

# The Impact of Laparoscopic Surgery for Endometriosis on Patients Symptoms

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## Background

Endometriosis is a chronic benign gynecological disease that unfortunately impairs the quality of life of affected women. Laparoscopy is the most common surgical procedure for diagnosing and treating endometriosis as that relieves the associated painful symptoms in most cases. However, it does not make it clear how long the therapeutic benefits would last. The aim of this study was to evaluate pain relief after laparoscopic removal of endometriosis over a 2-year period of postoperative follow-up.

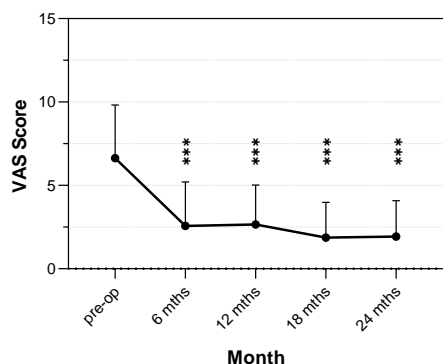
## Methods

A population-based registry study included one hundred and twenty-two symptomatic women with endometriosis who underwent laparoscopic surgery for endometriosis between 2019–2021. Prior to surgery, a visual analog scale was used to assess pain intensity, as well as after 6, 12, 18, and 24 months after surgery.

## Results

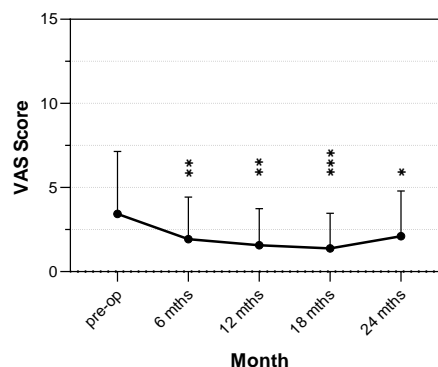
The mean visual analog scale score for dysmenorrhea decreased from  $6.6 \pm 3.1$  at baseline to  $2.5 \pm 2.6$  at 6 month ( $p < 0.001$ ),  $2.6 \pm 2.3$  ( $p < 0.001$ ) at 12 month,  $1.8 \pm 2.1$  ( $p < 0.001$ ) at 18 month, and  $1.9 \pm 2.1$  ( $p < 0.001$ ) at 24-month post operation.

**Figure 1. Dysmenorrhea visual analog scale (VAS) scores significantly improved after surgery.**



Before surgery, mean visual analog scale score for dyspareunia was  $3.4 \pm 3.7$ , but decreased to  $1.9 \pm 2.4$  after 6-month ( $p < 0.01$ ),  $1.5 \pm 2.1$  after 12-month ( $p < 0.01$ ),  $1.3 \pm 2.02$  after 18-month ( $p < 0.001$ ), and  $2.1 \pm 2.6$  after 24-month ( $p < 0.005$ ) post surgery. The mean visual analog scale score for noncyclic pelvic pain showed reductions after 6 months ( $2.2 \pm 3.7$  to  $1.5 \pm 2.3$ ), although there was a recurrence.

**Figure 2. Dyspareunia visual analog scale (VAS) scores significantly improved after surgery.**



**Table 1. Summary of women's symptoms before and after laparoscopic surgery for endometriosis.**

	pre-op	6 mths	12 mths	18 mths	24 mths
Quantitative evolution of symptoms (VAS) (Mean ± SD)					
Dysmenorrhea	6.6±3.1 (of 122)	2.5±2.6*** (of 58)	2.6±2.3*** (of 48)	1.8±2.1*** (of 46)	1.9±2.1*** (of 47)
Dyspareunia	3.4±3.7 (of 122)	1.9±2.4** (of 58)	1.5±2.1** (of 46)	1.3±2.02** (of 45)	2.1±2.6* (of 46)
Non-cyclic pain	2.2±3.7 (of 122)	1.5±2.3 (of 58)	2.6±2.8 (of 48)	1.9±2.9 (of 45)	2.2±2.8 (of 45)

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

## Conclusion

In many women with preoperative symptoms, laparoscopic excision of endometriosis significantly improves dysmenorrhea and dyspareunia for up to 2 years after surgery. Therefore, women with endometriosis who have severe pain complaints may benefit from conservative laparoscopic surgery.

## References

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