ABThera™ Open Abdomen Negative Pressure Therapy System

Case Study: Temporary Abdominal Wall Closure Following Severe Peritonitis Following Colonic Anastomotic Leak

Patient
A 65-year-old male with history of recurrent diverticulitis received an elective open left colectomy and primary anastomosis 6 days prior to presentation with peritonitis and fascial dehiscence (A).

An emergency reoperation revealed an anastomotic leak and severe peritonitis (B).

Initial Treatment/Application of ABThera™ Open Abdomen Negative Pressure Therapy (OA NPT)
The segment of the colon with the anastomotic leak was resected (C), and primary re-anastomosis was performed. The peritoneal cavity was washed out with copious saline, and the abdomen was left open for re-evaluation and to prevent abdominal compartment syndrome.

Temporary abdominal wall closure was performed using the ABThera™ OA NPT System (KCI, San Antonio, TX). The ABThera™ fenestrated Visceral Protective Layer (VPL) was trimmed to size and tucked inside the abdominal wall under the peritoneum to completely cover the viscera and protect abdominal contents. The ABThera™ Perforated Foam was measured and cut to fit inside the exposed abdominal cavity. The ABThera™ Drape and tubing were placed over the dressing to create a seal and negative pressure was set at -125 mmHg (D). The patient received standard ICU treatment, including fluid resuscitation and antibiotics. Dressing changes and washouts were performed on days 1, 2 and 4.

By hospital Day 4, the patient’s condition was stable, and there was no evidence of residual abdominal sepsis. (E). On hospital Day 6, the ABThera™ OA Dressing was removed, and the abdomen was primarily closed.

Discharge and Follow-up
The patient had an uneventful recovery and was discharged on post-operative day 9. There were no complications at subsequent outpatient follow up.

Clinical Outcomes
The ABThera™ OA Dressing played a significant role in the effective removal of infected peritoneal fluid and facilitated early definitive fascial closure in this patient.

User Experience
In this case, the ABThera™ OA NPT system effectively removed any residual infected fluid, possibly helped to avoid postoperative intra-abdominal infection, and allowed definitive abdominal wall closure.
ECONOMIC VALUE
Prevention of post-operative sepsis in this patient 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. ABThera™ OA Dressing applied as temporary abdominal closure.

E. Open abdomen on 4th post-operative day after removal of ABThera™ OA Dressing looks clean and free of infection.

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.