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Repeat synthetic mid urethral sling procedure for women with recurrent stress urinary incontinence

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Purpose: We reported and compared the outcomes of repeat mid urethral sling with primary mid urethral sling in women with stress urinary incontinence.

Materials and Methods: A total of 1,225 consecutive women with urodynamic stress incontinence underwent a synthetic mid urethral sling procedure (955 retropubic, 270 transobturator) at our institution between 1999 and 2007. Of the patients 91% (1,112) were interviewed via telephone call with a structured questionnaire and were included in the analysis. Mean +/- SD followup was 50 +/- 24 months (range 12 to 114). A comparison between repeat (77, mean age 62 +/- 12 years) and primary (1,035, mean age 60 +/- 13 years) mid urethral sling groups was performed. Repeat sling was placed without removal of the previous sling.

Results: The preoperative incidence of intrinsic sphincter deficiency was higher in patients who had a repeat mid urethral sling (31% vs 13%, $p < 0.001$). The subjective stress incontinence cure rate was 86% and 62% in the primary and repeat group, respectively ($p < 0.001$). The repeat retropubic approach was significantly more successful than the repeat transobturator approach (71% vs 48%, $p = 0.04$). The rates of sling related and general postoperative complications were similar between the primary and the repeat groups. However, de novo urgency (30% vs 14%, $p < 0.001$) and de novo urge urinary incontinence (22% vs 5%, $p < 0.001$) were more frequent in the repeat group compared with the primary group.

Conclusions: A repeat synthetic mid urethral sling procedure has a significantly lower cure rate than a primary mid urethral sling procedure. The repeat retropubic approach has a higher success rate than the repeat transobturator approach. The incidence of de novo urgency and urge incontinence are significantly higher in repeat procedures.

Editorial Comment

This is a report on the efficacy of the repeat mid- urethral sling after a failed mid urethral sling. The authors examined an impressive pool of patients numbering well over a thousand of which 77 patients had a repeat mid-urethral sling. The authors noted a significantly lower rate of success (62%) as well as a fairly high rate of failure of the repeat transobturator sling of salvaging continence (53% or less). The authors were able to collate the results of their surgeries through the use of clinical interaction as well as telephone communication. To assess the results, a questionnaire made of select questions from previous validated questionnaires was utilized. The patient population was fairly young being between 60 and 62 years of age. It was noted that the repeat surgery group suffered from a higher rate of de novo urgency as well as urinary urge incontinence.

This study is very important in view of its' large numbers and examining the efficacy of mid-urethral sling. Take home messages include the confirmation of the difficulty in salvaging previously failed mid-urethral sling procedures as well as the fairly important singular finding of the limited efficacy of a transobturator sling to salvage either a failed retropubic or a previous transobturator sling. The difficulty in salvaging a gold standard operation has been noted in the past with regard to pubovaginal slings with autologous fascia (1). For further reading on management of failed suburethral slings, I direct the reader to an excellent reference summary article authored by Scarpero and Dmochowski (2).

References

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