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Patient Information Sheet
PERIPHERAL ARTERIAL DISEASE (PAD)
AND CLAUDICATION

What is claudication?

Claudication is a pain or cramping that occurs in the muscles of your legs during activity such as walking. The symptoms typically begin after you start to exercise (walk), and go away a short time after you rest.

Your arteries carry blood rich with oxygen and nutrients from your heart to the rest of your body. When the arteries that carry blood to your legs become narrowed or blocked, your leg muscles may not receive enough of the blood and oxygen they need to support physical activity but usually they do receive enough to function at rest.

When you start to walk, the muscles in your legs need more oxygen and as such if the arteries in your legs are narrowed to the point that too little blood reaches your muscles, you may feel leg

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pain when you walk.

Claudication not only is a problem with regard to the legs but is also a serious warning symptom because people who have it are also at increased risk of heart attack and stroke.

The arteries can become blocked usually as one gets older through a process called atherosclerosis. This tends to be caused by plaque, a hard mixture of cholesterol, calcium, and fibrous tissue which as it progresses causes the narrowing of the arteries. This is called peripheral arterial disease (PAD).

Risk factors for PAD include smoking, high cholesterol, high blood pressure, diabetes, and a family history of arterial disease. All patients with PAD should be on an aspirin (or aspirin equivalent) and a statin.

What are the symptoms?

Claudication is discomfort or pain in your legs that happens when you walk and goes away when you rest. You may not always feel pain, instead you may feel a tightness, heaviness, cramping, or weakness in one or both of your legs. Claudication often occurs at shorter distances if you walk uphill or up a flight of stairs.

What tests will I need?

I will initially determine your clinical history and examine the pulses in the leg. As part of your history and exam, I will want to know if

you smoke or have high blood pressure and I will also glean more specific information regarding when your leg symptoms occur and how often as well as their location.

After your exam, if I suspect that you have PAD, I may perform a number of other investigations, such as:

- Ankle-brachial index (ABI), which compares the blood pressure in your arms and legs
- Duplex ultrasound
- Blood tests for cholesterol, high blood sugar or other markers for artery disease
- Computerized tomographic angiography (CTA)

How is claudication treated?

Treatment of underlying causes of PAD

Although your surgeon will treat your claudication, he or she will also treat the underlying causes of your PAD, such as high cholesterol or high blood pressure. Treatment for these conditions includes lifestyle changes such as smoking cessation, exercise and weight loss, and if necessary endovascular intervention or surgery.

Exercise therapy

Exercise therapy is the initial treatment for claudication. Your

surgeon will develop an exercise plan specifically for you.

Therapeutic exercise recommendations for claudication generally consist of walking for periods of 1 hour or more, 3 or more times per week, for at least 3 to 6 months. The aim is to increase the amount of time that you can walk without reproducing severe pain in your legs. You will gradually accomplish this by walking for longer and longer periods.

At first, you should walk until you experience claudication pain, usually between 3 and 5 minutes. You should then continue walking until the pain becomes moderate (on a scale of 1 to 5, the pain is 3), which is usually at around 8 to 10 minutes of walking. Then you should stop walking and rest until the pain goes away, at which point you should begin walking again. Repeat this cycle of exercise and rest for approximately 35 minutes at the beginning and gradually increase the time until you can walk up to a total of 50 minutes. A sign that you are making progress in your walking program is that you will be able to walk for longer periods without pain.

Other forms of treatment include minimally invasive stretching open of the narrowing of the arteries (angioplasty or stent placement) or very rarely surgery and this very much depends on your symptoms and the distribution of the arterial disease in your legs. This is very much determined on a patient-by-patient basis.