Patient and Clinical Satisfaction Using a New 2 Layer Lite Compression System* for Patients with Low ABPIs
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Introduction
Chronic venous insufficiency is believed to be the underlying condition responsible for 54-81% of leg ulcers with increasing prevalence in an aging population. The literature indicates that approximately 25% of these patients also present with concomitant arterial compromise making the selection of reduced compression difficult as most systems are indicated for patients with Ankle Brachial Pressure Index’s (ABPI’s) greater than or equal to 0.8.

In our practice, we estimate that 40% of the patients we treat for venous leg ulcers require reduced compression due to lower ABPI’s and it has been a great concern because there has not been a product proven to be safe for these at risk patients.

We have had to utilize a variety of bandage combinations such as: zinc paste bandages with a cohesive wrap or cast padding plus a roll gauze or tubular stockings in an attempt to provide reduced compression but the effectiveness was variable.

Objective and Methods
With the introduction of a new 2 layer lite system* that has been shown to be safe for patient’s with ABPI’s ≥ 0.5, we were very interested in conducting an evaluation using the system on outpatients in our Wound Healing & Treatment Center with ABPI’s between 0.5 and 0.8 verified by an ABPI or arterial doppler study.

We planned to evaluate the product on at least 20 patients over a 6-12 week period seeing patients 1-2 times per week and at the end of the trial, the team would discuss the results and make a decision whether to add the 2 layer lite bandage to our formulary.

Patient History
HD. 82 year old male with 2 partial thickness LLE venous leg ulcers. Status post 6 way cardiac bypass with stent placement in carotid artery, has Type 2 Diabetes, peripheral arterial disease with clinical symptoms including weakened pedal pulses, thinning of skin, thinning toe nails, loss of hair to extremities.

Previous treatment prior to outpatient wound care:
Left open to air for 2 weeks. No antibiotics.

Patients comments:
Compression wrap very comfortable, no slippage, glad he didn’t have to care for wounds himself. LLE felt so much better as edema much improved, able to wear his own shoe.

Patient History
GM. 68 year old male with multiple full thickness ulcers since 9/10/10.
Peripheral arterial disease with weak pedal pulses, Type 2 Diabetes well controlled with the use of Insulin, hypertension, positive culture for MRSA, on systemic antibiotics.

Patients comments:
More comfortable than previous wraps, stays up well, and he is able to wear his own footwear.

Patient History
RW, 64 year old male with mixed etiology leg ulcers. Arterial Doppler results- 1.2 both legs but pt. has significant arterial calcifications with stents placed in both legs , Insulin dependent diabetic not well controlled, Heart disease, s/p CABG 2005 with saphenous vein graft. Significant edema since CABG on same leg as vein harvest. On hemodialysis which causes increase in edema in legs to between treatments.

Patients comments:
Very comfortable and able to wear this compression wrap where before he could not tolerate other types of compression wraps. Pt. was also able to wear his diabetic shoes and continue his lifestyle without any changes. A cast cover was used to allow showers.

Patient History
GR. 74 year old male with mixed etiology leg ulcers. Status post 6 way cardiac bypass with stent placement in carotid artery, has Type 2 Diabetes, peripheral arterial disease with clinical symptoms including weakened pedal pulses, thinning of skin, thinning toe nails, loss of hair to extremities.

Previous treatment prior to outpatient wound care:
Left open to air for 2 weeks. No antibiotics.

Patients comments:
Compression wrap very comfortable, no slippage, glad he didn’t have to care for wounds himself. LLE felt so much better as edema much improved, able to wear his own shoe.

Results
For these patients with mixed etiology and for our patients with venous stasis ulcers who do not tolerate full compression, the 2 layer lite compression system has proven to be clinically therapeutic without compromising patient comfort, safety and compliance. For the patients presented, edema was controlled and healing occurred with no adverse effects.

Discussion
This system has improved our patient’s acceptance of compression therapy because the material is comfortable, lightweight and allows them to wear their own shoes. We feel it has also decreased our workload because it is easy to use. More importantly, our concern for safely applying compression to patients with low ABPI’s has been greatly reduced.

Based on the successful evaluation, our Wound Center has standardized to using the 2 layer lite compression systems for all our patients with lower ABPI’s.

* 3M™ Coban™ 2 Layer Lite Compression System, (3M Health Care, Neuss, Germany)

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