# Causes of Dizziness and High Blood Pressure

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According to the American Heart Association, more than 73.6 million adults over the age of 20 suffer from high blood pressure, or hypertension. Suffer may actually not be the best choice of words, since hypertension has no symptoms and is often called one of the silent killers--by the time you discover you have it, the disease is already well advanced. The good news for hypertensives is that it is relatively easy to treat through diet, exercise and prescribed medications. But, like most medications, those used for high blood pressure come with a number of unwanted side affects. Some of them include orthostatic hypotension, sympathetic nerve responses or reactions to medications--all can cause dizziness in someone with high blood pressure.

### Orthostatic Hypotension

Orthostatic hypotension is a temporary condition that causes low blood pressure from a sudden change in posture. People with and without hypertension can experience orthostatic hypotension after standing up too quickly, from a sitting or lying position. The body's arteries contain a series of arterial baroreceptors that tell the arteries when to constrict and when to dilate, controlling blood pressure. While in a prone position, your blood pressure will be low. If you suddenly move from a lying to a standing position, the baroreceptors may not have time to adjust to the change in posture making you feel lightheaded or dizzy.

### Sympathethic Nerve Responses

During fight or flight responses to danger, the body's sympathetic division of the autonomous nervous systems regulates how the body reacts to danger. Common responses include stimulating the heart to beat faster and more forcefully and dilating arterioles to supply more blood to active muscles. Another response to a fight or flight response is to increase blood pressure. To compensate, the hypertensives' kidneys excrete salt and water, to lower the blood volume. If this response occurs too quickly, you may feel lightheaded.

#### Reactions to Medications

There are a number of approaches to treating hyptertension using prescription medications--some of them may result in hypotension. Thiazide diuretics are usually the first medication given to a newly diagnosed hypertensive because it is designed to lower the blood volume by eliminating sodium and water. Adrenergic blockers lower blood pressure by blocking part of the fight or flight aspect that raises the blood pressure. Angiotensin-converting enzyme (ACE) inhibitors work to lower blood pressure by dilating arteries, so if the prescription is high, you could experience transient episodes of low blood pressure or dizziness. If you feel lightheaded after standing or while performing routine daily tasks, speak to your doctor. You may need to have your prescription adjusted.

## Resources

Arterial baroreceptors