

Compression Stockings (Graduated compression stockings)

What are graduated compression stockings?

Graduated compression stockings are specially designed stockings that are used to promote blood circulation returning from the legs. These stockings are designed to be tighter at the ankle than they are at the top of the calf (or leg for full length stockings). By being tighter at the bottom of the leg, blood is encouraged to return to the rest of the body.

Why should I use graduated compression stockings?

There are a number of reasons why someone is recommended to wear these stockings.

- You may be told to wear these stocking if you have had a clot (thrombosis) in the leg. (**see information sheet on Below Knee DVT, Above Knee DVT or Superficial Thrombophlebitis**). Clots in the veins of the legs block blood flow which can cause swelling in the leg. Compression stockings can be used to promote blood flow in the leg and reduce swelling. The use of stockings after a clot can help prevent long term problems.
- If you have had a clot in the past and the veins are damaged this may lead to pain, swelling and skin changes in the leg (**See information sheet on Post Thrombotic Syndrome**). Sometimes ulcers can even occur if the veins are damaged. The use of compression stockings in this situation can reduce symptoms of pain and swelling and can prevent these symptoms from getting worse.

How long do I need to wear these stockings?

The bad news with these stockings is that you should try and use them for as long as possible. If you have had a clot, we would encourage you to wear the stockings for at least many months (and hopefully up to 2 years!). The more you wear the stockings and the longer you wear them, the more effective they are at preventing other long term problems.

Are all stockings the same?

No – there are many different types of stockings. The stockings differ on the basis of the pressure (“tightness”) at the ankles. There are different grades of tightness.

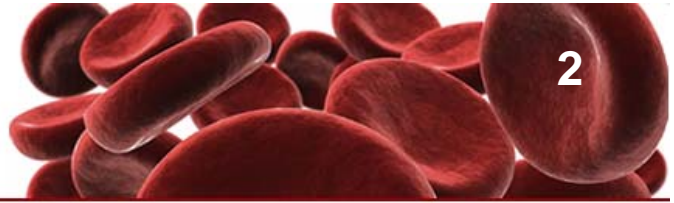
Anti-embolism stockings (Pressure at ankle approximately 15 mmHg)

Used for light support and prevention of clots developing (e.g. in the setting of long flights or following operations)

Examples of class 1 stockings:

Scholl Flight Socks <http://www.scholl.com.au/products/flightsocks/index.php>

TED stockings http://www.sportstek.net/knee_ted.html



A new product called "Skins" <http://www.skins.net/> is reported to be a compression stocking and to be useful in problems relating to the venous circulation.

Class 1 Graduated Compression Stockings (Pressure at ankle 20 – 30 mmHg)

Used for greater support (e.g. following a patient who has a past history of a clot and may have some minor swelling or ongoing discomfort) Class 1 stockings may also be used to prevent clots in flights.

Class 2 Graduate Compression Stockings (Pressure at ankle 30 – 40 mmHg)

Used when more support is required. Often patients with a recent clot who have significant swelling of the leg would benefit from having greater, Class 2, support

Class 3 Graduated Compression Stockings (Pressure at ankle 40+ mmHg)

Used for maximal support (e.g. when the veins are damaged and there is long term swelling of the legs)

Class 1 and Class 2 stockings may be purchased at a pharmacy (a common brand is Vitality compression stockings) Class 3 stockings need to be specially made for patients.

A number of orthotists are able to provide this service. One service available in Melbourne is available at www.oapl.com.au.

Are there any problems in using the stockings?

Some people with very poor (arterial) circulation in the legs may find the stockings very uncomfortable. Stockings should not be used in people who have problems with peripheral vascular disease. The benefits or disadvantages of wearing stockings should be discussed with your doctor. Generally however the stockings are well tolerated and can be used by most people.

Resources used to prepare this information sheet.

- Cullum N, Nelson E, Fletcher A, Sheldon T. Compression for venous leg ulcers. Cochrane Database of Systematic Reviews 2006(Issue 4).
- Kolbach D, Sandbrink M, Hamulyak K, Neumann H, Prins M. Non-pharmaceutical measures for prevention of post-thrombotic syndrome. Cochrane Database of Systematic Reviews 2006(Issue 4).

(Last updated: 13/04/2007)