

URINARY OUTCOMES BEFORE AND AFTER BARIATRIC SURGERY: A PROSPECTIVE COHORT STUDY

Hypothesis / aims of study

To identify and quantify pelvic floor dysfunction, in particular urinary outcomes in obese women before and after laparoscopic bariatric surgery.

Study design, materials and methods

Prospective cohort study of patients with a BMI > 40 undergoing bariatric surgery. 46 patients completed their 6 month follow-up. Questionnaires for urinary function (Bristol female lower urinary tract symptoms) was completed along with BAROS score (1) before and 6months after surgery. Paired t-test was used.

Results

Overactive bladder: All the 46 patients included had symptoms of an overactive bladder preoperatively. Results indicate that 44 out of 46 patients had an overall improvement in symptoms postoperatively. The 2 remainder patients had both an exacerbation of existing and onset of new symptoms postoperatively. 15.9% of patients that had a complete resolution of symptoms following surgery.

Stress incontinence: 37 patients were identified with stress incontinence. 83.8% (31/37) had an improvement in symptoms postoperatively, of which 24.3% (9/31) had no stress incontinence after surgery. 4 patients had no improvement in symptoms and 1 patient worsening symptoms of stress incontinence.

Unaware leakage of urine: 14 patients were unaware of leaking urine prior to surgery. 71.4% (10/14) showed an improvement in symptoms, with 50% (5/10) of women having no further urinary leakage.

Obstructive symptoms: Preoperatively, 18 out of 46 patients identified obstructive symptoms. (10/18) patients had an improvement in symptoms, of which only 2 showed resolution of symptoms postoperatively. 5 patients that were asymptomatic previously, displayed new onset symptoms postoperatively.

Infection: 8 out of 46 indicated symptoms of an infection preoperatively. Post-operatively 6 patients had an improvement of symptoms, of which 66.7% (4/6) were asymptomatic.

BAROS outcomes showed 19 with very good score (5-7), 21 with a good score (3-5), 5 with a fair score (3-5) and 1 was a failure (<1=0.5).

Interpretation of results

Both overactive bladder and stress incontinence symptoms were more prevalent than other urinary symptoms and resulted in greater improvement upon bariatric surgery. Overactive bladder symptoms improved in 95.75%, stress incontinence improved in 83.8%, unaware leakage of urine improved in 71.4%, infection symptoms improved in 66.7% and obstructive symptoms improved in 5.6%. Overall urinary symptoms (Bristol female lower urinary tract symptoms) improved and pre and postoperative questionnaires showed a statistical significance -7.6 (p <0.5)

Concluding message

Bariatric surgery led to significant improvement in quality of life and all urinary outcomes specifically overactive bladder and stress incontinence.

References

1. Oria HE, Moorehead MK. (2009) 'Updated Bariatric Analysis and Reporting Outcome System (BAROS).', Surg Obes Relat Dis, 5(1), pp. 60-6.

Disclosures

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