# **High Blood Pressure: Secondary Hypertension**

### What is secondary hypertension?

High blood pressure caused by a disease or another known medical problem is called secondary hypertension. Blood pressure is the force of the blood against artery walls as the heart pumps blood through the body. High blood pressure (hypertension) is blood pressure that keeps being higher than normal. Most cases of secondary hypertension are caused by kidney or hormonal problems.

Normal blood pressure ranges up to 120/80 ("120 over 80"), but blood pressure can rise and fall with exercise, rest, or emotions. It is measured in millimeters of mercury. The first number (120 in this example) is the pressure when the heart pushes blood out to the rest of the body. It is called the systolic pressure. The second number (80 in this example) is the pressure when the heart rests between beats (diastolic pressure).

- Healthy blood pressure is less than 120/80.
- Pre-high blood pressure (prehypertension) is from 120/80 to 139/89.
- Stage I high blood pressure ranges from 140/90 to 159/99.
- Stage II high blood pressure is over 160/100.

If repeated checks of your blood pressure show that it is higher than 140/90, you have hypertension. It's important to get treatment for high blood pressure. If it is not treated, it can damage the body in many ways.

#### What is the cause?

Many medical conditions, diseases, and medicines can cause secondary hypertension, including:

- Narrowing of the arteries in the kidneys
- Narrowing of the aorta, a large blood vessel that supplies blood to the lower body
- Several types of kidney disease
- Excess secretion of a hormone called aldosterone from the adrenal gland
- An adrenal gland tumor
- · Cushing's syndrome, a disorder in which there is too much corticosteroid hormone in the blood
- Thyroid problems
- Medicines such as estrogen and oral contraceptives
- · Abuse of drugs such as amphetamines, alcohol, or diet pills
- Pregnancy

#### What are the symptoms?

Although most people do not experience any symptoms with high blood pressure, there are some symptoms that should be checked by your provider. These symptoms may mean you have a problem with your blood pressure or another condition:

- Headaches
- Nosebleeds
- Tiredness
- Blurred vision
- Dizziness
- · Fast or irregular heartbeat
- · Shortness of breath
- · Chest pain

These symptoms may be serious and should be reported to your provider right away.

Remember most people with high blood pressure have no symptoms. To know if your blood pressure is well controlled, have it checked regularly

### How is it diagnosed?

Your healthcare provider will ask about your symptoms and medical history and examine you. Your blood pressure will be measured on 3 different days when you are relaxed and not in a hurry and have not had alcohol for 72 hours. You may have blood tests, chest X-rays, and an electrocardiogram (ECG, or EKG).

Your medical history is an important part of diagnosis. Your healthcare provider will ask about your personal and family history of high blood pressure and heart or kidney disease.

#### How is it treated?

Secondary hypertension is treated by treating the condition causing the high blood pressure. For example, if you have high blood pressure caused by Cushing's syndrome, treatment for Cushing's will lower your blood pressure.

Your healthcare provider may recommend additional treatments to lower your blood pressure, such as diuretics or other medicines that lower blood pressure.

## How long will the effects last?

If the cause can be diagnosed and treated, your blood pressure should get better over time. If you are taking medicine to reduce your blood pressure and your underlying condition is treated, at some point you may be able to cut down or stop taking the blood pressure medicine.

#### How can I take care of myself?

- · Follow your treatment plan and know how to take your medicines.
  - · Work with your healthcare provider to find what lifestyle changes and medicines are right for you.
  - Follow the directions that come with your medicine, including information about food or alcohol. Make sure you know how and when to take your medicine. Do not take more or less than you are supposed to take.
  - Many medicines have side effects. A side effect is a symptom or problem
    that is caused by the medicine. Ask your healthcare provider or pharmacist
    what side effects your medicine may cause and what you should do if you
    have side effects. Ask if you should avoid some nonprescription medicines.
  - Be careful with nonprescription medicines or herbal supplements. Some can raise blood pressure. This includes diet pills, cold and pain medicines, and energy boosters. Read labels or ask your pharmacist if the medicine or supplement affects blood pressure. Some illegal drugs, like cocaine, can also affect blood pressure.
  - Check your blood pressure (or have it checked) as often as your provider advises. Keep a diary of the readings. A diary is also a good place to note your exercise, weight, salt intake, types of food you are eating, and your feelings. This can help you learn how these things can affect your blood pressure. Take your diary with you when you visit your provider.
- Don't smoke.
- Eat a healthy diet that is low in salt, saturated fat, trans fat, and cholesterol. Include lots of fruits, vegetables, and fat-free or low-fat milk and milk products.
- Get regular exercise, according to your healthcare provider's advice. For example, you might walk, bike, or swim at least 30 minutes 3 to 5 times a week.
- Limit the amount of alcohol you drink. Moderate drinking is up to 1 drink a day for women and up to 2 drinks for men.
- · Limit the amount of caffeine you drink.
- · Lose weight if you are overweight.
- Find ways to relax and to manage or reduce stress.
- · Ask your healthcare provider:
  - · How and when you will hear your test results
  - How long it will take to recover
  - What activities you should avoid and when you can return to your normal activities
  - · How to take care of yourself at home
  - What symptoms or problems you should watch for and what to do if you have them
- · Make sure you know when you should come back for a checkup.

## How can I help prevent secondary hypertension?

Most of the conditions that cause secondary hypertension cannot be prevented. However, regular checkups can help detect many conditions before they become serious, including those that can lead to high blood pressure.

Developed by RelayHealth.

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