

Use of a Novel, Variable Intermittent Negative Pressure Wound Therapy System and a Bio-Cellulose Nano-structured Gel (Nanogen Gel™) in Combination to Treat a Stage 4 Pressure Based Tissue Injury with Exposed Coccygeal Bone.

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24 year-old female T-10 paraplegic presented with a complaint of a foul odor coming from her lower back. She had a long history of compliance issues and had been advised to make sure her chair cushion was inflated correctly and to minimize time sitting without changing her position. She was unemployed and decided to mow her grandmothers small farm over a period of several days. She had ignored the odor for a week or more but finally became concerned when self examination revealed a wound at the top of her buttocks and increasing foul drainage on her clothes. The presentation showed a necrotic coccygeal wound with obvious exposed coccygeal bone. X rays fortunately showed no evidence of Osteomyelitis. Need for rapid coverage of the coccyx was mandated.

Nanogen is a Bio-Cellulose nano-structured membrane synthesized by a bacterial strain Acetobacter Xylinum through a fermentation process. The membrane was converted to a gel matrix for application on the NPWT foam prior to use. The Genadyne XLR8 System using the Variable Intermittent mode and foam dressings at 100mmHg x 5 minutes and 20mmHg x 10 minutes with dressing changes 3x/week were initiated. The wound progressed well with ongoing decrease in all parameters.

6.1 x 6.0 x 4.2

exposed
coccygeal
vertebra
e



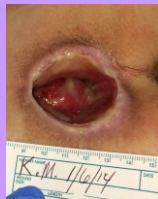
November 25, 2014

5 x 4.7 x 3.5



December 9, 2015

4.4 x 2.6 x 2.4



January 6, 2015

2.8 x 1.8 x .6



June 9, 2015