

# Treatment of Pyoderma Gangrenosum with a Silver Contact Layer

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A 71 year-old Caucasian woman with a chronic painful leg ulcer of greater than one-year duration was referred to the DRMC Wound Clinic by a local dermatologist. The wound originally began as a cat bite and later blistered into a full thickness leg ulcer. The ulcer rapidly deteriorated and increased markedly in size. The referring dermatologist diagnosed the wound as pyoderma gangrenosum. Significant medical co-morbidities include rheumatoid arthritis, asthma, and coronary artery disease. Her history also included chronic use of immunosuppressive agents.

The wound had failed to respond to treatments of several wound healing agents, topical antimicrobial ointments, and various home remedies. On initial presentation to our clinic, the patient reported significant sharp, stinging pain from the wound.

Exam demonstrated a wound on the anterior right leg that measured 5.5 X 3.4 cm in diameter with full thickness depth (Fig.1). Wound margins were fibrotic and devitalized with irregular borders and undermining. The wound base was necrotic and hemorrhagic. Pedal pulses were palpable and mild lower extremity edema was appreciated. Transcutaneous oxygen tension measurements were within normal range. White blood cell count was normal and leg x-rays were negative for osteomyelitis.

Treatment consisted of a silver contact layer dressing (Fig 2) and a Profore 4-layer compression wrap changed twice weekly. The wound was not debrided. Reduction in pain was reported immediately. At 4 weeks, the wound had decreased in size by approximately 50% (Fig 3). At 10 weeks the wound was healed (Fig 7).



Fig. 1 1/25/02 5.5 x 3.4cm



Fig. 2 Silverlon contact layer

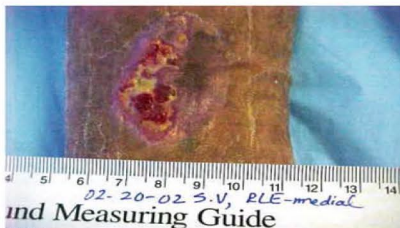


Fig 3 2/20/02 3.9 x 1.7cm



Fig 4 3/6/02 1.7 x 1.1cm



Fig. 5 3/13/02 1.2 x 0.5cm

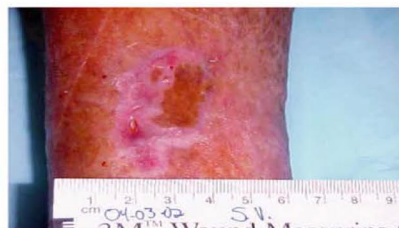


Fig 7 4/03/02 healed

## Conclusion:

Pyoderma gangrenosum is a destructive inflammatory disease. It may affect any part of the skin, but the lower legs are the most common site. It is thought to be an autoimmune disorder. Pyoderma gangrenosum generally presents as a rapidly enlarging, painful ulcer with purple, undermined edges and a necrotic, hemorrhagic base. Pustular, follicular, nodular, or bullous, lesions have also been described. Treatment often consists of topical or oral steroid combinations and typically takes several months to resolve. This case demonstrates successful rapid healing with a silver contact dressing and compression therapy.