

Medical Device Surveillance and Assessment (MDSA)

Newsletter



Gender Differences in Recurrence After Groin Hernia Repairs Depending on Surgical Approach

In a study published in *Hernia*, Kaiser Permanente General Surgeons and Medical Device Surveillance & Assessment Researchers compared male and female patients' risk of reoperation following different hernia repair approaches (open, laparoscopic, and robotic).

Women may uniquely benefit from a laparoscopic or robotic hernia repair, possibly due to the ability to routinely identify an occult femoral hernia with these minimally invasive approaches.

Francisca Maertens, MD, Department of General Surgery,
The Permanente Medical Group, Oakland, CA | Study Author

Study Details

The study cohort was comprised of 110,805 patients 18 and older who underwent 131,626 first inguinal repairs with mesh during 2010-2020, 10,079 (7.7%) repairs were in females. Multiple Cox proportional-hazards regression was used to evaluate the association between sex and risk for ipsilateral reoperation during follow-up. Analysis was stratified by surgical approach (open, laparoscopic, and robotic).

Following open groin repair:

- Females had a higher risk of reoperation than males but a lower reoperation risk when using the laparoscopic approach.
- The crude 5-year cumulative reoperation probability following robotic repair was 2.8% in males and no reoperations were observed for females.
- Of females who had a reoperation, 10.3% (39/378) were for a femoral hernia, while only 0.6% (18/3110) were for femoral hernias in males.

Practice Considerations

- Lower risk was observed for females through a minimally invasive approach (laparoscopic or robotic) and may be due to the ability to identify an occult femoral hernia through these approaches.
- Women who need groin hernia repair may benefit from a laparoscopic or robotic surgical approach.
- A minimally invasive inguinal hernia repair should be considered by surgeons as the primary surgical approach for females with groin hernias.
- If an open repair is pursued in a female patient, evaluation for a femoral hernia with dissection of the inguinal floor should be considered as a strategy to minimize the risk of reoperation.

Link to Full Publication

Maertens F, Chan PH, Prentice HA, Brill E R, Paxton EW, Mostaedi R. (2023). **Female sex and ipsilateral reoperation risk following mesh-based inguinal hernia repair: a cohort study including 131,626 repairs in adults from an integrated healthcare system over a 10-year period** *Hernia***, (Epub ahead of print).**