Blood pressure (low) - hypotension

Summary

- Hypotension, or low blood pressure, means that the pressure of blood circulating around the body is lower than normal or lower than expected.
- Low blood pressure is only a problem if it has a negative impact on the body and produces symptoms.
- Some causes of hypotension include blood loss, dehydration and certain medications, such as antihypertensive drugs.

The heart pumps blood around the body through the blood vessels. Blood pressure is the amount of force exerted on the artery walls by the pumping blood. Blood pressure varies according to environmental demands. For example, it rises during physical exertion and drops in extreme heat.

Hypotension, or low blood pressure, means that the pressure of blood circulating around the body is lower than normal, or lower than expected given the environmental conditions. However, ‘hypotension’ is a relative term – one person may have low blood pressure compared to others of similar physical characteristics, but may be perfectly healthy.

Low blood pressure is only a problem if it has a negative impact on the body. For example, vital organs (particularly the brain) may be starved of oxygen and nutrients if the blood pressure is too low for that particular person.

Symptoms of hypotension

Substantial blood loss can cause a sudden drop in blood pressure (shock). The most dramatic symptom of sudden hypotension is unconsciousness. Usually, low blood pressure develops over time.

Symptoms include:

- Light-headedness, when standing from a sitting or lying position
- Unsteadiness
- Dizziness
- Weakness
- Blurred vision
- Fatigue
- Fainting.

Causes of hypotension

Blood pressure is measured using a device known as a sphygmomanometer. If the measurement drops 30mmHg below the person’s usual blood pressure, this is considered to be hypotension.

Low blood pressure has many different causes including:

- Emotional stress, fear, insecurity or pain (the most common causes of fainting)
- Dehydration, which reduces blood volume
- The body’s reaction to heat, which is to shunt blood into the vessels of the skin, leading to dehydration
- Blood donation
- Internal bleeding, such as a perforated stomach ulcer
- Blood loss from trauma, such as a road accident or deep cut

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• Pregnancy
• Medications for high blood pressure
• Diuretics, which produce fluid loss
• Medications for depression
• Medications for certain heart conditions
• Allergic reaction to certain drugs or chemicals
• Some forms of infection, such as toxic shock syndrome
• Heart disease, which can hamper the pumping action of the heart muscle
• Some nervous system disorders, such as Parkinson's disease
• Addison's disease (where the adrenal glands fail to produce sufficient blood-pressure-maintaining hormones).

Orthostatic hypotension

Generally, when you stand upright from a sitting or lying position, the blood vessels in your body respond to gravity by constricting. This increases blood pressure. Orthostatic hypotension means that the blood vessels don't adjust to a standing position and, instead, allow the blood pressure to drop, resulting in a feeling of light-headedness.

Causes include:

• Nervous system diseases, such as neuropathy
• Prolonged bed rest
• Dehydration
• Irregular heart beat (heart arrhythmia).

Treatment for hypotension

Treatment depends on the cause. For example, the dosages of existing medications may need to be altered or a bleeding stomach ulcer surgically repaired. If no particular cause can be found, drugs may be used to raise blood pressure. In extreme cases, a lower body pressure suit may be required.

Where to get help

• Your doctor

Things to remember

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