

The Impact of Robot-Assisted Sacrocolpopexy on Sexual Function

Yusuke Kimura¹, Emika Moriyasu¹, Jo Tamura¹, Rumiko Omatsu¹, Hiroshi Yamane¹, Ryutaro Shimizu¹, Shogo Teraoka¹, Ryoma Nishikawa¹, Syuichi Morizane¹, Katsuya Hikita¹, Atsushi Takenaka¹

1. Department of Urology, Tottori University Faculty of Medicine

Objective

The objective of this study was to evaluate changes in sexual function-related quality of life after RASC at our institution.

Methods

We included 63 patients who underwent RASC at our institution between 2021 and 2025. To assess sexual function, we used the Pelvic Organ Prolapse/Incontinence Sexual Questionnaire, or PISQ-IR, which evaluates sexual function in women with pelvic floor dysfunction. It has separate subscales for sexually active and sexually inactive patients — the active group is assessed on desire, arousal-orgasm, partner-related, condition-specific, and satisfaction domains, while the inactive group is assessed on the reasons for their inactivity.

We confirmed sexual activity status for all patients, and assessed sexual function-related QOL in the sexually inactive group preoperatively, and at 3 and 6 months postoperatively.

Results

The mean age was 71.1 years, and most patients had preoperative POP-Q stage III disease. There were no Clavien-Dindo grade III complications and no mesh exposure.

The response rate for PISQ-IR was lower than that for the IPSS and OABSS questionnaires at every time point, reflecting the sensitivity of this topic for patients. (Fig.1)

Only a small minority of patients were sexually active — most remained in the sexually inactive group throughout the study, which is why our analysis focused on this group. (Fig.2)

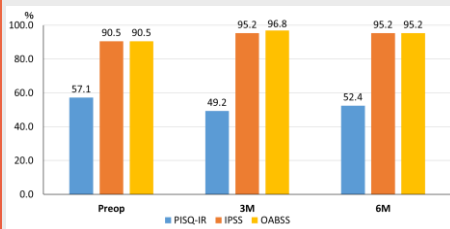


Fig.1 Questionnaire Response Rate

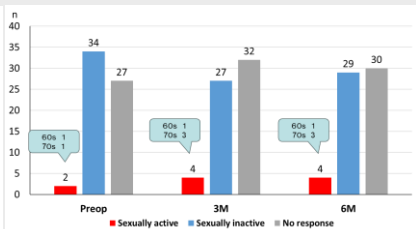


Fig.2 Sexual Activity Status

Avoidance of intercourse due to fear of incontinence or prolapse decreased significantly, from about 69% preoperatively to 25% at 6 months. Feelings of sexual inferiority and resentment related to incontinence or prolapse also improved significantly over time. (Fig.3)

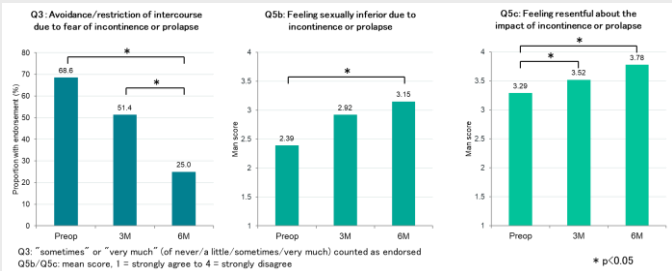


Fig.3 PISQ-IR Score Changes

At the subscale level, both condition-specific reasons for inactivity and the condition-specific psychological impact subscale improved significantly by 6 months postoperatively. (Fig.4)

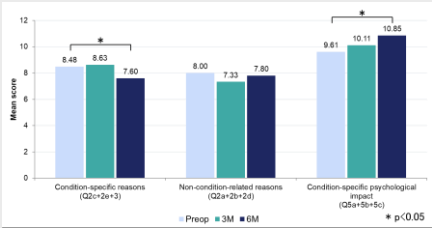


Fig.4 PISQ-IR Subscale Changes

Implications

These results show that even among patients who remain sexually inactive, RASC significantly reduces the psychological burden associated with pelvic organ prolapse — including fear-driven avoidance, feelings of inferiority, and resentment. This suggests that surgical benefit after RASC should not be judged solely by whether patients resume sexual activity. Rather, a comprehensive tool such as PISQ-IR, which captures the psychological dimension of sexual inactivity, is essential for fully evaluating outcomes in this population. Our findings support the conclusion that RASC can improve sexual function-related quality of life even in older, sexually inactive patients, and that this improvement is a meaningful outcome in its own right.