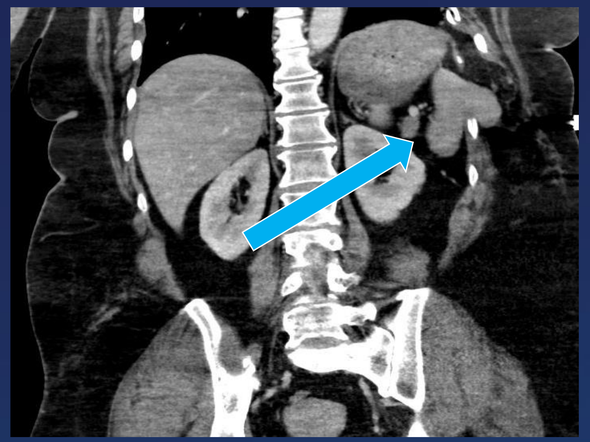
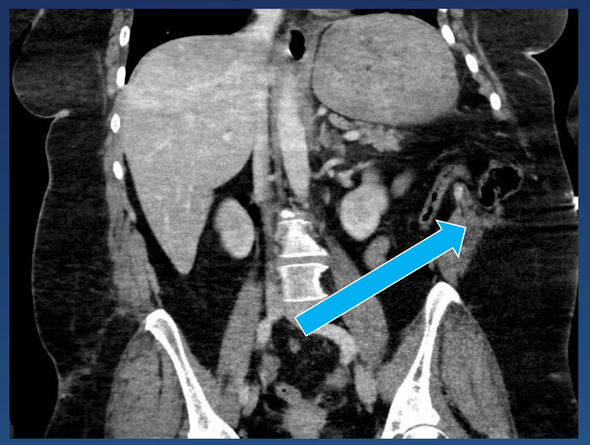
Elective Robotic Repair Of A Traumatic Abdominal Wall Hernia

Jaclyn Heilman, MD; Thea Murray, MD; Ryan Shadis, MD; Seth Newman, MD; Abington Jefferson Health

Traumatic abdominal wall hernias (TAWHs) are a rare finding with prevalence under 1%. They are typically secondary to shear stress and rapid increase in intra-abdominal pressure from high-speed blunt trauma. Operative repair is recommended for prevention of incarceration or strangulation of abdominal viscera. While open and laparoscopic repairs are described, with and without mesh, and immediate or delayed, we present a novel approach of delayed repair using a robotic technique.





We report a case of a delayed robotic hernia repair of a TAWH.

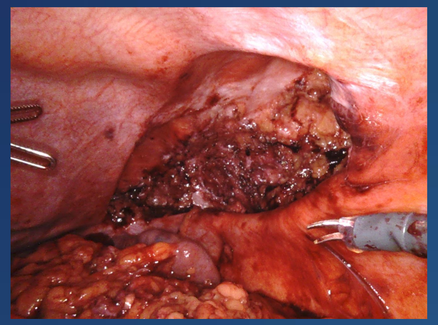
The patient was a 54 year old obese, female restrained driver who presented as a trauma activation following a high-speed motor vehicle crash into a pole requiring prolonged extrication.

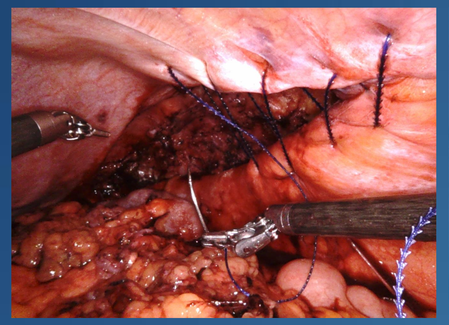
She was hemodynamically normal and her primary survey was intact. Workup demonstrated a left humerus fracture, a left tri-malleolar fracture and left 8th - 10th rib fractures with an associated abdominal wall hernia containing portions of her spleen and colon.

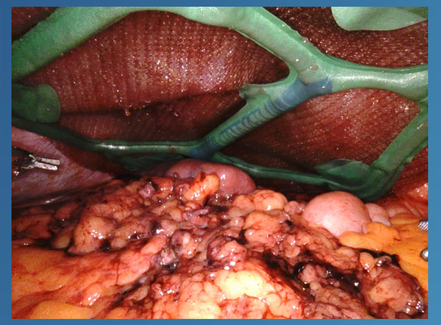
During her initial hospitalization she underwent extremity fracture repair and was discharged home with physical therapy as well as hernia precautions. A month later, she returned for an elective robotic repair of her TAWH.



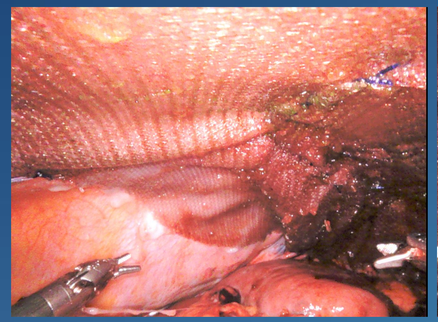
Under general anesthesia, in a right semi-decubitus position, three ports (infraumbilical, RUQ, LLQ) were placed. The splenic flexure of the colon, portions of omentum, and the spleen were incarcerated within the left TAWH which was complex with two components between ribs; infero-lateral and superio-lateral.

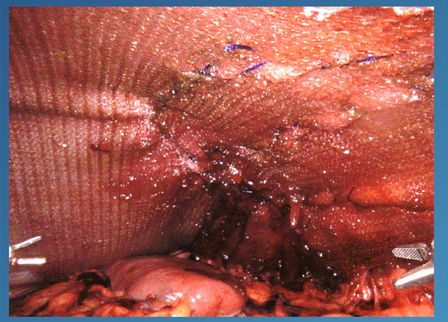






Extensive adhesiolysis was required to reduce the contents. The defect was subsequently closed with a running uni-directional 0-PDS Suture (STRATAFIX™ Symmetric) run 2 1/2 times over the defect. This was followed by deployment of a coated polypropylene mesh (**Ventralight™ ST**) sized to more than 5 cm underlay from the defect edges in all aspects.





The patient was discharged the following day. Outpatient follow-up two weeks later demonstrated minimal pain medication use and she has made an uneventful recovery with no subsequent pain, functional issues, or recurrence.