

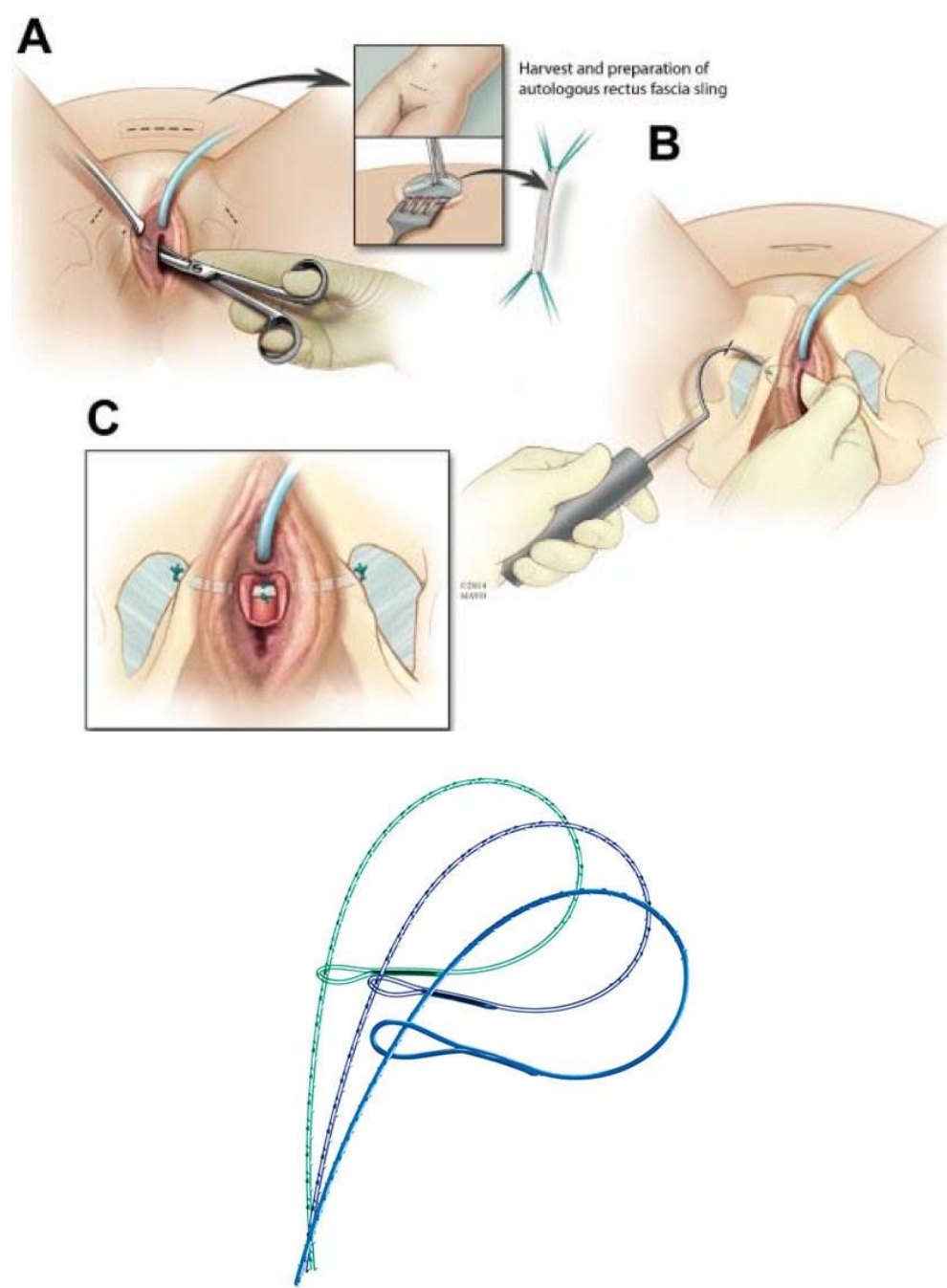


# Outcome evaluation of modified autologous fascial sling operation in female patients with stress urinary incontinence

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## Introduction

Stress urinary incontinence (SUI) have severe negative impact on the quality of life in women. Although synthetic mid-urethral sling surgery has been considered as the standard surgical treatment worldwide, artificial mesh related complications become an important issue in several countries. The old-fashioned usage of rectus fascial sling is an alternative to reduce adverse events. We evaluated the treatment outcome of modified autologous trans-obturator fascial (TOF) sling operation applied to the female patients with stress urinary incontinence.



## Methods and Materials

### Data source

This retrospective study was conducted in one medical centers in Northern Taiwan.

### Patient population

Patient who met the following criteria were enrolled in this study:

- Confirmed diagnosis of stress urinary incontinence
- Age  $\geq$  20 years
- Have received
  - Modified autologous trans-obturator (TOF) sling operation

### Follow-up

All questionnaires were collected at the timepoint before and after sling surgery

### Outcome

- The score of Urinary Distress Inventory, Short Form (UDI-6), Incontinence Impact Questionnaire, Short Form (IIQ7), Overactive Bladder Symptom Score (OABSS)
- Clinical Global Impressions scale- Improvement (CGI-I)
- Adverse events

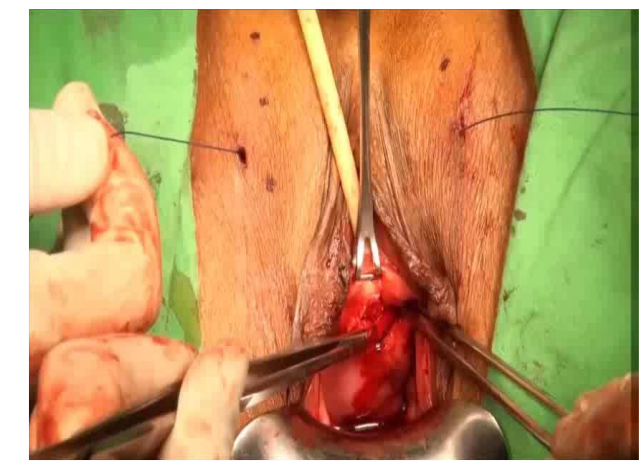
## Results

	Before operation	After operation	p-Value
UDI-6	11.55 $\pm$ 5.47	3.67 $\pm$ 3.72	< 0.001
IIQ7	10.21 $\pm$ 5.79	0.85 $\pm$ 3.67	< 0.001
OABSS	6.06 $\pm$ 4.03	3.06 $\pm$ 2.90	< 0.001
CGI-I		2.00 $\pm$ 0.80	

UDI-6	Before operation	After operation	p-Value
Frequency	2.03 $\pm$ 1.70	0.79 $\pm$ 1.11	< 0.001
Urine leakage when urgency	1.79 $\pm$ 1.69	0.52 $\pm$ 1.09	< 0.001
Urine leakage when physical activity	3.61 $\pm$ 0.75	0.55 $\pm$ 1.00	< 0.001
Small amounts of urine leakage	2.48 $\pm$ 1.58	0.48 $\pm$ 0.97	< 0.001
Difficult emptying	1.15 $\pm$ 1.46	1.06 $\pm$ 1.41	0.744
Lower abdominal pain	0.48 $\pm$ 1.14	0.27 $\pm$ 0.80	0.335

- Mean follow up time: **13.18 $\pm$ 9.41 months**
- 18 patients have no significantly decreasing maximal flow rate after receiving sling surgery (p=0.804)
- Regarding the complications of surgery, there are two patients (5.88%) reported voiding dysfunction, one patient (2.94%) inguinal pain and one patient (2.94%) mild erosion after operation.

## Discussion



- Self-locking TO fascia sling
- Tiny puncture wound
- Convenient to monitor tensioning
- Avoid retro-pubic approach-related complication
- Possibility to adjust tension after surgery

## Conclusions

- Modified TOF sling surgery is feasible and an alternative treatment for SUI patients.
- In addition to significant improvement in urinary continence, few post-operative complications were reported in this study.

## References

1. Linder, B. J., & Elliott, D. S. (2015). Autologous transobturator urethral sling placement for female stress urinary incontinence. *The Journal of urology*, 193(3), 991-996.