

# 26108 - The Impact of different Stress Incontinence Surgeries on Female Sexual Function; A Comparison of Tension-free Vaginal Tape (TVT), Burch Colposuspension (BC) and Autologous Fascial Sling (AFS)

Bugeja. R | Rahman A | McCrossan K | Jha. S  
Department of Urogynaecology, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom



## Introduction

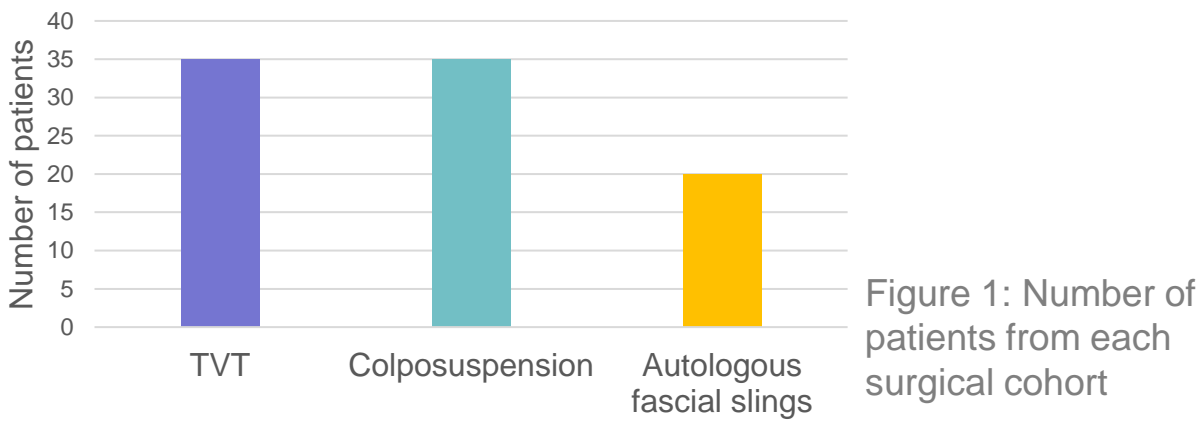
Sexual dysfunction is very common and affects around 50% of women.

Stress urinary incontinence is associated with an increased prevalence of sexual dysfunction. The most common surgical procedures used for management of stress incontinence include TVT, Burch colposuspension and Autologous Fascial Sling. These procedures are associated with a general improvement in coital incontinence however, common complications include persistent pain and dyspareunia. This can have an adverse effect on sexual function and therefore a detrimental impact on patients' quality of life.

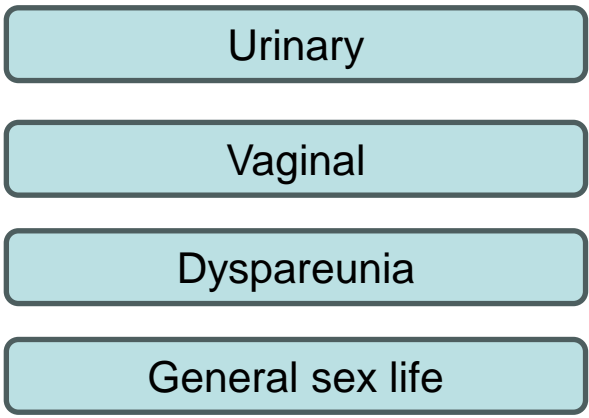
The aim of this study is to evaluate the preoperative and postoperative outcomes on sexual function following different SUI surgery.

## Material and Methods

- Retrospective study of **100 patients** that underwent stress urinary incontinence procedures at a UK tertiary centre between 2005 – 2024



- Pre-operative and post-operative Electronic Personal Assessment Questionnaires (ePAQ) data were used to assess change in symptoms
- 4 domains** included as part of the sexual dimension



- Domain scores were calculated, and paired T-test used to analyse change in score
- One-way analysis of variance (ANOVA) used to determine if the type of surgery had a statistically significant impact on symptoms

## Results

Mean age of women included in the study is 51 years.

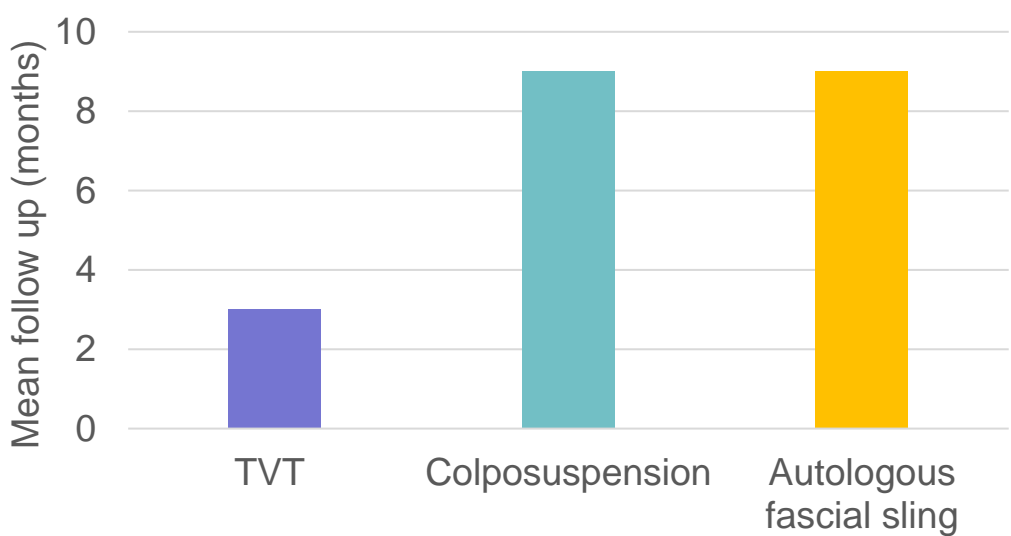


Figure 2: Mean follow up in each surgical cohort

All women had follow-up within 3-9 months post surgery. Mean follow up was 6.7 months

All women underwent urodynamics assessment prior to surgery. 3 women in the TVT group, 4 women in the BC group and 5 women in the AFS group did not have any details available on urodynamic studies in their medical records.

Urodynamic diagnosis	TVT	BC	AFS
Urodynamic stress incontinence (USI)	88%	92%	84%
Mixed incontinence (USI and Detrusor Overactivity)	12%	8%	8%
Normal urodynamics	0%	0%	8%

Table 1: Urodynamics diagnosis for patients within each surgical cohort

### Impact of SUI surgery on domain scores

	TVT			Colposuspension			AFS		
Sexual fun	Mean	Mean diff	p-value	Mean	Mean diff	p-value	Mean	Mean diff	p-value
Urinary domain									
Pre-op	30.8			6.6			34		
Post-op	3.4	27.4	<0.0001	3.3	3.3	0.005	6	28	0.001
Vaginal domain									
Pre-op	21.5			33.3			41.2		
Post-op	5.8	15.7	0.003	21.8	11.5	0.02	29.8	11.4	0.13
Dyspareunia domain									
Pre-op	15.7			18.4			32		
Post-op	6.2	9.5	0.005	14.6	3.8	0.1	19.5	12.5	0.02
General sex life domain									
Pre-op	19.2			5.2			43.5		
Post-op	15	4.2	0.16	3.3	1.9	<0.0001	25.5	18	0.006

Table 2: Pre-operative and post-operative domain scores and paired T-test results

- The level of sexual activity post-operatively did not change for the three cohorts of patients.
- All three procedures showed an improvement in the impact of urinary symptoms on sexual activity (p = <0.05)
- Dyspareunia following both TVT and slings was shown to have **significantly improved** in the post operative period however the results were not statistically significant within the colposuspension group (p = 0.1).
- Analysis of general sex domain showed improvement following autologous fascial sling (p=0.006) and colposuspension (p=<0.001).
- One-way ANOVA revealed a **statistically significant effect** on the choice of SUI procedure on symptoms of sexual satisfaction, partner sexual avoidance and impact on quality of life, F(2,51)=7.117, p<0.001.

### Limitations

- Retrospective nature of the study could lead to potential bias
- Small number of patients in each surgical group
- Mean length of follow up was 7 months therefore unable to evaluate for long term outcomes

## Conclusion

Our findings show that sexual function does improve after surgery for stress urinary incontinence. The choice of surgery, however, may have a different impact on sexual function and therefore, patient quality of life. It is therefore important that women are adequately counselled regarding this during the consent process. Further research using larger study numbers and a longer follow up period is needed to analyse this key area.

## References

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