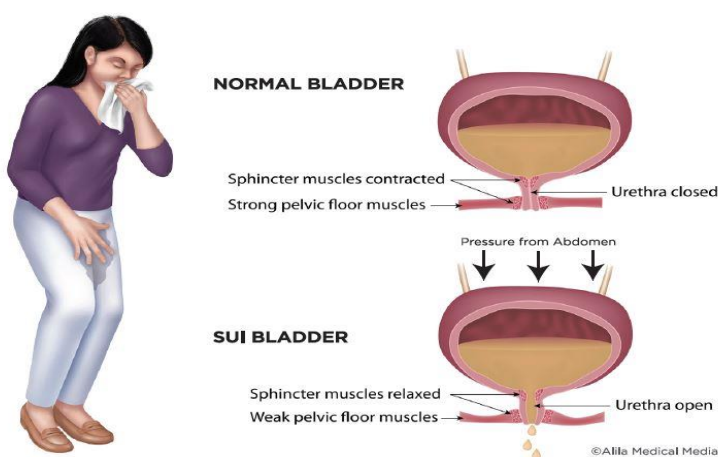


## Hypothesis / Aims of Study

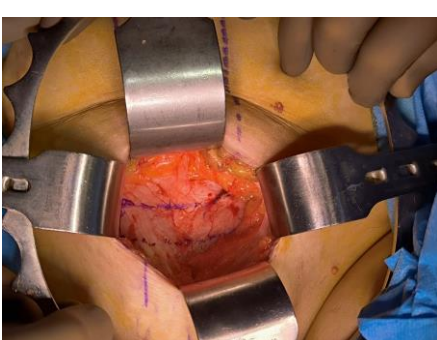
- Stress urinary incontinence (SUI) is the most common type of urinary incontinence in women. When conservative measures fail, surgery is indicated.
- For women with SUI and urethral hypermobility, first line surgical treatment for women with SUI is an **autologous or synthetic sling** procedure after a careful discussion with the patient.
- Here we review the short- term outcomes of surgery performed using autologous fascia or synthetic mesh.

Due to the mesh related complications, current guidelines recommend the patients to be offered all surgical options including colposuspension, bulking agents, autologous fascial slings and synthetic slings.



## Study Design, Materials and Methods

- Patients being treated for SUI at a tertiary referral centre between January 2021 and March 2024 were retrospectively examined.
- Each patient received pelvic floor exercises for at least 6 weeks and/or medical treatment Those who failed conservative measures were counseled for surgical treatment using either an autologous fascia sling (AFS) or a synthetic mesh sling (SS).
- After a through discussion on pros and cons of each option patients made the final decision. **Both the synthetic mesh and autologous fascia were placed via the retropubic route at the level of mid- urethra following standard techniques.**
- A transobturator tape (TOT) was only performed when retropubic route was not available. The patients' clinical information, surgical technique, postoperative success and complication conditions were noted.



## Results and Interpretation

**Table 1. Demographic Information**

Median age	56 (42-73) years	
Median follow-up	8 (1-30) months	
Number of patients	41/52 (78.8%) AFS	11/52 (21.2%) SS
		- TOT 7/52 (13.5%)
		- TVT 4/52 (7.7%)

**Table 2. Comparison of the groups**

	AFS	SS
Complete dryness	78.7% (33/ 41)	81.8% (9 / 11)
		(p=1,000, chi square test)
Median hospital stay	2 days	1 day

## Complications were observed in the AFS group:

- 1/ 41 (2.4 %) mechanical sling failure
- 3/41 (7.3%) required temporary ISC (<6 weeks)
- 3/41 (7.3%) wound infection
- 1/ 41 (2.4 %) sling release
- 2/41 (4.8%) botox injection *de novo* urgency

## Conclusions

- In stress urinary incontinence, autologous or synthetic sling operations can be performed with satisfactory results in the short term.
- Compared to synthetic slings, patients who undergo autologous sling surgery have a longer hospital stay and a higher rate of complications.
- Nevertheless, the majority of patients preferred an autologous sling instead of a synthetic one possibly due to concerns about the long- term safety of the synthetic tapes.

## References

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- Larouche M, Zi Zheng MM, Yang EC, Konci R, Belzile E, Gill PK, Geoffrion R. Synthetic vs nonsynthetic slings for female stress and mixed urinary incontinence: a systematic review and meta-analysis. *Am J Obstet Gynecol*. 2024 Aug;231(2):166-186.e8. doi: 10.1016/j.ajog.2024.02.306. Epub 2024 Mar 1. PMID: 38432418.

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