



Patient education: Orthostatic hypotension self-care

Orthostatic hypotension (OH) is a condition where a person has a drop in systolic BP (top BP value) of ≥ 20 mmHg or diastolic BP (bottom BP value) ≥ 10 mmHg when rising from lying/sitting to standing. For example, a person whose seated BP is 120/80 mmHg and after standing for 1-3 minutes their BP falls to 90/60 mmHg.

OH can cause or worsen symptoms including lightheadedness (feeling faint), palpitations (sensation of pounding, fast, or irregular heart beat), tremulousness (trembling feeling), generalized weakness, blurred vision, exercise intolerance, and fatigue upon standing. There can be several reasons why OH occurs, including dehydration, medications, and/or other conditions (e.g., Parkinson's, diabetic neuropathy).

At Heart One, our #1 goal is to prevent lightheadedness, fainting, and falls by maintaining your blood pressure when you are in an upright position. To accomplish this we will work together to raise your overall blood pressure so that it does not fall too low when standing (to reduce your orthostatic symptoms) or go too high when lying down (to reduce risk of heart attack and stroke).

Treatment of orthostatic hypotension

1. Lifestyle habits
 - These are first-line treatment options because they are effective in raising blood pressure, well tolerated, and safe. These strategies have a much lower risk of raising lying blood pressure.
2. Medications
 - Used in addition lifestyle habits to raise blood pressure.

Lifestyle habits

These measures are important to prevent falling or passing out due to low blood pressure. They can be used in combination. Consistency is key to maximize benefits.

- (1) before getting out of bed
 - drink 16 ounces of cold water
 - stretch arms and legs
 - rise slowly from lying to sitting to standing (wait 1-2 minutes between each position)
- (2) stay hydrated by drinking a minimum of 6 - 8 glasses of plain water daily
 - this is equivalent to 48-64 ounces / 1,500-2,000 milliliters / 1.5-2 quarts / $\frac{1}{2}$ gallon
- (3) wear an abdominal binder while standing
 - this is best to wear first thing in the morning and when standing for long periods of time
 - this is very important to help prevent falls
 - can be purchased at pharmacies or online [search abdominal binder / postoperative wrap]
 - **must remove prior to lying down/sleeping to avoid increased lying blood pressure**



- (4) add salt to foods / eat salty snacks
 - maintain salt (sodium) intake 3-10 grams daily (1 teaspoonful table salt = 2.3 grams sodium)
 - **if you have heart failure please talk with your doctor before increasing salt intake**
- (5) avoid alcohol because it can contribute to lower blood pressure
- (6) if your lying systolic blood pressure (top number) is > 160 mmHg try these steps
 - if you are taking midodrine/droxidopa/pyridostigmine, make sure that you are taking your last daily dose at least 3 (and perhaps 5) hours before lying down at night
 - sleeping with your head elevated 30 degrees [use an electronic bed, head of bed riser, bed wedge pillows, foam mattress elevator, or sleep in a recliner]
 - sleeping with your head elevated can lower your lying blood pressure, reduce the number of times you urinate at night, and help improve morning symptoms
- (7) if your blood pressure drops after meals try these steps
 - be careful while standing for 30-60 minutes after eating
 - eat smaller meals throughout the day rather than 2-3 larger meals
 - drink 16 ounces of cold water 15 minutes before eating
 - eat smaller portions of rapidly digested carbohydrates (white bread, white rice, potatoes, muffins, cookies, bagels, sugary beverages)
- (8) exercise as able; ideally 30 minutes 5-7 times per week
 - exercising in the pool prevents a fall in blood pressure
 - try recumbent exercises such as riding a stationary bicycle, using elastic bands for resistance training, and rowing

Medications

- **Midodrine, Droxidopa, Pyridostigmine** – short-acting medications to raise blood pressure for ~4 hours after each dose to improve ability to be active; the best time to take these medications is immediately after waking up, midday, and late afternoon at least 3 hours before bedtime
- **Fludrocortisone** – long-acting medication used to increase blood pressure by increasing blood volume through water retention; this med is taken once daily