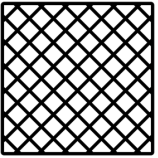


Association of Robotic Approach with Intraperitoneal Mesh Placement in Ventral Hernia Repair

Ryan Howard, MD, MS; Anne Ehlers, MD, MPH; Abigail Kappelman, MA;
Dana Telem, MD, MPH; Jenny Shao, MD

University of Michigan, Ann Arbor, Michigan, USA

Aims



Intraperitoneal onlay mesh placement is a common approach for minimally invasive ventral hernia repair

We evaluated whether adoption of the **robotic platform** was associated with changes in location of mesh placement

Methods

Retrospective analysis of patients undergoing elective minimally invasive ventral hernia repair with sublay mesh placement

Outcome of interest was **intraperitoneal mesh location**

Multivariable logistic regression performed to evaluate the association between robotic approach and mesh location



Results

4,512 patients

79.5% robotic

20.5% laparoscopic

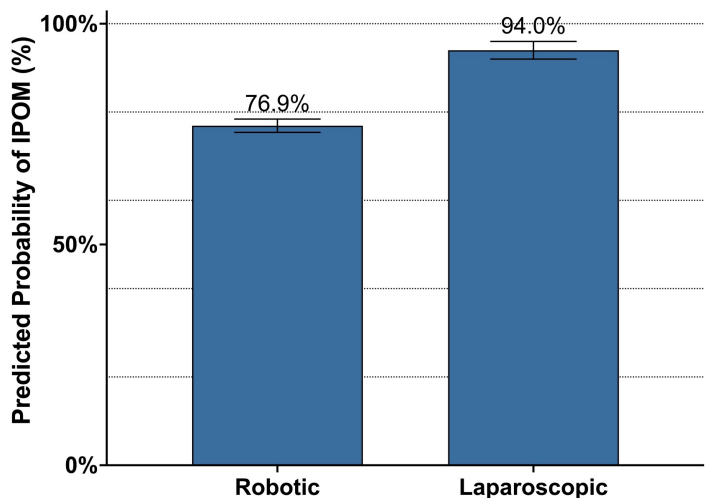
Mean hernia size 3.7 cm

80% intraperitoneal mesh

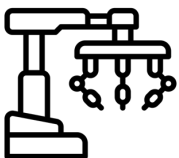
20% extraperitoneal mesh

Robotic approach
associated with
lower likelihood
of intraperitoneal mesh

Likelihood of intraperitoneal mesh placement



Conclusions



Compared to laparoscopic approach, robotic approach to ventral hernia repair is associated with **significantly lower likelihood** of intraperitoneal mesh placement

Future research should investigate whether this difference in technique impacts patient outcomes