

FUNCTIONAL OUTCOME EXPECTATION IN THE OBESE IS WORSE THAN THE NORMAL WEIGHT PATIENT DESPITE OPTIMAL SURGICAL CORRECTION FOR SEVERE PELVIC ORGAN PROLAPSE

Hypothesis / aims of study

The aim of this study was to assess the impact of body mass index (BMI) on the objective and subjective outcomes of patients who had surgical treatment using the combined anterior trans-obturator mesh and vaginal sacrospinous ligament fixation for severe pelvic organ prolapse.

Study design, materials and methods

This was a prospective study on 217 patients who had surgical treatment for severe pelvic organ prolapse with combined anterior trans-obturator mesh Perigee (American Medical Systems, Minnetonka, MN, USA) device and vaginal sacrospinous ligament fixation. All patients had the Pelvic Organ Prolapse Quantification (POP-Q) assessment, completed the questionnaires Urogenital Distress Inventory (UDI-6), Incontinence Impact Questionnaire (IIQ-7), Pelvic Organ Prolapse Distress Inventory 6 (POPDI-6) and Pelvic Organ Prolapse/ Urinary Incontinence Sexual Questionnaire (PISQ-12) pre-operative and post-operatively. Objective cure was defined as less than stage II prolapse. Subjective success was patient's feedback of no or mild abdominal organ falling out sensation (question 3) and no or mild heaviness (question 2) on the POPDI-6. Patients were grouped into normal healthy weight (group A), overweight (group B) and obese (group C) based upon World Health Organization BMI cut-off points recommendations for Asian population[1]. Student paired *t*-test was used to examine the outcomes. A *p* value of < 0.05 was considered significant. A post hoc sample size calculation of 62 subjects was needed to detect differences in failure rate of 10%, with a confidence level of 95%, and statistical power of 80%.

Results

A total of 208 patients completed a mean follow-up of 38.29 ± 18.08 months post operatively. The mean age for group B was 61.8 ± 11.4 years and group C was 66.1 ± 10.1 years while in group A it was 62.0 ± 11.1 years. The mean parity was 3.96 ± 1.84 and 4.19 ± 1.04 for group B and C respectively. One hundred and eighteen group B patients had vaginal sacrospinous ligament fixation and anterior mesh surgery including 99 patients who had concomitant vaginal hysterectomy. Thirty group C patients had vaginal hysterectomy from a total of 36 who had the combined surgery of sacrospinous ligament fixation and anterior mesh. Sixty-three group A patients had the combined surgery. The objective cure rate for the group A, B and C were 93.3%, 92.0% and 94.2% respectively. Subjective cure rate of group C was 91.4% and 93.8% in the group B patients. Group A patients had a 95% subjective cure rate. All groups showed improvement in the POP-Q, POPDI-6 and PISQ-12 assessment after surgery. Vaginal mesh exposure was 3.8% (8 out of 208) overall and there was only 1 patient in group C that had infection post surgery.

Interpretation of results

Objective and subjective success were not statistically significant for group B and C when compared with that of group A. It was noted that within group C, the subjective cure rate was lower compared to objective cure rate in contrast to that observed in the other two groups. There was significant improvement in the POPDI-6 and PISQ-12 within the studied groups after surgery but group C patients had a significantly less improvement when compared to group A patients.

Concluding message

Functional outcome expectation in obese patients is worse than the normal weight patients despite having had optimal surgical correction for severe pelvic organ prolapse. This served as an important individual factor for counselling prior to pelvic organ surgery.

References

1. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies (2004). *Lancet* 363 (9403):157-163. doi:10.1016/S0140-6736(03)15268-3

Disclosures

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