

ANATOMICAL AND FUNCTIONAL OUTCOMES FOLLOWING THE PLACEMENT OF A POLYPROPYLENE MESH BY VAGINAL ROUTE FOR CYSTOCELE : LONG TERM FOLLOW-UP (14 YEARS) .

Hypothesis / aims of study

The transvaginal placement of a polypropylene mesh is associated with a higher anatomical success rate for the treatment of cystocele at short and mid-term follow-up,. However, data are lacking at long term follow up.

The objective of the current study was to evaluate, after 14 year follow-up, the functional and anatomical outcomes in patients who underwent transvaginal non-absorbable monofilament polypropylene mesh for the treatment of cystocele.

Study design, materials and methods

65 patients underwent a transvaginal surgery using a synthetic monofilament polypropylene mesh (Gynemesh™) between October 1999 and 2001. Polypropylene mesh was inserted under the bladder using a tension-free technique. All patients had a symptomatic stage 2 to 4 cystocele, regarding to the ICS-POPQ classification. This monocentric observational study evaluated patients, using a clinical exam (POP-Q) and validated questionnaires (PFDI, PFIQ) at 3 years, 6 years and 14 years follow-up. Anatomical (objective) success was defined as follows: patients presenting with stage 0 or 1 cystocele. Subjective success was defined as follows: no genital prolapse symptom (vaginal bulge). Data were presented as numbers, percentages, median and interquartile range (25th and 75th). Statistical analysis of continuous data used Kruskal-Wallis test.

Results

After 14 years, functional success rate was 73% and anatomical success rate 75% (9/12). The global post-operative satisfaction rate was 90%. Fourteen patients (21%) developed a cystocele recurrence, and one underwent a prolapse surgery again. Nine patients had *de novo* stress urinary incontinence. Vaginal mesh exposure rate was 18% (12 patients), and 14% (9) needed a re-intervention for this reason. Global re-intervention rate was 26% (17/65). The 14 years lost-to-follow-up rate was 60%.

Interpretation of results

This is the first study concerning the very long term follow-up of patients who underwent a transvaginal cystocele repair using synthetic meshes. At 14 years of median follow-up, the objective anatomical and subjective functional results were globally satisfying. A previous study, with the longest follow-up previously published was 7 years. They reported similar anatomical and functional results [1]. One limitation of our study was a high rate of lost-to-follow-up, which can be well-accepted in a 5 years or more follow-up study according to the literature [2]. In the literature, it has been showed that transvaginal mesh placement is associated with increased anatomical success rates even if reinterventions rates are higher following mesh surgery [3].

Concluding message

At very long-term follow-up (14 years), the recurrence rate of prolapse among patients who underwent a transvaginal repair of cystocele using a monofilament polypropylene mesh remains low, and this technique is associated with a high global satisfaction rate. However, vaginal mesh exposure is high.

References

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3. Maher C, Feiner B, Baessler K, Christmann-Schmid C, Haya N, Marjoribanks J. Transvaginal mesh or grafts compared with native tissue repair for vaginal prolapse. Cochrane Database Syst Rev. 2016 Feb 9;2:CD012079. doi: 10.1002/14651858.CD012079. Review. PubMed PMID: 26858090.

Disclosures

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