

CONCURRENT EXCISION OF MID-URETHRAL SLING DURING REPEAT MID-URETHRAL SLING IS NOT ASSOCIATED WITH CONTINENCE OUTCOMES

Hypothesis / aims of study

The role of excision prior to a repeat mid-urethral synthetic sling for recurrent or persistent stress urinary incontinence is unknown. Several prior studies have shown that a repeat sling placement after initial sling failure can lead to improved continence, even if success may not be as high as with primary sling placement [1, 2]. It has also demonstrated that repeat success is higher with the retropubic approach compared to transobturator approach [3]. The purpose of our study was to evaluate if excision of a prior sling during repeat mid-urethral sling placement is associated with greater success or failure.

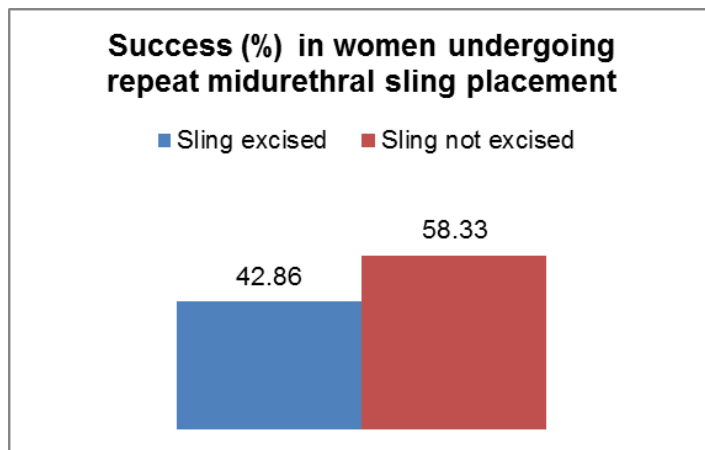
Study design, materials and methods

Retrospective chart review was performed for all women who had undergone a sling procedure at our institution between 2009 and 2013. We identified patients receiving repeat mid-urethral slings and evaluated outcomes by examining post-op symptom scores. We contacted the patients to obtain information regarding symptoms using the UDI-6 and Patient Global Impression of Improvement. Success was defined as: response of "No" to the question regarding stress incontinence on UDI-6 and response of "very much better" or "much better" on PGII. Failure was defined as response of leakage on UDI-6 question on stress incontinence, or the need for further anti-incontinence surgery. Mean values are reported and were analyzed using the two-sample T-test and Fisher's test.

Results

30 women with prior mid-urethral sling underwent a repeat mid-urethral sling for primary failure or recurrence. 19 women were able to provide prospective telephone data. Of these women, 7 had the initial sling excised before replacement, and 12 had the original sling left in place. There was no improvement in success for women who had their sling excised compared to women who had their sling left in place (42.86% vs 58.33%, $p=0.6499$). Statistical power was 9.7%. Women whose slings were excised had lower BMIs (27.8 vs 32.7, $p=.0735$) and higher capacity on pre-op UDS (398.25 vs 335.4, $p=0.0736$).

Women whose slings were excised had higher ages (69.1 years vs 63.1 years, $p=0.2062$), and lower total scores on the pre-op UDI-6 (8.2 vs 10.5, $p=0.3732$). These women also had lower leak point pressure at capacity (42.3 vs 67.8, $p=.1789$), and lower incidence of urethral hypermobility (14.26% vs 45.5%, $p=.3156$). Finally, women whose slings were excised had longer length of follow up (8.5 months vs 3.2 months, $p=.0815$), however none of these were statistically significant.



Interpretation of results

Our study did not reach statistical significance in showing a difference in success and failure rates according to whether patients underwent initial sling excision or placement of repeat sling without excision of the pre-existing sling. These results show that we cannot predict success based on whether the failed sling is excised. The group of women whose slings were excised had higher ages, lower BMIs, and lower pre-op symptom scores. These factors may have skewed our results, although we would expect the increased age to lead to decreased success whereas lower BMI and lower preoperative symptoms would correspond with increased success, potentially balancing out. Involvement of a larger number of patients would increase the power of the study and potentially lead to a statistically significant difference in outcomes.

Concluding message

Excision of pre-existing mid-urethral sling is not associated with success in women who underwent a repeat mid-urethral sling.

References

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Disclosures

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