The Management of a Recalcitrant Venous Ulcer

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Patient Presentation & History

An 83-year old female presented with a lower extremity ulcer of approximately 10 months duration. The wound was located superior to the right lateral malleolus and had developed subsequent to right hip arthroplasty. On admission the wound measured 1.3 x 2.1 cm and contained 90% yellow necrosis. Moderate drainage without odor and 2+ right lower extremity edema were noted at that time. The patient had a history of hypertension, degenerative joint disease, and varicose veins.

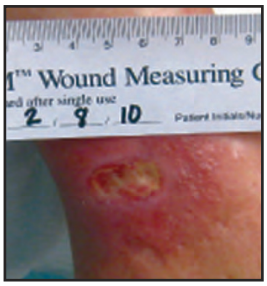
Treatment Plan

A comprehensive treatment plan was initiated that included a wound dressing regimen consisting of alginate with silver, foam, and compression. The wound was allowed to autolytically debride. After 3 months of treatment, the wound measured 0.8 x 1.5 x 0.1 cm (a 46% reduction in wound volume) and was without necrosis. Progression to healing had been steady to this point, but then stalled. A variety of other advanced moist wound healing modalities including collagen, silver, and a foam containing cleansing agents were then utilized without notable progress. The wound continued to measure 0.8 x 1.5 x 0.1 cm for 5 consecutive weeks. Research of additional advanced wound care options resulted in the discovery of a new negative pressure wound therapy device specifically designed for light to moderately exudating wounds that have failed conventional therapies.

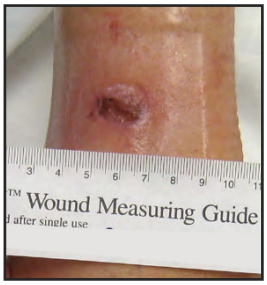
The benefit of NPWT is well known, but prior to the introduction of Kalypto Medical's NPD 1000™, NPWT was not feasible in wounds of this size and nature. The NPD 1000 can be used under multiple forms of compression. Treatment with Kalypto Medical's dressing and pump was initiated on 5/20/2010 and the dressing was covered with a tubular compression stocking. The patient was scheduled to come to the clinic twice weekly to have her dressing changed and wound evaluated by a wound care specialist.

Summary

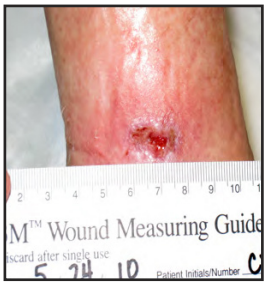
After 4 days of using Kalypto Medical's NPD 1000 NPWT System under compression, the wound area decreased by 83% to measure 0.4 x 0.5 x 0.1 cm with marked epithelialization. The patient described the dressing as comfortable, had no complaints of pain and found the device self sufficient operationally. NPWT was utilized for a total of 20 days, and discontinued on 6/10/2010 when the wound measured 0.1 x 0.2 x 0.1 cm and showed no drainage. The patient was continued on compression utilizing a 20-30 mmHg compression stocking and a foam dressing for one more week when complete epithelialization was achieved. The NPD 1000 proved efficacious in this case and was rated extremely easy to use by both the patient and the clinicians.



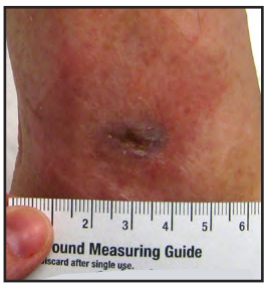
2/08/10:
WOUND SIZE:
1.3 x 2.1 cm
INITIAL WOUND



5/20/10:
WOUND SIZE:
0.8 x 1.5 x 0.1 cm
NPWT STARTED



5/24/10:
WOUND SIZE:
0.4 x 0.5 x 0.1 cm
AREA DECREASED BY 83%



6/17/10:
WOUND SIZE:
0.1 x 0.2 x 0.1 cm
WOUND CLOSED

CAUTION: *Federal (USA) law restricts these devices to sale by or on the order of a physician.*

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