Risk factors of peripheral arterial disease

Patient information

What is peripheral arterial disease?
Peripheral arterial disease (PAD) is the narrowing of the blood vessels of the arms and/or legs.

What causes peripheral arterial disease?
The narrowing of blood vessels is caused by atheroma. Atheroma is the build-up of fatty matter (plaque) inside the walls of the artery. The atheroma builds up over time, much like the scale in water pipes.

As the atheroma develops it decreases the amount of blood that can get past it. The muscles and tissues below the blockages don’t get as much blood which can lead to pain and eventually ulcers.

What causes atheroma?
Factors that increase the risk of atheroma (fatty matter) building up include:

Lifestyle factors that can be changed:
- Smoking
- Lack of physical activity
- Obesity
- An unhealthy diet
- Excess alcohol

Treatable risk factors:
- High blood pressure
- High cholesterol
- Diabetes
- Kidney disease

Fixed risk factors that you cannot alter:
- A strong family history. You are considered to have a strong family history if you have an immediate family member who had a heart attack or stroke before the age of 60.
- Being male
- Early menopause in women
- Age: the older you become the higher the risk
What are the symptoms of peripheral arterial disease?

Pain is the main symptom of peripheral arterial disease.

It can develop in one or both of your calves when you walk or exercise and is relieved when you rest. The pain may feel like aching, cramping or tiredness in your legs. This is called intermittent claudication.

Intermittent claudication develops because when you walk or exercise your muscles need more blood to provide oxygen and nutrients to your body. If the blockage is higher up in your body the pain may be in your thigh/s or buttocks.

If the blood supply to the legs gets worse you may develop pain when you're resting. This needs to be treated quickly to prevent the development of ulcers, or in a small number of cases gangrene (death of tissue).

Medication you might need

- **Aspirin** prevents blood clots forming in the arteries.
- **A statin** to decrease your cholesterol levels.
- **Diabetic** medications to assist in controlling your blood glucose level which will prevent further atheroma developing.
- **Blood pressure** medication.

Will you need surgery?

There are three types of surgery for PAD:

- **Angioplasty**: involves a small balloon and/or stent to open the blood vessel where it is narrowed.
- **Bypass surgery**: involves a graft (like a hose) connected to the artery above and below the blockage.
- **Amputation**: of the foot or leg is possible when there are no other options and the skin has become gangrenous.
What can you do?

**Stop smoking**
If you smoke, **stopping is the most effective treatment**. It can double or triple how far you can walk without pain developing. Stopping smoking also greatly decreases your risk of heart attack or stroke.

**Exercise regularly**
If you **exercise regularly** the smaller blood vessels of the legs enlarge which **improves the blood supply to your legs**. You should aim to walk for 30 minutes, 5 times a week.

**Obesity**
**Losing weight** decreases the demands on the blood vessels and reduces the risk of developing atheroma.

**Diet**
**A healthy, balanced diet** will reduce the chance of atheroma forming.

**Foot care**
**Protect your feet** from injury. Any injury to the feet may lead to an ulcer and/or infection if you have decreased blood supply. **Wear shoes at all times** but ensure they are not too tight. Tell your doctor if you injure your foot, if you have increased pain in your feet and/or legs or you notice any changes in the colour or temperature of your feet.

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**Contact us**

**Mail**
Sir Charles Gairdner Hospital
Hospital Avenue Nedlands WA 6009

**Phone**
Main line 9346 3333
Patient enquiries 9346 4444
Hearing impaired (TTY)
(7.30am to 8.30pm) 9346 3900

**Web**
www.scgh.health.wa.gov.au

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Provided by the Vascular and Endovascular Surgery Department. Information current at July, 2015 © Department of Health 2015