

# The Impact of Hysterectomy on the Rate of Complications After Surgery for Pelvic Organ Prolapse: Experience of a Single Surgeon

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## Background

19% of Australian women will require pelvic organ prolapse (POP) surgery within their lifetime.<sup>1</sup> Hysterectomy at the time of POP surgery increases the complexity of the surgical procedure but reduces the risk of recurrent prolapse requiring surgery.<sup>2</sup> Few studies have investigated the difference in complication rates by the same surgeon.

## Aims

- To report the rate of complications after POP surgery with and without hysterectomy by a single experienced surgeon

## Method

- We performed a retrospective cohort study on all patient who underwent prolapse surgery performed by a single experienced surgeon from 2002-2019
- The age, parity, pre-surgical POP-Q, surgical procedure performed, post surgical POP-Q and complications for each patient were identified
- The rate of complications were calculated for each group, presented with descriptive statistics and analysed using PRISM8 statistical software

Characteristic	Hysterectomy (n = 125)	No Hysterectomy (n = 76)	p value
Age (ave, SD)	59.5, 10.7	61.5, 10.9	.20
Parity (median, min-max)	2, 1-7	2, 0-7	.96
Previous Caesarean(n)	12	2	.10

Table 1: Patient Characteristics

## Results

- 305 patients underwent POP repair
- 104 excluded for prior hysterectomy
- 125 underwent hysterectomy and 76 did not
- Patient characteristics are presented in *Table 1*
- There were more anterior prolapse (71.2% vs 52.6%,  $p = 0.02$ ) and more apical prolapse (76.8% vs 10.5%,  $p < 0.0001$ ) in the hysterectomy group
- There were less posterior repairs (13.6 vs 31.6%,  $p < 0.01$ ), less mesh repairs (0.8% vs 10.5%,  $p < 0.01$ ) and more uterosacral ligament suspensions (81.6 vs 9.2%,  $p < 0.01$ ) in the hysterectomy group

- The distribution and total number of complications are presented in *Table 2*
- There was no statistical difference in complication rates (**17.6% vs 11.8%, p-value 0.27**)

## Discussion

Conveying the risk of complications is an integral part of counseling patients regarding POP surgery. This study is limited by its lack of randomization, lack of BMI analysis and small sample size.

## Conclusion

The complication rate after prolapse surgery with hysterectomy was not significantly increased compared to without hysterectomy when performed by a single experienced surgeon.

## References

1. Smith FJ, Holman CD, Moorin RE, Tsokos N. Lifetime risk of undergoing surgery for pelvic organ prolapse. *Obstet Gynecol.* 2010;116(5):1096-1100.
2. Mairesse S, Chazard E, Giraudet G, Cosson M, Bartolo S. Complications and reoperation after pelvic organ prolapse, impact of hysterectomy, surgical approach and surgeon experience. *Int Urogynecol J.* 2020;31(9):1755-1761.

Complication	Hysterectomy Group	No Hysterectomy Group	p value
Adhesions	3	0	.29
Bladder Injury	1	0	.99
Constipation	1	1	.99
Dyspareunia	2	0	.53
Exposed Suture	1	0	.99
Fistula	0	1	.38
Haematoma	0	1	.38
Scar Tissue	0	1	.38
Stress Urinary Incontinence	1	0	.99
Urge Incontinence	2	2	.63
Urinary Retention	5	1	.41
Uterine Perforation	0	1	.38
UTI	5	1	.41
Vaginal Ulceration	1	0	.99
<b>Total (n, % rate)</b>	<b>22, 17.6%</b>	<b>9, 11.8%</b>	<b>.27</b>

Table 2: Complication Rates

