulcer medicines
- Water pills (diuretics)

Do not stop taking any medicine before talking to your doctor. Your provider may recommend that you eat no more than 3 grams of salt (sodium) per day for at least 2 weeks before the test.

Or, your provider will recommend that you eat your usual amount of salt and also test the amount of sodium in your urine.

At other times, the aldosterone blood test is done right before and after you receive a salt solution (saline) through the vein (IV) for 2 hours. Be aware that other factors can affect aldosterone measurements, including:

- Pregnancy
- High- or low-sodium diet
- High- or low-potassium diet
- Strenuous exercise
- Stress

How the Test will Feel

When the needle is inserted to draw blood, some people feel moderate pain. Others feel only a prick or stinging sensation. Afterward, there may be some throbbing or a slight bruise. This soon goes away.

Why the Test is Performed

This test is ordered for the following conditions:

potassium

- Hard to control blood pressure
- Low blood pressure upon standing (orthostatic hypotension)

Aldosterone is a hormone released by the adrenal glands. It helps the body regulate blood pressure. Aldosterone increases the reabsorption of sodium and water and the release of potassium in the kidneys. This action raises blood pressure.

Aldosterone blood test is often combined with other tests, such as the renin hormone test, to diagnose over- or under-production of aldosterone.

Normal Results

Normal levels vary:

- Between children, teens, and adults
- Depending on whether you were standing, sitting, or lying down when the blood was drawn

Normal value ranges may vary slightly among different laboratories. Some labs use different measurements or test different samples. Talk to your provider about the meaning of your specific test results.

What Abnormal Results Mean

A higher than normal level of aldosterone may be due to:

- Bartter syndrome (group of rare conditions that affect the kidneys)
- Adrenal glands release too much aldosterone hormone (primary hyperaldosteronism - usually due to a benign nodule in the adrenal gland)
- Very low-sodium diet
- Taking blood pressure medicines called mineralocorticoid antagonists

A lower than normal level of aldosterone may be due to:

- Adrenal gland disorders, including not releasing enough aldosterone, and a condition called primary adrenal insufficiency (Addison disease)
- Very high-sodium diet

Risks

There is little risk involved with having your blood taken. Veins and arteries vary in size from one patient to another and from one side of the body to the other. Taking blood from some people may be more difficult than from others.

Other risks associated with having blood drawn are slight but may include:

- Excessive bleeding
- Fainting or feeling lightheaded
- Multiple punctures to locate veins
- Hematoma (blood accumulating under the skin)
- Infection (a slight risk any time the skin is broken)

Aldosterone - serum; Addison disease - serum aldosterone; Primary hyperaldosteronism - serum aldosterone; Bartter syndrome - serum aldosterone

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