

ABTHERA™ OPEN ABDOMEN NEGATIVE PRESSURE THERAPY SYSTEM

CASE STUDY: ABDOMINAL WALL CLOSURE FOLLOWING FULL THICKNESS LOSS OF ANTERIOR ABDOMINAL WALL FROM NECROTIZING SOFT TISSUE INFECTION WITH RESULT OF MULTIPLE ENTEROATMOSPHERIC FISTULAS

PATIENT

A 42-year-old male, with prior medical history of necrotizing soft tissue infection of the abdomen following a liposuction procedure, required numerous operations resulting in full-thickness loss of most of the anterior abdominal wall. A split-thickness skin graft was applied on the exposed intestines. Unfortunately, patient developed multiple high-output enteroatmospheric fistulas and was referred to our center for higher level care.

MANAGEMENT

A complex operative procedure (duration 8 hours) included a difficult entry into the abdomen through the side of the wound (A). The bowel was mobilized and the loops with the fistulas were isolated (B). A matted mass of bowel with multiple fistulas was excised (C), and an anastomosis performed. There was extensive peritoneal contamination with intestinal contents, and the bowel was edematous. Copious lavage with saline was performed. Routine postoperative care was carried out with antibiotics and TPN. An ABThera™ Open Abdomen Dressing (KCI, San Antonio, TX) was placed intraoperatively into the open abdomen and negative pressure was initiated at -125mmHg (D). Dressing changes were performed every 24-48 hours for 4 days. On postoperative day 4, the method of temporary abdominal closure was switched to traditional negative pressure wound therapy (NPWT; V.A.C.® Therapy; KCI, San Antonio, TX) with V.A.C.® WhiteFoam Dressings (KCI, San Antonio, TX) applied over a layer of vaseline gauze, as there was no plan for fascia closure due to the extensive loss of tissue. The abdominal wound was skin grafted on post-operative day 8.

DISCHARGE AND FOLLOW-UP

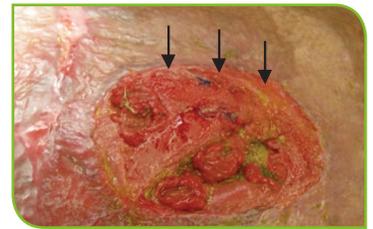
The patient was discharged on post-operative day 16 with no complications. Subsequent follow up showed good healing without any problems.

CLINICAL OUTCOMES

The ABThera™ OA Dressing was effective in removing any residual fluid from the deep spaces in the peritoneal cavity, possibly contributing to the prevention of abscess formation. The ABThera™ OA Dressing was replaced with traditional NPWT with V.A.C.® WhiteFoam Dressings in order to allow adhesions between the bowel and the remaining peritoneum, which helps reduce the risk of fistulas. This was done because there was no possibility of fascia closure because of the extensive loss of tissue due to the necrotizing soft tissue infection.

USER EXPERIENCE

This was a highly contaminated abdomen with extensive spillage of intestinal contents and a high risk of post-operative infectious complications. The use of the ABThera™ OA NPT effectively removed contaminated and toxin-loaded residual fluid, possibly helping to manage the risk of local and systemic infectious complications.



A. Prior necrotizing soft tissue infection of the abdomen, requiring a complex operative procedure.



B. Intraoperative appearance of matted loops of small bowel with multiple fistulas.



C. Excised matted mass of bowel with multiple fistulas.

ECONOMIC VALUE

In this case, prevention of post-operative sepsis in this patient may have reduced intensive care unit and hospital stay and eliminated the need for further invasive procedures, such as reoperation or percutaneous drainage.

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D. Application of ABThera™ OA NPT



NOTE: As with any case study, the results and outcomes of this patient should not be interpreted as a guarantee or warranty of similar results. Individual results may vary depending on the patient's circumstances and condition.

NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for KCI products and therapies. Please consult a physician and product instructions for use prior to application. Rx only.

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