Introduction

Traditional compression modalities utilized in the management of chronic edema can be burdensome for the patient (impairing mobility due to bulky bandage systems, difficulty for patient to get on, uncomfortable) and/or the health care provider (requiring training and specialist referrals). In addition, patients often have co-existing medical complexities that would preclude traditional compression modalities or have difficulty tolerating effective compression. This case series demonstrates effective management of lower extremity (LE) swelling and chronic non-healing leg ulcers utilizing Fuzzy Wale Elastic compression textile.

Case I

76 y.o. female with long standing h/o CVI with recurrent ulcerations. Patient has custom compression stockings however her caregiver struggles to apply and pt's anxiety limits use of compression. Pt presents with ulceration on posterior left leg which had been present for >12months. Alginite with AG was used for drainage management and Fuzzy Wale Elastic textile stockinet was used on both LE for edema management. Pt was seen in clinic 2x/wk for the first 8wks and then 1x/wk for the next 3 wk. Compression was worn during the day and removed at night for patient comfort.

Case II & III

Both patients presented with LE swelling and non-healing ulcerations; both patients had failed traditional bandage with 2 layer cohesive compression wrap; traditional lymphedema wrap demo volume reduction however containment of residual tissue was a concern. Used Edema Wear under the short stretch compression wrap to support the tissue without need for additional foam thus allowing patient more mobility due to less bandage bulk.

Case IV

58 y.o. female who presented with non-healing wound post multiple orthopedic surgeries following complex fracture. Pt has significant limitations in her LE ROM at knee and ankle. This physical inability to don/doff compression and cost are listed as reason for deferring use of compression in numerous patient scenarios. In addition, tissue consistency/weight is not always adequately supported by traditional compression products. As a result, there is a need in the compression market for a product that can provide compression without compromising vascular flow (arterial, venous & lymphatic), that is comfortable and easy to apply, that can be used independently or as an adjunct to other compression wrap techniques. Fuzzy Wale Elastic textile utilizes longitudinal yarn compression which allows for a focused compression on subcutaneous fat and promotes healing of skin. This longitudinal compression, unlike traditional compression wraps, cannot cause a tourniquet effect thereby enhances safety in use.

Materials and Methods

Fuzzy Wale Elastic compression textile is stockinet that is composed of fuzzy longitudinal wales that are connected by Lycra spandex elastic yarns. Fuzzy wales create a unique surface. The non-compressed Subcutaneous tissue between the wales has open veins and lymphatics that promote return edema fluid into the vascular space. The compression profile created is comparable to “mild” compression (15 – 20mmHg). This case series of patients referred to a lymphatic therapist for ‘edema management’ details the history of four patients with recalcitrant ulcerations and/or ‘edema’ for which compression hose was not an option. Each patient received moist wound care when appropriate and Fuzzy Wale Elastic compression textile. Outcomes measured included LE volume change, wound area and time to wound closure.

Discussion

Compression is a necessity for LE edema management and has been shown to have a positive impact on healing of LE ulceration.1,2 However, not all patients are able to utilize standard compression products. Limitations including arterial insufficiency, medical co-morbidities, pain, anxiety, physical inability to don/doff compression and cost are listed as reason for deferring use of compression in numerous patient scenarios. In addition, tissue consistency/weight is not always adequately supported by traditional compression products. As a result, there is a need in the compression market for a product that can provide compression without compromising vascular flow (arterial, venous & lymphatic), that is comfortable and easy to apply, that can be used independently or as an adjunct to other compression wrap techniques. Fuzzy Wale Elastic textile utilizes longitudinal yarn compression which allows for a focused compression on subcutaneous fat and promotes healing of skin. This longitudinal compression, unlike traditional compression wraps, cannot cause a tourniquet effect thereby enhances safety in use.

Conclusions

The Fuzzy Wale Elastic textile was well tolerated and the clinicians/caregivers all reported it ‘easy to use’ and ‘did not interfere’ with the patient’s mobility. This small case series demonstrates the effectiveness of Fuzzy Wale Elastic compression textile for the management of LE swelling and chronic non-healing leg ulcers for whom traditional compression is not an option.

References