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ASSESSMENT OF OVERACTIVE BLADDER SYMPTOMS IN WOMEN WHO UNDERWENT TISSUE FIXATION SYSTEM (TFS) SURGERY FOR PELVIC ORGAN PROLAPSE.

Hypothesis / aims of study

The objective of this study was to evaluate the impact of Tissue Fixation System (TFS) surgery on overactive bladder symptoms in women with pelvic organ prolapse.

Study design, materials and methods

Forty seven women aged between 55 to 85 years (average 70.3) with stage III or IV prolapse, who underwent Tissue Fixation System (TFS) surgery from October 2007 to December 2009, were included in this study. Post-operative changes in symptoms of urinary urgency, frequency, and urge urinary incontinence were assessed before and at 3 to 6 months after surgery. The Japanese Overactive Bladder Scoring System (OABSS) was used for an assessment of overactive bladder symptoms in women who underwent Tissue Fixation System (TFS) surgery. The OABSS includes an assessment of four symptoms, which are as follows:

1) Increased daytime urinary frequency
0 points: less than 7 times, 1 point: 8-14 times, 2 points: more than 15 times

2) Nocturia
0 points: none 1 point: less than 1 time, 2 points: 2 times, 3 points: more than 3 times

3) Urgency
0 points: none, 1 point: less than 1 time per week, 2 points: more than 2 times per week, 3 points: 1 time per day, 4 points: 2-4 times per day, 5 points: more than 5 times per day.

4) Urgency urinary incontinence
0 points: none, 1 point: less than 1 time per week, 2 points: more than 2 times per week, 3 points: 1 time per day, 4 points: 2-4 times per day, 5 points: more than 5 times per day.

When the patients have 2 points in the Urgency section and more than 3 points in total, an overactive bladder is suspected.

Results

All patients were followed up for a minimum of 3 months. The means ± SDs of the operating time and loss of blood were 94.4 (± 29.3) minutes and 77.1 (± 92.7) ml, respectively. Seventeen patients (36%) were discharged on the same day of surgery and 28 patients (59.6%) on the following day.

The results have shown that 93.6% (44/47) of women having prolapse surgery (TFS) experience resolution of urgency and improved OABSS results. Twenty-eight patients (63.6%) had improvement by over 3 points. One patient's (2.1%) symptoms got worse, and two other patients (4.3%) experienced no change.

Forty (85.1%) of 47 patients had urgent urinary incontinence and post-operatively, 37 (92.5%) of them experienced resolution of these symptoms. Two patients (5%) symptoms got worse, and one patient (4.3%) experienced no change.

Forty (85.1%) of 47 patients had daytime urinary frequency and post-operatively, 24 (60%) of them experienced resolution of these symptoms. One patient's (2.1%) symptoms got worse, and one patient (2.5%) experienced no change.

Forty-two (89.4%) of 47 patients had nocturia and post-operatively, 24 (57.1%) of them experienced resolution of these symptoms. Five patients (11.9%) symptoms got worse, 13 (31.0%) experienced no change and two patients experienced this symptom de novo.

After reconstructive surgery, two patients had recurrence, one patient had a mild cystocele and one patient had a mild rectocele. Ten patients (21.3%) had mesh erosion and there were four erosions in the perineal body sling. All meshes were removed in the outpatient clinic.

Interpretation of results

These results show that an overactive bladder due to a lax pelvic floor is improved by normalising the anatomy when treated by the TFS method. In respect of mesh erosion, after using a two-layer closure method (from September 2009), no further erosions have occurred to date.

Concluding message

The TFS procedure delivers satisfactory results for uterine prolapse with an overactive bladder. Furthermore, the procedure is useful because of the short duration of the operation, a short recovery period, its good safety profile and minimal invasiveness.
Moreover, there is a significant improvement in the quality of life. However, long-term results are currently unknown. A controlled trial compared with reconstructive surgery is recommended.

References

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