

# Overview of Peripheral Artery Disease and Peripheral Vein Disease Difference

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## DESCRIPTION

Peripheral Artery Disease (PAD) and Peripheral Vein Disease (PVD) are two different conditions that affect the blood vessels in the legs. While both conditions involve in the peripheral circulation, and even have different causes, symptoms, and treatments.

### Causes

The underlying cause of PAD is atherosclerosis, which is a build-up of plaque in the arteries that supply blood to the legs. This plaque narrows the arteries and restricts the blood flow, leading to symptoms such as pain, cramping, and weakness in the legs.

PVD, on the other hand, is caused by the damage to the veins in the legs. This damage can occur as a result of injury, surgery, or a blood clot. When the veins are damaged, blood can pool in the legs, causing swelling, pain, and other symptoms.

### Symptoms

The symptoms of PAD and PVD can be similar, but they are caused by different underlying conditions. In general, PAD causes pain or discomfort in the legs that occurs with activity and decreases with rest. This pain is called claudication and is usually located in the calf, but it can also affect the thighs or hips.

In contrast, PVD can cause swelling, pain, and a feeling of heaviness or tiredness in the legs. These symptoms are often worse at the end of the day and improve with elevation of the legs. In some cases, PVD can also cause skin changes such as thickening, discoloration, or ulceration.

### Diagnosis

Diagnosis of PAD typically involves a physical examination and diagnostic testing, such as an Ankle-Brachial Index (ABI) test or imaging studies such as Doppler ultrasound, angiography, and Computed Tomography (CT) or Magnetic Resonance Imaging (MRI) angiography.

Diagnosis of PVD may involve a physical examination, a medical history review, and diagnostic testing such as ultrasound or

venography. Ultrasound is a non-invasive test that uses high-frequency sound waves to create images of the blood vessels in the legs. Venography is a more invasive test that involves injecting a dye into the veins and taking X-ray images to visualize the veins.

### Treatment

Treatment for PAD typically involves lifestyle modifications, medications, and procedures such as angioplasty or stenting. Lifestyle modifications may include quitting smoking, improving diet and exercise habits, and controlling blood pressure and cholesterol levels. Medications such as aspirin, clopidogrel, or cilostazol may be prescribed to improve blood flow and prevent blood clots. In some cases, procedures such as angioplasty or stenting may be performed to remove blockages or bypass the affected area.

Treatment for PVD may involve compression stockings, lifestyle modifications, and medication to improve blood flow and prevent blood clots. Compression stockings are designed apply pressure to the legs and help to improve the blood flow. Lifestyle modifications may include improving diet and exercise habits and elevating the legs when sitting or lying down. Medications such as anticoagulants or thrombolytic may be prescribed to prevent or dissolve blood clots.

In some cases, surgery may be necessary to treat both PAD and PVD. Surgery may involve in removing the affected vein or artery, bypassing the affected area with a graft, or creating a new channel for blood flow. Surgery is typically reserved for cases where conservative treatment options have been unsuccessful or when the condition is severe.

## CONCLUSION

Peripheral Artery Disease (PAD) and Peripheral Vein Disease (PVD) are two different conditions that affect the blood vessels in the legs. While both conditions can cause symptoms such as pain and swelling, they are caused by different underlying conditions and require different treatment approaches. If the person is experiencing any of the symptoms of PAD or PVD, it is important to seek medical attention to receive an accurate diagnosis and appropriate treatment.

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