

Chronic Venous Insufficiency

Venous insufficiency and venous ulcers are often challenging conditions to treat. They are typically accompanied by pain, loss of mobility and even physical deformity. Pneumatic compression therapy is fast becoming an essential component of any comprehensive treatment program for these edema-related diagnoses. Physicians like the ease of use, while patients benefit from the clinical outcomes.

Chronic venous insufficiency (CVI) is a widespread, serious, and often underestimated problem that affects approximately 10-35% of the population. Even more compelling, the latest data shows that venous ulcers account for 70% of all chronic wounds. Pneumatic compression can help heal those chronic wounds and also help prevent them from returning through regular therapy treatments. A typical ulcer can take up to 90 days to heal, however with use of pneumatic compression, healing time can be reduced to as few as 20 days.

Symptoms of Chronic Venous Insufficiency

- Legs are swollen
- Changes in the skin tone and color of legs
- Ulcers on legs
- Dermal "disruptions" of the legs
- Pain when walking
- Chronic infections such as cellulitis

What is Pneumatic Compression Therapy

Pneumatic compression therapy is a non-invasive therapy that applies sequential gradient pressure to improve circulation, decrease edema and help aid in healing venous stasis ulcers. By moving stagnated fluid out of the legs it decreases swelling while allowing fresh blood to move down and help positively oxygenate the wound bed.

The system consists of a pump and an appliance (sleeve) which fits over the extremity. The compression pump has individual, overlapping bladders that inflate with air, distal to proximal, in a gradual gradient sequential fashion.

Patients and physicians like the convenience of the half-leg appliance for treating CVI, which also increases compliance which aids in healing.

Since our lymphatic system runs distal to proximal, the use of a compression pump in essence mimics the natural lymphatic system. When the lymphatic system becomes interrupted or damaged moving lymphatic fluid becomes challenging. The gentle massaging action of a pneumatic compression device will help move lymphatic fluid for the body to process. Pneumatic compression devices are a lightweight, easy to use, relaxing, low cost way to treat CVI.

Pneumatic compression therapy is a non-invasive therapy that applies sequential gradient pressure to improve circulation, decrease edema and help aid in healing venous stasis ulcers. The mechanism of action is fairly simple: massage and move the stagnated fluid out of the area and allow fresh blood to move in. Pneumatic compression reduces the overall volume, thus reducing edema (swelling) and aiding in fresh oxygenated blood circulation. With the half-leg appliances for CVI, patients find them easy to put on and comfortable to use. The typical response is the feeling of getting a lower-leg massage.