

# CLINICAL CASE REPORT

**Ginard Henry, MD**

**University of Chicago Pritzker School of Medicine, Chicago, IL**

## Recurrent Incisional Hernia Repair with Component Separation Technique using the Bard<sup>\*</sup> AlloMax<sup>\*</sup> Surgical Graft



**Bard<sup>\*</sup> AlloMax<sup>\*</sup> Surgical Graft**

### Presentation and History

The patient is a 55-year-old female who presented with an intermittently draining abdominal wound for the past 13 months. The chronic, non-healing wound had resulted from wound infection and dehiscence from a previous incisional hernia repair. The patient had a Roux-en-Y bariatric surgical procedure performed two years previously. As a complication from the bariatric surgery she developed a wound infection and an incisional hernia. This was initially treated with wound debridement and placement of a wound V.A.C.<sup>\*</sup> After the infection was cleared and the wound stable, a hernia repair was performed using GORE-TEX<sup>\*</sup> mesh. This repair subsequently became infected and a wound dehiscence recurred. This complication was treated with wound debridement and partial resection of the GORE-TEX<sup>\*</sup> mesh and placement of an additional flat sheet of polypropylene for a secondary hernia repair. This repair also became infected and the ensuing wound infection and dehiscence were treated with additional surgical debridement and placement of another wound V.A.C.<sup>\*</sup> The resultant wound partially closed but the patient was left with a draining wound which she was treating conservatively for over four months before presentation.

On evaluation, the patient was determined to have a re-recurrent hernia and a moderate size subcutaneous abscess. CT scan of the abdomen also confirmed the presence of two types of artificial material and a hernia defect measuring 7x16cm. She was then scheduled for a definitive debridement and hernia repair.

### Surgical Intervention

Exposure of the hernia was performed along the previous midline incision. The entire area of inflamed tissue surrounding the subcutaneous abscess was excised. A tedious dissection was required to separate the hernia sac from surrounding subcutaneous tissue. The sac was then dissected free from the GORE-TEX<sup>\*</sup> and polypropylene mesh of the previous dehisced repairs. Both the mesh materials were resected from the surrounding abdominal fascia with care to remove all foreign material but to spare as much intact fascia as possible. Bowel adherent to the inner aspect of the abdominal wall at the fascial edge was dissected free to leave a 3cm periphery of cleared fascia



**A BARD Company**

bilaterally. With the bowel safely repositioned intra-abdominally, the entire surface of the wound was debrided using a VERSAJET<sup>®</sup> Hydrosurgery System. After post-debridement, rapid slide gram stain was confirmed negative and a component separation technique was performed.

The subcutaneous fat was elevated from the anterior rectus fascia to the level of the linea semilunaris bilaterally. The external oblique fascia was incised longitudinally the same length of the hernia defect to expose the underlying external oblique musculature. The external oblique fascia was dissected free from the muscle on the lateral side of the incision for approximately 1.5cm. After these component separation techniques were performed bilaterally, the medial edges of the rectus fascia were easily mobilized to close the hernia defect in the midline without any tension.

Before closure of the abdominal wall defect, care was taken to remove any diastasis rectus intervening fascia to leave only healthy rectus fascia to use for the closure. The rectus fascia was then re-approximated in an interrupted figure-of-eight fashion. A 4x16cm graft of Bard<sup>®</sup> AlloMax<sup>®</sup> human acellular dermis was used to reinforce the component separation technique in an onlay fashion. 1-0 PROLENE<sup>®</sup> suture was used in a running fashion to secure the AlloMax<sup>®</sup> graft over the entire midline repair. This protected the suture repair, further strengthening the hernia repair. As an onlay repair, the AlloMax<sup>®</sup> graft also prevents external irritation of suture, especially in thin patients. Two #19 BLAKE<sup>®</sup> drains were placed above the AlloMax<sup>®</sup> repair. The skin was then closed primarily in a multi-layered fashion.

## Results

The patient spent three days in the hospital where she recovered without incident. She went home with the drains in place. By post-operative day #11 the drainage output decreased to less than 30ml over 24 hours and the drains were then removed. Her wound was completely healed and presented no evidence of recurrence of hernia. She was placed on a strenuous activity restriction (no straining or lifting to exceed 10lbs). At six weeks post-operatively she was cleared for all activities and returned to her exercise routine, including weight training and aerobics, without complication. At her one year follow-up she was doing well with complete and persistent repair of her hernia and no evidence of wound infection.

## Conclusion

The Bard<sup>®</sup> AlloMax<sup>®</sup> Surgical Graft provided instant stability and reinforcement in the reconstruction of this patient's abdominal wall, which was weakened due to multiple surgical procedures and wound infections. AlloMax<sup>®</sup> strengthened the component separation repair immediately, allowing permanent incorporation over time with the patient's own fascial tissue.

<sup>\*</sup> Bard and AlloMax are trademarks and/or registered trademarks of C.R. Bard, Inc. or an affiliate. GORE-TEX is a registered trademark of W. L. Gore and Associates. VERSAJET is a trademark of Smith & Nephew. V.A.C. is a registered trademark of K.C.I. Licensing. PROLENE and BLAKE are trademarks of ETHICON, INC.

The opinions and clinical experiences presented herein are for informational purposes only. The results from this case study may not be predictive for all patients. Individual results may vary depending on a variety of patient specific attributes. The physician has been compensated by Davol Inc. for the time and effort in preparing the clinical case study for Davol's further use and distribution.

**Consult product labels and inserts for any indications, contraindications, hazards, warnings, cautions and instructions for use.**

© 2008 C.R. Bard, Inc. All rights reserved.  
MMCR5



A BARD Company

**Davol Inc. • Subsidiary of C. R. Bard, Inc.**  
**100 Crossings Boulevard • Warwick, RI 02886**  
**1.800.556.6275 • www.davol.com**