A 10-month-old feline was referred for treatment of a non-healing axillary wound of unknown initial origin. The wound had been present prior to the kitten’s first exam by the primary care veterinarian at an age of approximately 4 weeks. Wounds in this location are known to be refractory to healing in the feline. This wound had been biopsied and cultured twice. No evidence of atypical etiologic agents (including mycobacterial organisms) or neoplastic disease was identified. Previous efforts at medical management and surgical closures, including a graft/flap/omental pull-through technique had not met with success over a period of nine months. The kitten was FELV/FIV negative.

BID hyperbaric oxygen therapy sessions at 2 ATA were begun, with daily hydrotherapy and oral antibiotics based on a bacterial culture and sensitivity obtained upon admission to this hospital. An Elizabethan collar was kept in place continuously. The wound rapidly diminished in size over two months until it reached a point where contraction seemed to cease and it became a small wound deep in the angle of the axilla (where the skin was constantly in motion as the limb moved). At this time the wound edges were debrided, and delayed primary surgical closure was performed. No flaps or grafts were necessary, as the wound size had become very small, and little or no tension was produced as the result of the procedure.
BID HBOT was continued until suture removal two weeks after the final closure. The wound remained closed at follow up 3 months later.

Hyperbaric Oxygen Therapy speeds wound healing by increasing circulating stem/progenitor cell numbers\(^{(1)}\) and by the induction of placental growth factor (PGIF)\(^{(2)}\), thus promoting vasculogenesis.
