

**Setting:** Royal Infirmary of Edinburgh, an EXPPECT Endometriosis Centre since 2014.

### Objectives

To audit the effectiveness of rectovaginal endometriosis excision by analysing the change in endometriosis symptoms scores postoperatively.

To audit the incidence of perioperative complications incurred.

### Methodology

Between 2014 and 2019, 147 patients had surgical treatment for rectovaginal endometriosis with 96% completed laparoscopically. Data on their pre-operative, intraoperative and postoperative symptoms was analyzed and compared with findings from the BSGE Cohort Study.

Frequencies were calculated and comparative analysis of symptoms change done using Wilcoxon signed ranks test.

### Outcomes

Symptoms of Premenstrual pain, Menstrual pain, non cyclical pain, deep dyspareunia, cyclical dyschezia, non cyclical dyschezia, low back pain were reduced significantly at 6 months and sustained at 24 months

	Baseline	6 Months	12 Months	24 Months	Short term Change (baseline Vs 6 months) p-value	Long Term Change (baseline versus 24 months) p-value
Premenstrual Pain <sup>+</sup>	6	0	0	0	0.000	0.000
Menstrual Pain <sup>+</sup>	9	0	0	0	0.000	0.000
Non-cyclical Pain <sup>+</sup>	7	4	5	4	0.000	0.002
Deep Dyspareunia <sup>+</sup>	2	0	0	0	0.000	0.005
Cyclical Dyschezia <sup>+</sup>	6	0	0	0	0.000	0.000
Non Cyclical Dyschezia <sup>+</sup>	5	0	0	0	0.003	0.058
Low back pain <sup>+</sup>	7	3	3	4	0.000	0.019
Frequent of Bowel Movement <sup>+</sup>	3	3	2	2	0.943	0.148
Analgesia use	122	90	59	29	0.002	0.07
EQVAS Total*	40	75	68	70	0.000	0.005

<sup>+</sup>Table Pain scores, Analgesia use and Quality of Life scores at preoperative baseline and Follow up

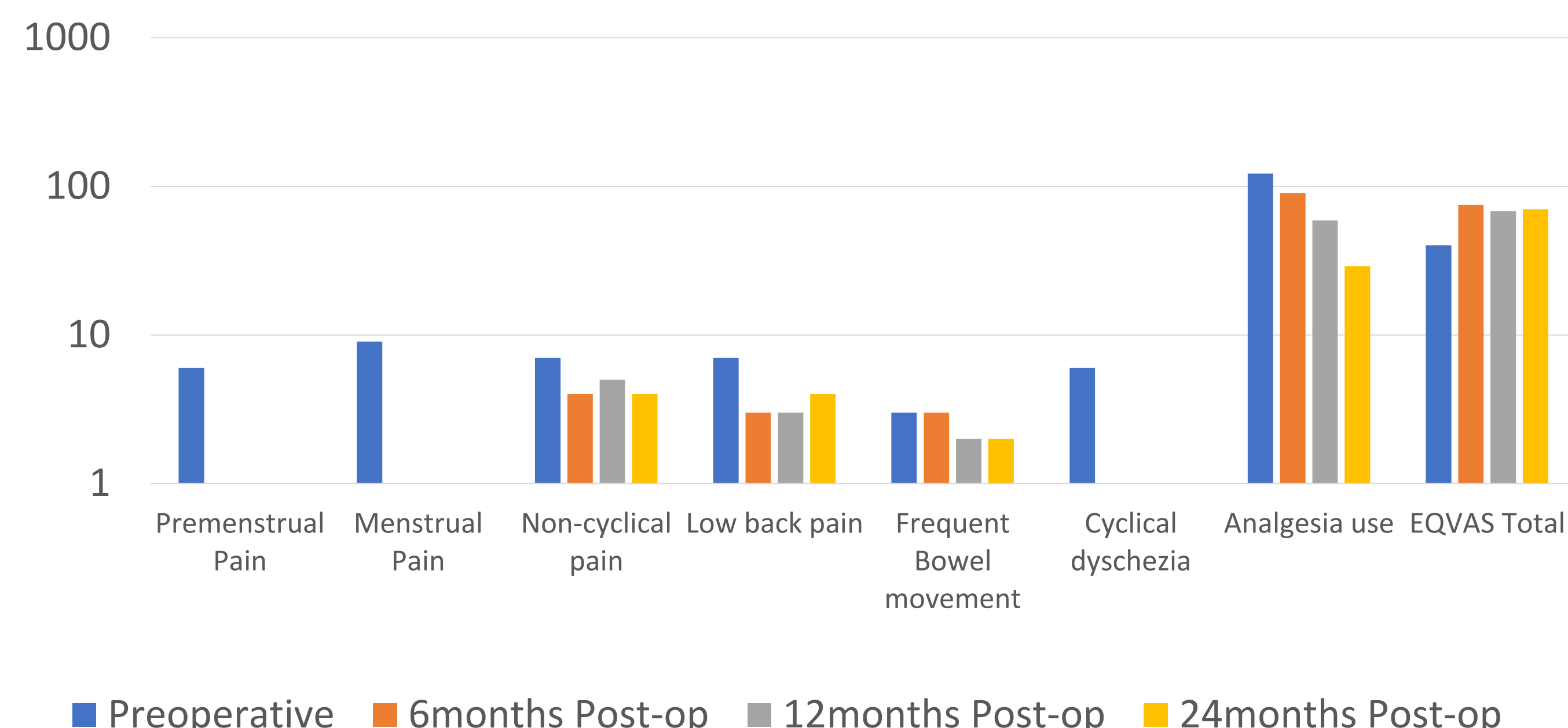
\*Median values on a 10-point scale

\*Median values (100-point scale). Level of significance p = 0.05

The overall quality of life score had sustained improvement as was reduction in the use of analgesia.

The overall incidence of complication was **4.8%** from our centre which is less than that observed in the BSGE Audit (6.8%).

### Change in Symptoms Scores and Analgesia use



### Discussion

Pelvic deep infiltrative endometriosis affects 5-10% of women of reproductive age, it is difficult to treat and can be associated with severe complications.<sup>1</sup> Laparoscopic surgical excision of rectovaginal endometriosis remains an effective safe option of treatment with improved quality of life and a low rate of major complications when performed in specialist centres.<sup>2,3</sup>

At 6, 12 and 24 months post-op there was significant reduction in symptoms (premenstrual pain and menstrual). There was reduction in analgesia use, as well as an improved quality of life scores, most notable in the early post-operative period. Opiates use fell by about 64 % at 6 months post op and only 14% of the women were using opiates at 2 years post op.

There was significant reduction in Dyschezia, with only a slight reduction in other bowel symptoms. The peri-operative complications in this 5-year period was 7 (4.8%), with no intraoperative gastrointestinal complication compared to 1.1% from the BSGE Cohort study.

The complications included 2 case conversions to laparotomy, 1 with EBL >1L; 1 cases each of ureteric injury, aspiration, pulmonary embolism and post op bowel obstruction.

### Conclusion

The surgical treatment of rectovaginal endometriosis is safe and effective when carried out in specialist centres and the outcome from EXPPECT Edinburgh centre is similar to the BSGE findings, with less perioperative complications.

There is no potential conflict of interest to disclose.

#### References

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2. The Association of Professors of Gynecology and Obstetrics (APGO). Diagnosis & Management of Endometriosis: Pathophysiology to Practice. APGO Educational Series on Women's Health Issues Available online at [https://www.ed.ac.uk/files/atoms/files/diagnosis\\_and\\_management\\_of\\_endometriosis\\_booklet.pdf](https://www.ed.ac.uk/files/atoms/files/diagnosis_and_management_of_endometriosis_booklet.pdf)
3. Byrne D, Curnow T, Smith P, et al. Laparoscopic excision of deep rectovaginal endometriosis in BSGE endometriosis centres: a multicentre prospective cohort study. BMJ Open 2018;8:e018924. doi:10.1136/bmjopen-2017-018924