

Use of a Novel, Variable Intermittent Negative Pressure Wound Therapy System to treat a Traumatic Leg Wound in a Patient with Poliomyelitis

Michael S. Miller DO, FACOS, FAPWCA, WCC CEO and Medical Director – The Miller Care Group Indianapolis, Indiana



77 year-old male presented with a non-healing wound of the left lower leg present for 4 weeks. He was riding on his lawnmower and slipped, traumatizing the area. He had been using Hydrogen Peroxide and topical antibiotics daily with no improvement. His history was significant for Poliomyelitis since childhood requiring him to wear leg braces and use a walker for ambulation. He had a history of chronic lower extremity swelling and prolonged healing of any leg wounds or other trauma to the legs. The initial measurements of this initially unimpressive wound were 5.5 x 2.2 x .1 cm. The leg showed moderate pitting edema to the level of the knee.

He was diagnosed with Chronic Venous Insufficiency and 4 layer compression therapy was commenced from the ankle to the knee with Hydrogel gel to the wound, both changed twice a week.. At his request, the feet were unencumbered to allow him to wear his braces and shoes. He was instructed on manual assisting his gastrocnemius/soleus muscle complex activity by using a cord to promote dorsiflexion. On August 12th, after 4 weeks, he noted increased redness and sanguinous drainage with clots. The wound was probed and a previously unrecognized deep tissue hematoma was identified and cleaned out. NPWT using The Genadyne XLR8 system using the Variable Intermittent mode and foam dressings at 80mmHg x 5 minutes and 20mmHg x 10 minutes with dressing changes 3x/week was initiated along with continued treatment of the underlying venous disease. Using this method, the wound dramatically decreased with resolution of all tunnels in 5 weeks. A collagen dressing changed twice a week was commenced with continuation of the multilayer compression to healing as pictured.



August 12, 2014



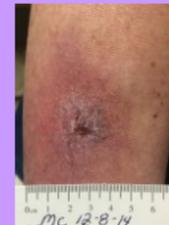
August 19, 2014



September 23, 2014



September 30, 2014



December 8, 2014