



Primary Aldosteronism

WHAT IS PRIMARY ALDOSTERONISM?

Primary aldosteronism (PA) is a type of hyperaldosteronism. This condition occurs when your adrenals—two small glands located on top of each kidney—produce too much of the hormone aldosterone. Aldosterone helps balance the levels of sodium (salt) and potassium in your body. Having too much aldosterone causes the body to hold on to sodium, resulting in salt and water build-up and a rise in blood pressure.

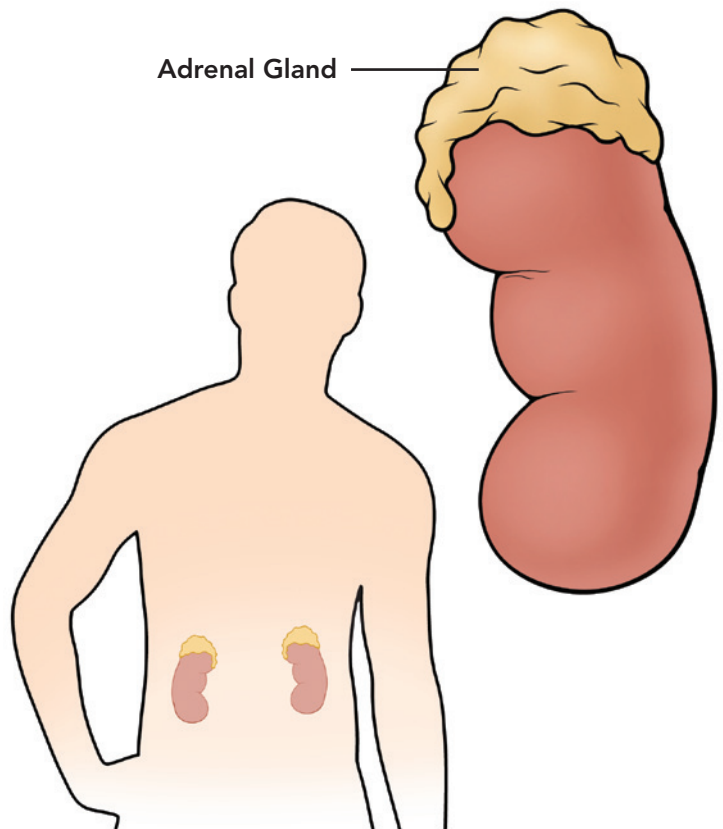
Uncontrolled high blood pressure can put you at risk for stroke, heart attack, heart failure, or kidney failure. The risk of heart disease and stroke may be even greater in people with PA than in other people with high blood pressure.

When the increase of aldosterone is caused by a problem in your adrenals, the condition is called primary aldosteronism. When the problem originates outside the adrenals, it's called secondary aldosteronism. The main causes of PA are

- Overactivity of both adrenal glands, which occurs in about two-thirds of cases
- A noncancerous growth or tumor in one adrenal gland (also called Conn's syndrome), which occurs in about one-third of cases
- An inherited disorder, which is rare
- A cancerous tumor of the adrenal gland, which is very rare

DID YOU KNOW?

Primary aldosteronism was once thought to be a rare condition. Now, experts say as many as one in ten people with high blood pressure may have PA.



HOW IS PRIMARY ALDOSTERONISM DIAGNOSED?

To diagnose PA, your doctor may measure the levels of aldosterone and renin in your blood. Renin is a protein produced by the kidneys that helps regulate blood pressure. In PA, renin levels are low and aldosterone levels are high. If PA is diagnosed, your doctor will run further tests to see if you have a noncancerous tumor in one adrenal gland or if both adrenal glands are overactive. This may involve taking blood samples from each adrenal vein to measure aldosterone levels.

HOW IS PRIMARY ALDOSTERONISM TREATED?

Treatment of PA depends on its cause. When both adrenals are overactive, treatment includes medication and lifestyle changes. Your doctor may prescribe a special type of diuretic ("water pill") that works to block the action of aldosterone in your body. You will also need to limit sodium (salt) in your diet.

When a tumor is the cause, medication and lifestyle changes can treat PA. However, doctors usually recommend surgery to remove the adrenal gland containing the tumor. After surgery, you may still need to take medication. You should also follow a healthy lifestyle by

- Reducing sodium in your diet
- Losing weight, if needed
- Exercising regularly
- Limiting alcohol intake
- Stopping smoking

RISK FACTORS FOR PRIMARY ALDOSTERONISM

High blood pressure that requires more than three medications to manage

High blood pressure that started at a young age (less than age 30)

Family history of stroke at a young age

Low potassium level in your blood (called hypokalemia)

Question to ask your doctor

- Should I be tested to find out the cause of my high blood pressure?
- What kind of medication should I take? How often should I take it?
- How long will I need to take medication?
- What are the benefits and risks of my medication?
- How often should I have follow-up appointments?
- Should I see an endocrinologist for my care?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Hormone Health Network information on primary aldosteronism: www.hormone.org/Cardiovascular/primary-aldosteronism.cfm
- Mayo Clinic: www.mayoclinic.com/health/primary-aldosteronism/DS00563
- Medline Plus: www.nlm.nih.gov/medlineplus/ency/article/000330.htm

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

Primary Aldosteronism Fact Sheet



www.hormone.org