

Panniculectomy and Complex Hernia Repair: A Plastic Surgery Perspective

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Abstract

Background: Complex incisional hernia repair in the overweight and obese is problematic due to the technical challenge presented by a large protruding pannus. Incorporating concomitant panniculectomies has been well accepted as a means of improving surgical exposure to the obese abdomen and is oftentimes required for success in the most complex giant or recurrent hernia repairs. We report our experience with this combination procedure from a plastic surgery perspective.

Methods: Patients undergoing incisional hernia repair with panniculectomy at our institution from January 2011 to September 2013 were retrospectively reviewed. All repairs performed by general surgeons, with plastic surgery assistance for panniculectomy and closure. Surgical management included use of advancement flaps and application of subcutaneous talc.

Results: N=154 patients met inclusion criteria. Average BMI was 38 ± 8.5 (range 23.5-71.2) and age 58 ± 11 . Nearly 70% had at least one previous hernia repair; 56 underwent 2-9 repairs. Of the group, 56% had an uncomplicated follow-up course. Sixty-eight patients experienced postoperative complications. Most prevalent were development of wounds requiring intervention (18.8%); including dehiscence, infection and cellulitis (21, 12 and 5 cases respectively). N=7 patients had infected mesh removed at time of surgery; of these, 71.4% developed severe wound healing issues ($p=0.003$). Increased BMI and related comorbidities was associated with higher complication rates, with half of all complications experienced by the morbidly obese ($BMI > 40.0$). Of 14 super morbidly obese patients ($BMI > 50.0$), 71% experienced major postoperative complications ($p=0.044$), most often wound dehiscence and fat necrosis. Overall hernia recurrence rate was 5%, with zero recurrences in the super morbidly obese and 1 in the morbidly obese.

Conclusions: Concomitant panniculectomies provide an effective means of achieving intra-abdominal access for especially complex incisional hernia repairs. Extra care should be taken with the morbidly and super morbidly obese to prevent major postoperative complications and problematic wound healing. Our current protocols for handling these patients will be reviewed.