

**Department of Surgery**  
**2026 Research Day**  
**6<sup>th</sup> May 2026 (Wednesday) | 7 am – Noon | MART Auditorium**

**Title:**

Subsequent Abdominal Surgeries Following Abdominal Wall Reconstruction: Analysis of 3,280 Patients with 997-Day Median Follow-Up

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**Background:**

Although complex abdominal wall reconstruction (AWR) volume is increasing, the post-AWR surgical history remains poorly understood. We aimed to describe the incidence and timing of abdominal procedures after AWR using a large single-state all-payer database supporting longitudinal patient tracking, with a secondary aim of determining the incidence of small bowel obstruction (SBO) and surgical interventions for it.

**Methods:**

Adult patients undergoing elective AWR (ventral hernia repair with component separation) were identified in the New York SPARCS database (2016–2024). Post-AWR abdominal surgeries were identified and grouped using ICD-10-PCS and CPT codes. Cumulative incidence of SBO hospitalizations and operative management rates were calculated.

**Results:**

Among 3,280 AWR patients (median follow-up 997 days), 553 (16.9%) underwent at least one subsequent abdominal surgery, totaling 975 procedures; 75.9% had only one reoperation. The most common procedures were drainage of surgical site occurrences (20.6%), ventral hernia repair (19.7%), lysis of adhesions (15.6%), and small bowel resection (5.4%). Overall, 292 patients (8.9%) developed SBO at a median of 575 days, of whom 52 (18.5%) required surgery. Cumulative SBO incidence rose from 4.4% at 1 year to 16.2% at 6 years.

**Conclusions:**

Nearly two-thirds of post-AWR abdominal interventions were related to the index AWR — surgical site occurrences, hernia recurrence, or postoperative adhesions. AWR carries a high cumulative SBO risk with no apparent plateau, exceeding rates reported after open colorectal and oncologic surgery, while non-operative management success is comparable to other adhesive SBOs. Recurrent hernia is a major contributor to post-AWR SBO.