

COMPRESSION COMPRESSION COMPRESSION

Is compression bandaging the most effective treatment for venous leg ulcerations in adults in the community, and if so, is long stretch, short stretch or combination bandaging more efficient at healing?

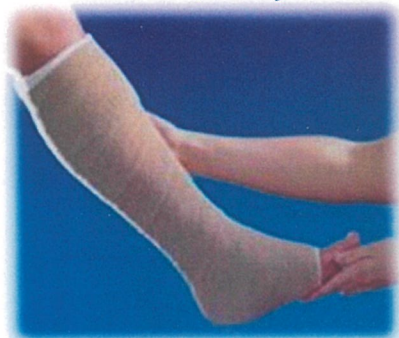
WHAT IS A VENOUS LEG ULCER?

A venous leg ulcer is a chronic wound, usually on the legs, which is most commonly caused by venous hypertension. When the valves in the veins are not working effectively, and the skeletal pump is unable to pump all the blood back to the heart, then blood begins to pool in the veins. The veins then stretch and lose their elasticity. Blood flow slows down, and fluid begins to leak into the tissue and oedema occurs. The oedema means that oxygen and nutrients are unable to diffuse into the tissue effectively so the skin begins to break down causing ulcers (Todd, 2011).



Compression bandaging is the most effective and efficient treatment for healing venous ulcers

(Cullum, Nelson, Fletcher, & Sheldon, 2008).



The multi layer bandage has proven to deliver the best results, however, any compression is better than none

(Cullum, Nelson, Fletcher, & Sheldon, 2008).

HOW DOES COMPRESSION BANDAGING WORK?

Compression bandaging works by reversing the cause, which is oedema and reduced blood supply. It acts like a skeletal pump by helping to push the blood back to the heart and close the valves. This reduces the diameter of the blood vessels, which means blood flow speeds up, and more nutrients are delivered to the cell. The compression also forces excess fluid out of the tissue and back into the circulatory system, which reduces the oedema. Compression, therefore, improves venous function and enables an environment for ulcer healing (Anderson, 2008).

WHAT ARE THE DIFFERENT TYPES OF COMPRESSION BANDAGING?

There are three main types of compression bandaging.

- **Long Stretch Bandages** can be stretched up to 100% and they maintain sustained high compression as they move with the body and return to their original shape. Clients can continue with their daily activities as normal with long stretch bandaging.
- **Short Stretch Bandages** have little stretch, so compression is not as continuous as long stretch. The compression is at an optimal level when the client is mobilising because the muscles are contracting, making the compression higher. It is important that this compression is only used on a mobile patient.
- **Multi Layer Bandages** have shown to be the most effective method of compression. It has three or four layers, the first being the padding layer which protects the skin and bony prominences. The second layer is a crepe bandage which smoothes out the padding and provides light compression. The third and fourth layers provide the most compression and provide even compression by being self adhesive, which means the bandage sticks to itself (McKenzie, 2010).

References:

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By Madeleine Matthews, Otago Polytechnic School of Nursing, ID: 10004896