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# Hypertension and Spina Bifida

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January 2024

## What is hypertension?

Hypertension, also called high blood pressure, is a medical condition in which the force of a person's blood flowing through their blood vessels is too high. Hypertension often goes undetected.

Blood pressure is measured by using a sphygmomanometer (blood pressure cuff) and provides two numbers. The top number is called the systolic pressure and the bottom number is called the diastolic pressure.

- Systolic pressure: the pressure when the blood is being actively pumped by the heart and the
- Diastolic pressure: the reading of the resting tone of the blood vessels when the heart is refilling with blood.

Blood pressure should be evaluated at least three separate times to establish the diagnosis of hypertension. In adults, a blood pressure consistently greater than 120/80 is abnormal. A child's normal blood pressure range depends on age and sex. Your child's pediatrician will have upper limits of normal available to him/her.

Many people have white coat hypertension, which means their blood pressure may elevate when they visit a doctor and are nervous. For this reason, blood pressure should ideally be taken in a setting when someone might not be as nervous. Approximately 40% of people with white coat hypertension eventually develop true hypertension that requires treatment, but 60% do not.

## What are symptoms of hypertension?

Hypertension often presents with no symptoms. A low-grade headache and fatigue may be the only indicator, if any, of high blood pressure.

## What are the dangers of hypertension?

Hypertension is associated with heart attacks and strokes. Unmanaged hypertension can shorten someone's life by several years. It is important to take blood pressure issues seriously.

## Is there an elevated risk of hypertension in Spina Bifida?

Adults and children with Spina Bifida may have an increased risk for hypertension when compared to individuals without Spina Bifida. The reason for this increased risk is not clear but may be due to a higher frequency of some risk factors listed below. An evaluation for an underlying cause should be pursued including workup for a possible kidney cause.



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## What are the risk factors for hypertension?

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| <p>1. <i>Non-modifiable:</i></p> <ul style="list-style-type: none"><li>a. Family history</li><li>b. Age</li><li>c. Race</li><li>d. Sex</li></ul> | <p>2. <i>Modifiable:</i></p> <ul style="list-style-type: none"><li>a. Obesity</li><li>b. High salt intake</li><li>c. Sleep apnea</li><li>d. High stress</li><li>e. Excessive alcohol consumption</li><li>f. Smoking</li><li>g. High cholesterol and triglycerides</li></ul> |
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## What is the treatment of hypertension?

The cause of hypertension should first be identified, particularly in young people. The following healthy lifestyles changes can significantly improve blood pressure by reducing modifiable risk factors:

- 1. Dietary salt restriction
- 2. Weight loss
- 3. Stress management
- 4. Regular exercise
- 5. Limiting alcohol intake and smoking

Treatment with medications is often necessary for many individuals. The physician will help guide medication selection and management as there are various classes of hypertension medications. For adults, internal medicine and cardiology doctors frequently manage hypertension. Pediatric cardiologists or nephrologists treat more complicated pediatric cases.

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*This information does not constitute medical advice for any individual. As specific cases may vary from the general information presented here, SBA advises readers to consult a qualified medical or other professional on an individual basis.*