



GENDER DIFFERENCES IN THE IMPORTANCE OF VARIOUS PATIENT REPORTED OUTCOMES IN HERNIA REPAIR

Gurusha Jangid, M.B.B.S.¹; Sarah Mohamedaly, M.D.¹; Omar Ghanem, M.D.¹; Charlotte Horne, M.D.¹

¹ Division of Metabolic and Abdominal Wall Reconstructive Surgery, Mayo Clinic, Rochester, MN, USA.

BACKGROUND

Gender differences in hernia care and outcomes remain poorly understood. This prospective study aims to examine gender-based differences in the perceived importance of patient-reported outcomes across hernia types to assess whether existing tools effectively capture patient-centered metrics and to inform better surgical decision-making.

METHODS

We conducted a prospective, non-randomized observational study on 12 adult patients (7 males, 5 females) scheduled for elective hernia repair. At the preoperative visit, participants completed the Hernia-Related Quality-of-Life Survey (HerQLes) and rated the perceived importance (mean impact factor) of each item to their anticipated postoperative experience. Data were analyzed using Chi-square and t-tests to compare male and female responses.

RESULTS

The analysis of patient-reported outcomes on the HerQLes survey revealed significant gender-based differences. Female patients consistently reported a greater impact from their hernia on physical limitations and appearance.

RESULTS

Specifically, statistically significant differences were found in **Restriction from daily activities** (males: 1.0, females: 5.2, $p=0.014$), **Restriction during sports** (males: 1.2, females: 5.3, $p=0.033$), and **Restriction during heavy labour** (males: 1.2, females: 6.7, $p=0.001$) (Figure 1). Furthermore, female patients reported a significantly greater concern regarding the **Shape of their abdomen** (males: 3.25, females: 9.0, $p=0.002$) and the **Site of the hernia** (males: 3.25, females: 9.2, $p=0.013$). Interestingly, despite these differences in symptom burden, there were **no statistically significant gender-based differences** in how males and females rated the importance of the survey questions themselves ($p > 0.05$).

DISCUSSION

This prospective study highlights significant gender-based differences in the experience of hernia disease, with female patients reporting greater restrictions in physical activity and stronger concerns regarding abdominal appearance. These findings suggest that hernia-related morbidity may extend beyond physical symptoms and also include psychosocial factors that warrant greater attention during preoperative counseling and shared decision-making.

FIGURE 1 : Gender-Based Differences - Mean Impact Factor (Left) vs. Average HerQLes Score (Right)



DISCUSSION

Interestingly, both genders rated the importance of quality-of-life domains similarly, indicating that while existing patient-reported outcome tools capture relevant constructs, they may not fully reflect gender-specific severity.

CONCLUSIONS

This study demonstrates that the HerQLes survey effectively identifies significant gender-based differences in the lived experience of hernia patients. While females reported a substantially greater impact on physical activity, daily function, and body image, the small sample size precluded a statistically significant finding on whether the perceived importance of each survey item varies by gender. This highlights a need for future larger-scale studies to definitively determine if a gender-based difference in the perceived value of outcome metrics exists independently of symptom experience.