

**THE USE OF A NEW FOAM FILLER MATERIAL FOR NEGATIVE PRESSURE WOUND THERAPY (NPWT) IN THE MANAGEMENT OF COMPLEX DIABETIC LOWER LIMB ULCERATION**

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**Aim:** To assess the suitability of a new foam filler material for NPWT in the management of three patients with complex diabetic lower limb ulceration. Observed comparisons of clinical efficacy.

**Methods:** Patients were selected on an intention to treat basis presenting with complex diabetic lower limb ulceration. In all cases concurrent infection was managed with IV antibiotics and in two cases surgical debridement was undertaken pre-NPWT to create a viable wound bed. A wound contact layer was used in each case and a negative pressure of -80mmHg applied via the foam filler.

**Results:**

	Filler	Days NPWT	Dressing changes	Pre-NPWT Wound dimensions (cm) <i>(length x width x depth)</i>	Post-NPWT Wound dimensions (cm) <i>(length x width x depth)</i>
Pt 1 (4-01)	Foam	22	6	27.5 X 13 X 1	21 X 9 X 0.3
Pt 2 (4-02)	Foam	6	1	19 X 4.5 X 1.2	17.2X 4 X 1.1
Pt 3 (4-03)	Foam	5	1	3 X 3 X 1	2.4 X 2.3 X 0.7

**Conclusions:** The new foam NPWT filler performed extremely well and in the author's opinion delivered comparable outcomes to other commercially available NPWT foam when used in similar clinical circumstances, In addition to less discomfort reported by the patients. The pore size is visibly larger in the new foam and as such may cause faster granulation tissue due to micro deformation of tissue as described by Saxena et al (2004) and warrants further study.