Hernia Repair With AlloDerm in Patient With Recurrent Fistula

Walter Longo, MD
John A Cochran VA Hospital, St Louis, Mo

Patient History

A 39-year-old male with a 19-year history of Crohn's disease presented with recurrent enterocutaneous fistula. The patient had a history of colon resections related to the Crohn's and a permanent colostomy.

The patient had 2 prior enterocutaneous fistula repairs. During the second repair procedure, vicryl mesh was implanted with eventual placement of a split thickness skin graft (STSG). Subsequently the patient developed the third enterocutaneous fistula.

Based on the fistula-prone nature of Crohn's disease and this patient's history of vicryl erosion, treatment options were limited. Given the extensive nature of the disease and consequent cutaneous resection, the patient's skin was inadequate to close primarily; an STSG was the only option for skin closure. Based on the characteristics of AlloDerm, the selected treatment option was to simultaneously repair the fistula and the abdominal hernia with delayed application of an STSG.

Materials and Methods

AlloDerm Acellular Tissue matrix provided the benefits of a biologic implant in a compromised wound bed, structural integrity for the hernia repair, and a bed for an STSG. Four pieces of 4 cm x 16 cm AlloDerm (cat #102082) were sutured with PDS; the periphery of the grafts were sutured to the abdominal wall with O Prolene® suture.

Surgical Day: Implantation of AlloDerm oriented with basement membrane against the bowel.

The initial dressing was a standard burn dressing. At 3 days postop, allograft skin was placed on the wound and was changed every 7 days until day 55 postop. During this period, the patient changed the outer layers of the dressing daily but returned to the clinic for the allograft skin changes (see LifeCell Open Abdominal Wall guide for additional information).

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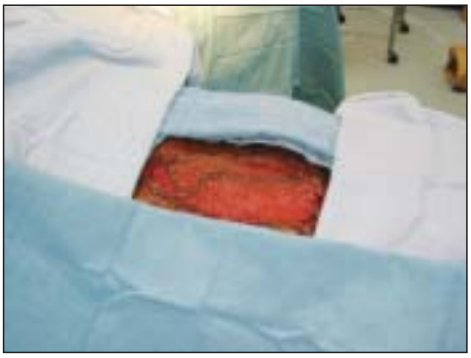
Results

Day 10 postop: Photo above exhibits exposed AlloDerm showing early revascularization.

The AlloDerm implant was ready for grafting by day 40; however, the patient opted to delay for personal reasons. Prior to grafting, the AlloDerm implant developed a healthy bed of granulation tissue.

Day 78 postop: Pre STSG.



Day 78 post-fistula repair: STSG applied.

Day 78 postop: Photos above exhibit the granulated bed pre and post application of the split thickness skin graft.

Day 102: Postop repair (day 24 post-skin grafting): Photo above exhibits normal wound healing.

LifeCell Corporation
One Millennium Way
Branchburg, NJ 08876
Tel: 908.947.1100
Fax: 908.947.1200
www.lifecell.com