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, according 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
1. (1) Damoiseaux A, Milani AL, Withagen MI. Long-term follow-up (7 years) of a randomized controlled trial: trocar-guided mesh compared with conventional vaginal repair in recurrent pelvic organ prolapse. Abstract, IUGA, juin 2015

Disclosures
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