

CLINICAL CASE REPORT

Recurrent Incisional Hernia Repair and Abdominal Wall Reconstruction with Component Separation Technique using the BARD ALLOMAX™ Surgical Graft

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Presentation and History



In 2002, this 43-year-old gentleman underwent lumbar disc surgery from an anterior approach. The procedure was complicated by a bladder injury and wound infection, and the abdominal incision was opened and allowed to heal by second intention. Subsequently, he developed abdominal wall hernias. Mesh repair of his ventral hernias was performed elsewhere in

2004. Within a few months, he began experiencing progressive discomfort on the left side of his abdomen, associated with the development of a progressive protrusion at the site of the original primary hernia.

The patient was referred for surgical consultation, at which he expressed despair, both over the chronic pain in his abdomen and the social inhibition from its appearance. He was noted to be obese; and the deformity of his abdomen was apparent even through his clothing. Examination revealed a broad, dense midline scar, extending from the xiphoid process to the mid-lower abdomen, with a fascial defect in the left mid-abdomen just above the level of the umbilicus, measuring at least 10 cm in maximum diameter, slightly tender and with foreign body (probably rolled or contracted prosthesis) palpable at the caudal margin. CT scan confirmed bilateral paramidline rectus diastasis with a large fat containing ventral hernia on the left, no evidence of bowel strangulation or obstruction. After an agreed-upon period of weight loss, open repair of his hernia was scheduled.

Surgical Intervention

At operation, the long, unsightly surgical scar was excised. In the central abdomen, there was virtually no subcutaneous tissue; and the scar was adherent to the anterior abdominal wall prostheses (two large, overlapping sheets of mesh had been employed in the previously-attempted repair). The mesh was mobilized anteriorly from the abdominal wall by sharp dissection. The omental and visceral adhesions to the deep face of the prostheses were lysed, resulting in two



small enterotomies that were promptly repaired but precluded re-implantation of a synthetic prosthesis.

The skin and subcutaneous tissue were mobilized along the full course of the incision laterally to more than 3 cm beyond the lateral border of the rectus abdominis muscles bilaterally, where vertical relaxing incisions were made in the external abdominal oblique fascia along the

entire length, freeing the retracted rectus abdominis muscles. The thinned and attenuated midline anterior abdominal wall fascia was resected to healthy margins, which were approximated without tension using multiple short continuous sutures of #1 PDS. A 10 x 15 cm ALLOMAX™ Surgical Graft was soaked in saline for three minutes and was fashioned to cover the entire length of the sutured closure, secured to the anterior abdominal

wall fascia with interrupted sutures of 2-0 Prolene. Jackson-Pratt 10 mm suction drains were placed in the space between the skin/subcutaneous flaps and anterior abdominal wall fascia at the lateral extent of dissection on both sides and were brought out through caudal puncture incisions. The skin was closed with interrupted vertical mattress sutures of 4-0 Nylon; and a sterile occlusive dressing was applied.

Results



After an uncomplicated three-day postoperative hospital course, the patient was discharged with activity limitations to office follow-up. The suction drains and skin sutures were removed on the 10th postoperative day. A subsequent abdominal wall fluid collection was easily managed by needle aspiration and did not recur. After 8 weeks and without any recurrent loss of abdominal wall integrity, the patient was released to unrestricted activity. At 6 months he returned for a courtesy visit, enjoying good health once again and restored to his vigor of several years earlier.

Conclusion

The component separation technique, coupled with use of the ALLOMAX™ Surgical Graft, enabled successful primary reconstruction and repair, without the need for synthetic mesh prosthesis, of an abdomen deformed and painful because of a large recurrent hernia.

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