

Full Thickness Abdominal Closure

History

This male patient in his 70's, was in a motor vehicle accident 14 months prior. His open hernia (28cm x 36cm) resulted in poor quality of life. Surgical plan stage 1 - Colostomy takedown, wound debridement, hernia reduction, skin flap advancement. Stage plan stage 2 - Hernia repair, skin closure.



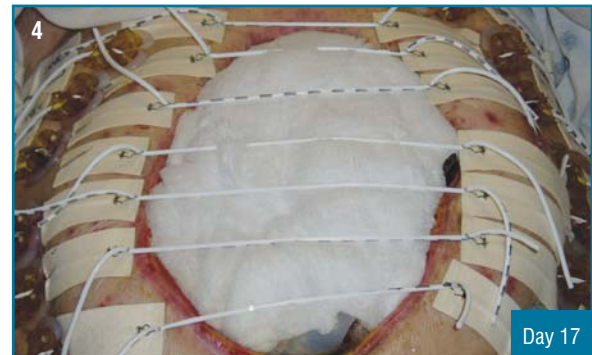
Closure consultation - During this initial consultation the patient indicated that he was allergic to bandages. He was found to have a sensitivity to the adhesive anchors after a 24-hour test.



Stage 1 - The procedure began with debridement of granulation tissue, preserving the omentum and taking down the colostomy. The viscera was supported with a silicone sheet and ABRA was installed with double elastomers and the anchors set 7.5 cm back from the margins (not typical) to create space for skin anchors.



Stage 1 (continued) - Skin anchors were installed to simultaneously advance skin flaps. Tension was set on both systems. Abdominal wall began to advance. Skin flaps advanced to within 10cm.



Day 14 to 17 - Unrelated complications (nasogastric tube) returned the patient to the O.R. Omentum adhesions were released. Onset inflammation required a reduction in elastomer tension. Wound size was allowed to increase. Since skin flaps were breaking down at anchor sites, skin anchors were replaced with adhesive anchors and re-tensioned.



Stage 2 - System was taken down. Fascia was released and four pieces of Alloderm were used to bridge the reduced gap. The surgeon estimated the ABRA system saved him 4-6 pieces of Alloderm.



Skin flaps were advanced and closed. Adhesive anchors (not shown) were applied to prevent wound dehiscence.