

FLINDERS MEDICAL CENTRE

## BACKGROUND

Stress urinary incontinence is the involuntary leakage of urine with physical exertion and activities that increase intra-abdominal pressure<sup>1</sup>. It affects 37% of the population, the highest prevalence is in younger women aged 35-44 years<sup>2</sup>. Conservative management remains first line however when it fails surgical treatment should be considered. Recent negative media attention around vaginal mesh procedures has highlighted the importance of exploring alternate nonmesh options for the management of stress urinary incontinence (SUI). The laparoscopic Burch colposuspension (LBC) is a minimally invasive surgical adaptation of the well-established open Burch colposuspension (OBC) with similar short-term outcomes compared to OBC and MUS<sup>1,3</sup>. Data on medium term outcomes (>18 months) of LBC is currently lacking.

#### AIMS

assess the medium-term outcomes of the То laparoscopic Burch Colposuspension (LBC).

#### MATERIALS AND METHODS

103 patients underwent LBC between April 1993 and December 1999 performed by two surgeons across the private and public system. Follow up data was collected via phone using a questionnaire with 15 questions regarding bladder function postoperatively. Primary outcome was the percentage of women without leakage on provocation postoperatively. Secondary outcomes were subjective improvement and surgical outcomes including complications, length of inpatient stay, duration of catherization and the effect of the number of sutures used.

# The medium-term outcomes of the laparoscopic Burch colposuspension for Stress Urinary Incontinence in Women Barnes, J. Martin, K. Ritossa, M. Seman, E. O'Shea, R

#### RESULTS

- 97 patients were analysed with a mean follow up of 32.2 months (range 1.5-94 months)
- 81% of patients stated no leakage post operatively
- 91% identified improved bladder postoperatively

	Total n = 97(%)
Bladder control post operatively	
Improved	88(91)
Same	6(6)
Worse	3(3)
Difficulty emptying bladder	
Always	8(8)
Sometimes	19(20)
Never	70(72)
Dribbling after emptying	
Always	7(7)
Sometimes	39(40)
Never	51(53)
Duration of follow up	
Months	1.5-94
Mean duration of follow up	
Months	32.2

**Table 1:** Outcomes in the post operative period

Noting relatively small numbers early in the surgeons learning curve:

- Success decrease slightly from 91% at 12 months to 78% at 24 months
- Success then remained stable out to 84 months
- Complications included a cystotomy rate of 6.7% and an intraoperative haemorrhage rate of 3.8%
- 6% of patients required a laparotomy to complete the procedure
- Overall satisfaction rate sat at 80%

control

	Bladder
100%	
80%	
60%	
40%	
20%	19
0%	
	уе

**Figure 1:** Bladder leakage with manoeuvres (sneeze, cough, laugh, exercise) in the post operative period

# **IMPLICATIONS AND CONCLUSION**

Laparoscopic Burch colposuspension provides similar short-term outcomes as the OBC and MUS however is a minimally invasive, non-mesh procedure. This study demonstrates high medium-term efficacy and satisfaction of LBC. The complication rate is similar to early studies of LBC, and may be explained by the fact that when the cases were performed LBC was still a relatively new procedure. Further evaluation of longterm outcomes, and current complication rates are warranted. LBC is a suitable alternative to offer to patients with SUI who wish to avoid mesh products.

#### REFERENCES

- Database Syst doi:10.1002/14651858.CD002239.pub4
- J Laparoendosc Surg 1991; 1: 169-73.



## leakage in the post perative period



1. Freites J, Stewart F, Omar MI, Mashayekhi A, Agur WI. Laparoscopic colposuspension for urinary incontinence in women. Cochrane 2019;2019(12). Rev.

2. Conrad DH, Pacquee S, Saar TD, et al. Long-term patient-reported outcomes after laparoscopic Burch colposuspension. Aust New Zeal J Obstet Gynaecol. 2019;59(6):850-855. doi:10.1111/ajo.13048

3. Vancaillie TG, Schuessler W. Laparoscopic bladder neck suspension.