Effectiveness of Total Pelvic Peritoneal Excision for the management of endometriosis

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Endometriosis

- Laparoscopic radical excision of endometriosis is a well established, safe and effective treatment

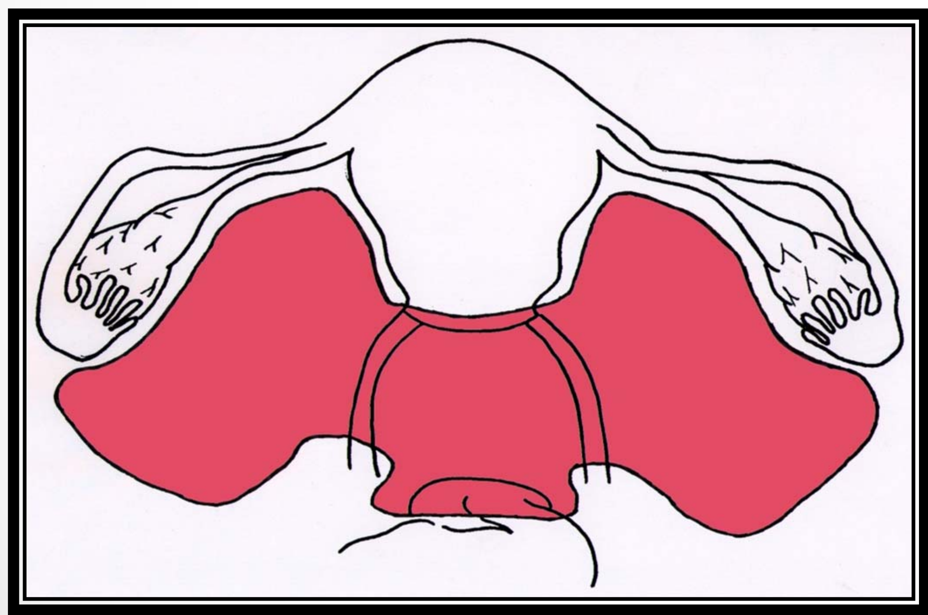
- However, recurrence rate = 21.5% at 2 years 40-50% at 5 years

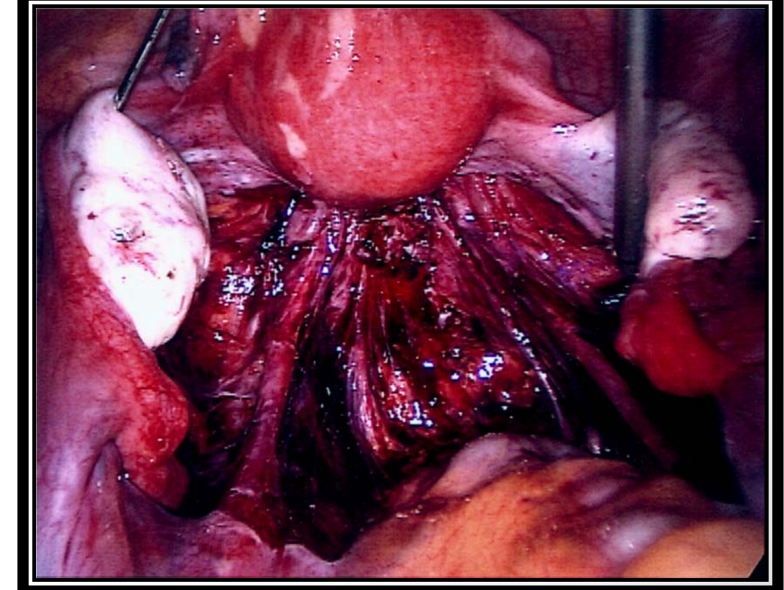
(Guo, Hum Reprod Update 2009)

Total Pelvic Peritoneal Excision

Suggested by Trehan, 2001

- To excise pelvic peritoneum covering both ovarian fossae, pelvic sidewalls, uterosacral ligament and Pouch of Douglas so as to remove all obvious and subtle endometriosis (Trehan 2001, 2003)





Aim of total Pelvic peritoneum excision

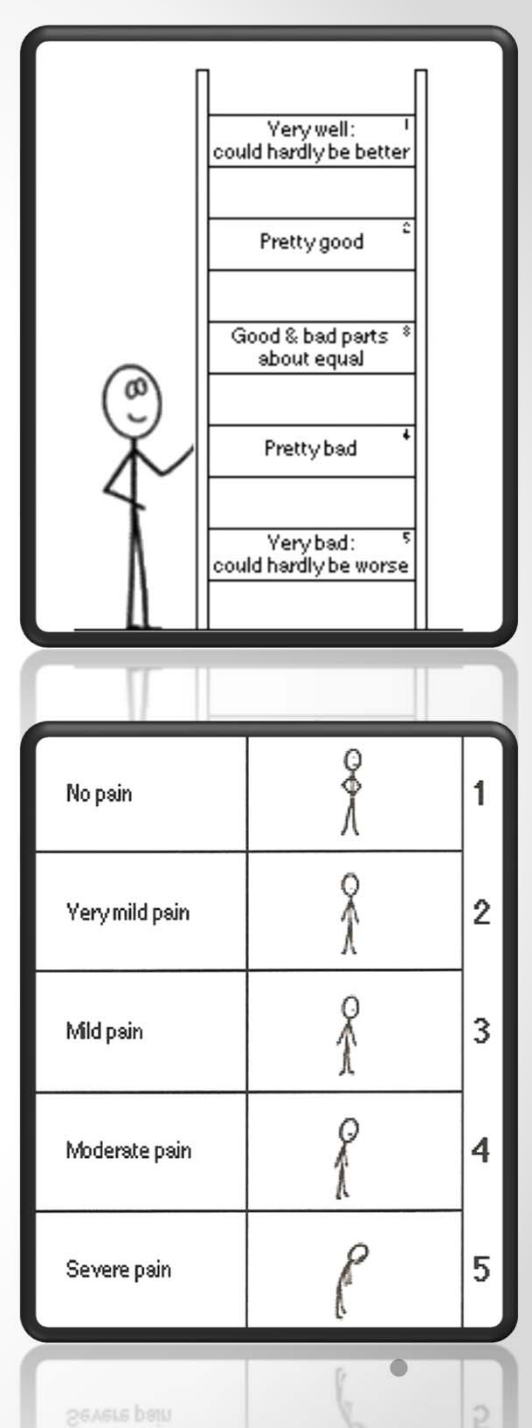
- Reduce disease recurrence
    - Endometriosis is unlikely to recur in the new peritoneum excised previously
- To improve pain and quality of life
- To avoid removing ovaries
    - It may be possible to preserve the ovaries if all peritoneal endometriosis is removed
- Improve safety
    - Starting dissection from relatively unscarred peritoneum may lead to fewer complications

Objective:

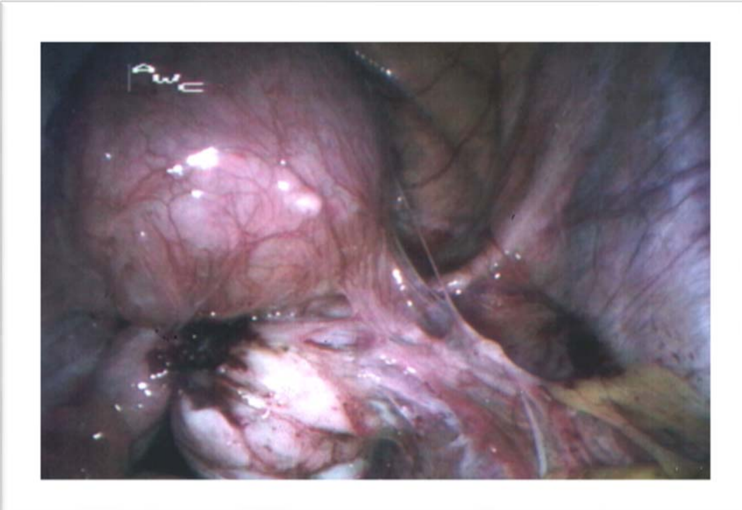
- To determine the long term effectiveness of Total Pelvic Peritoneal excision of endometriosis on pain and health related Quality Of Life (QOL)
- To determine safety, rate of further surgery, and hospital stay

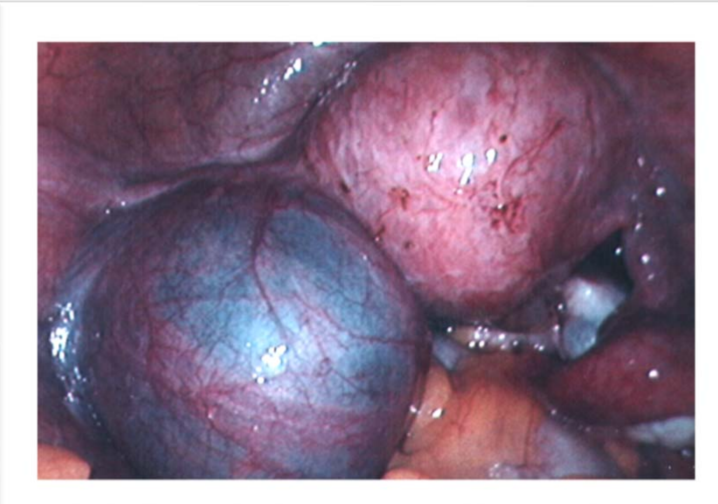
Methods:

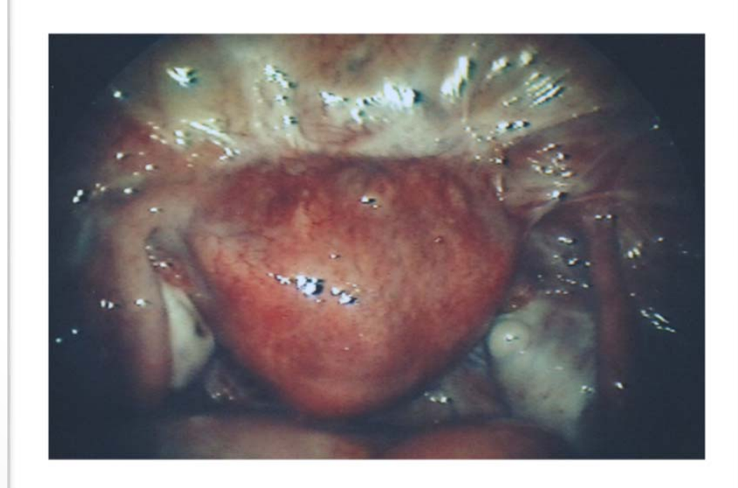
- 207 consecutive women with endometriosis (all stages) who had total pelvic peritoneal excision between 1999 and 2006.
    - Analysis undertaken in 2008
- **Study one**: A retrospective study of medical case notes
- **Study Two**: 2-8 year follow-up questionnaires measuring pain & QOL (EHP-5)



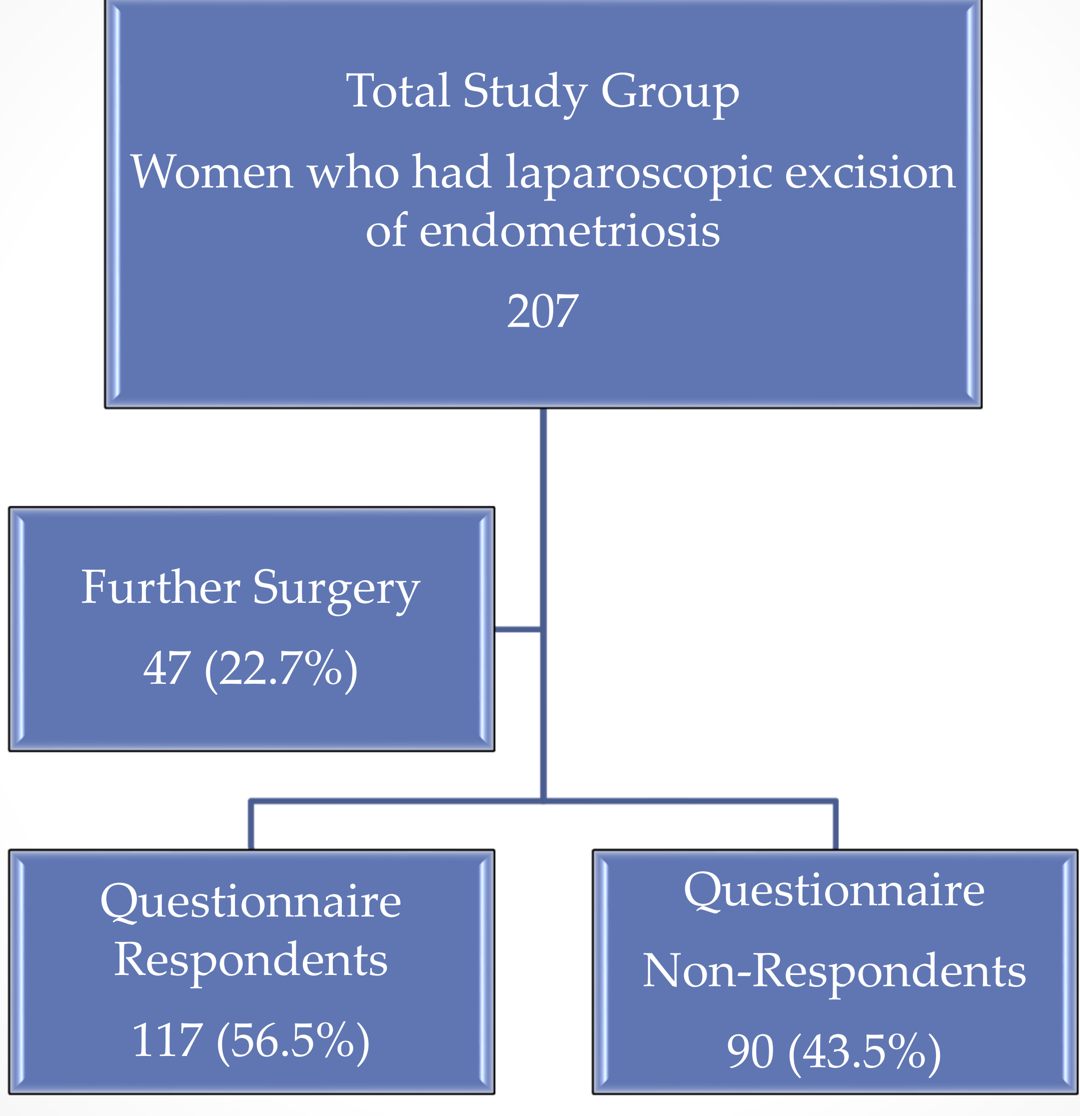
Complicated Stage IV Endometriosis cases included in this study

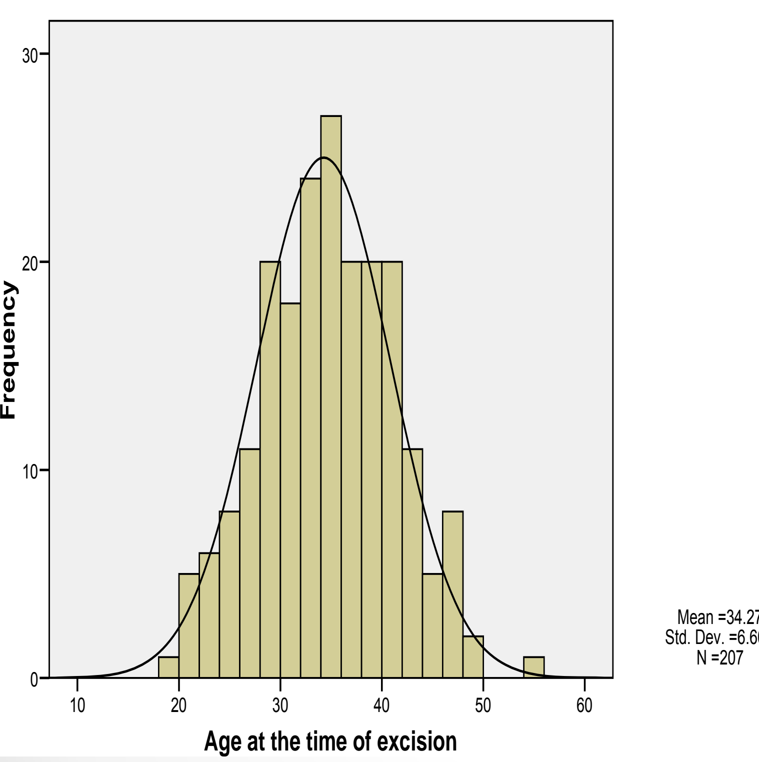




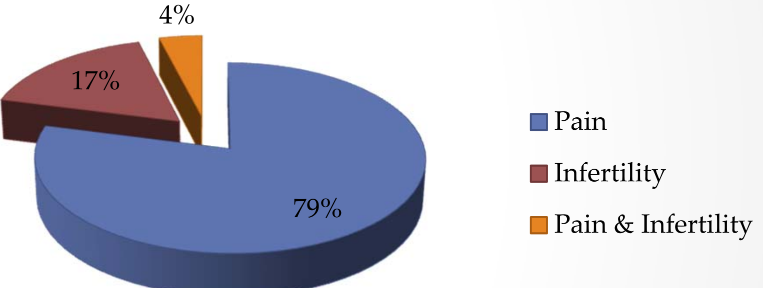


Main results





Indications



Concomitant procedures (alone or in combination) during 207 excisions:

Procedure	***n***	**%**
Laparoscopic Assisted vaginal Hysterectomy	46	22.2%
Oophorectomy Bilateral 7 (3.4%) Unilateral 4 (1.9%)	11	5.3%
Adhesiolysis	101	48.8%
Uterine surface coagulation	45	21.7%
Ovarian surface coagulation	75	36.2%
Ovarian cystectomy	43	20.8%
Temporary Ovarian suspension	13	6.3%
Ventrosuspension	39	18.8%
Creation of pararectal space	54	26.2%
Rectal Shaving	57	27.5%
Opening and stitching of vagina	9	4.3%

Re-operation: 47 (22.7%)

Procedure	n	%
Laparoscopic Assisted Vaginal Hysterectomy	21	44.6%
Ovarian Adhesiolysis	23	50%
Unilateral Oophorectomy	3	6.4%
Bilateral Oophorectomy (premenopausal-early part of study)	1	2%
Temporary Ovarian suspension	4	8.5%
Ovarian Cystectomy	3	6.5%
Excision of vaginal Vault	1	2%

Re-operation: 47 (22.7%)

Reoperation Cases Characteristics	n= 47
Histological Diagnosis of endometriosis	
Yes	17
No	30
Of the 17 women with endometriosis:	
Pelvic endometriosis (Uterovesical fold & outside margin)	13
Pelvic Endometriosis and Adenomyosis	1
Chocolate cyst	1
Chocolate cyst and Fallopian tube endometriosis	1
Fallopian tube endometriosis	1

Main Results of study 1:

Complications (207)

• Visceral injury (Bowel, bladder and ureter injury)	0/103 (0%)
• Vascular injury	0/103 (0%)
• conversion to laparotomy	0/103- (0%)

Main Results of study 1:

Length of Hospital stay (207)

Total no. of patients	Total no. of nights	Percentage of overnight stay
207	232	89.4%

185 (89.4%)of patients could be discharged home after overnight stay

21(10.6 %) of patients had 2 days stay

1 (0.5%) of patients stayed for 5days (Bowel shaving and repair - conservative management –not for complication)

Reasons for 2 days stay: pain, social reasons, patient choice and long distance to travel

Main Results of study 1:(207)

Oophorectomy

- **11/207(5.3%)** Oophorectomy
- **4/11(1.9%)** Unilateral Oophorectomy
- **7/11 (3.4%)** Bilateral oophorectomy
  (perimenopausal-early part of study)

Oophorectomy- not required for the management of endometriosis

Second look appearance of the pelvis after

Total Pelvic Peritoneal Excision

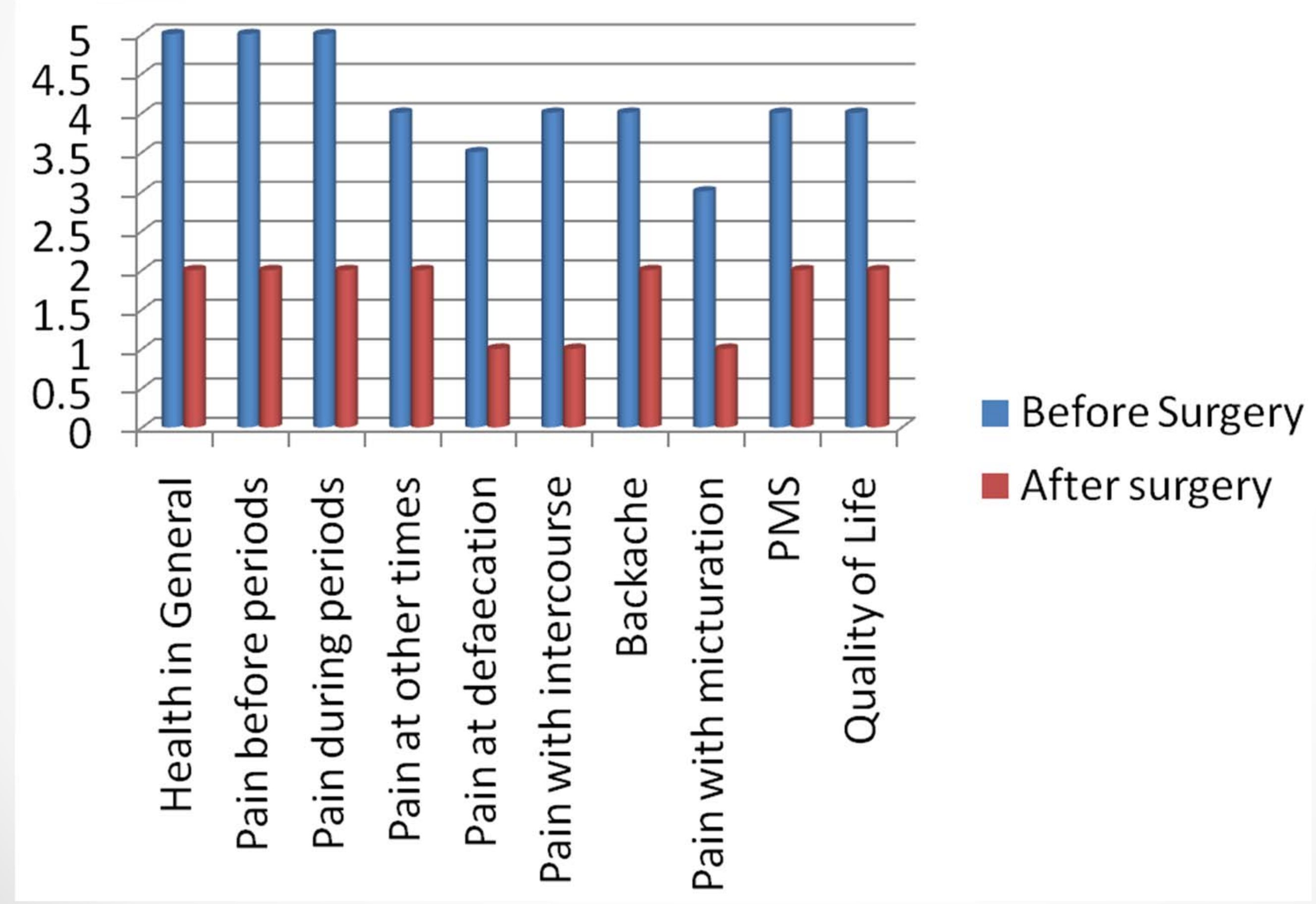
The new peritoneum which grows appears normal without adhesions, endometriosis

	After Excision	Second Look Laparoscopy
Patient 1		
Patient 2		

Questionnaire study: 117 (56.5%)

1-5 scale (scale 1 = never; scale 5 = always)

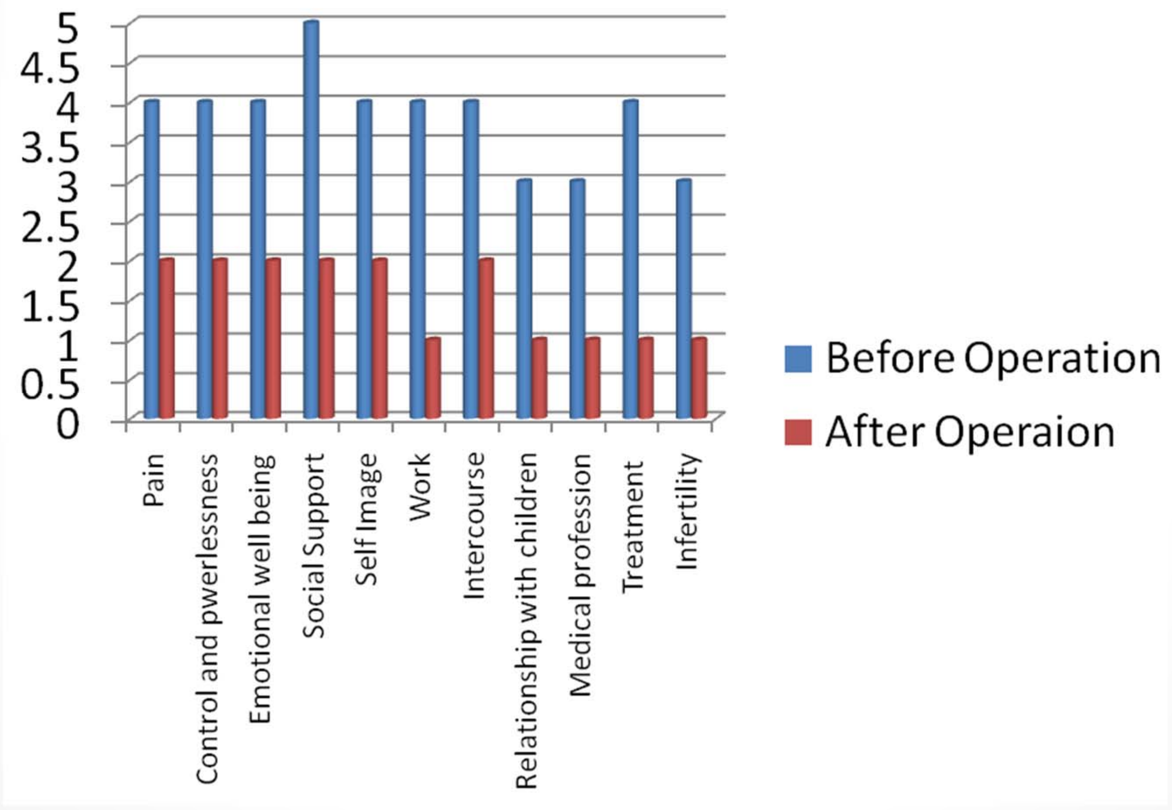
- Significant improvement in pain ($p<0.001$)



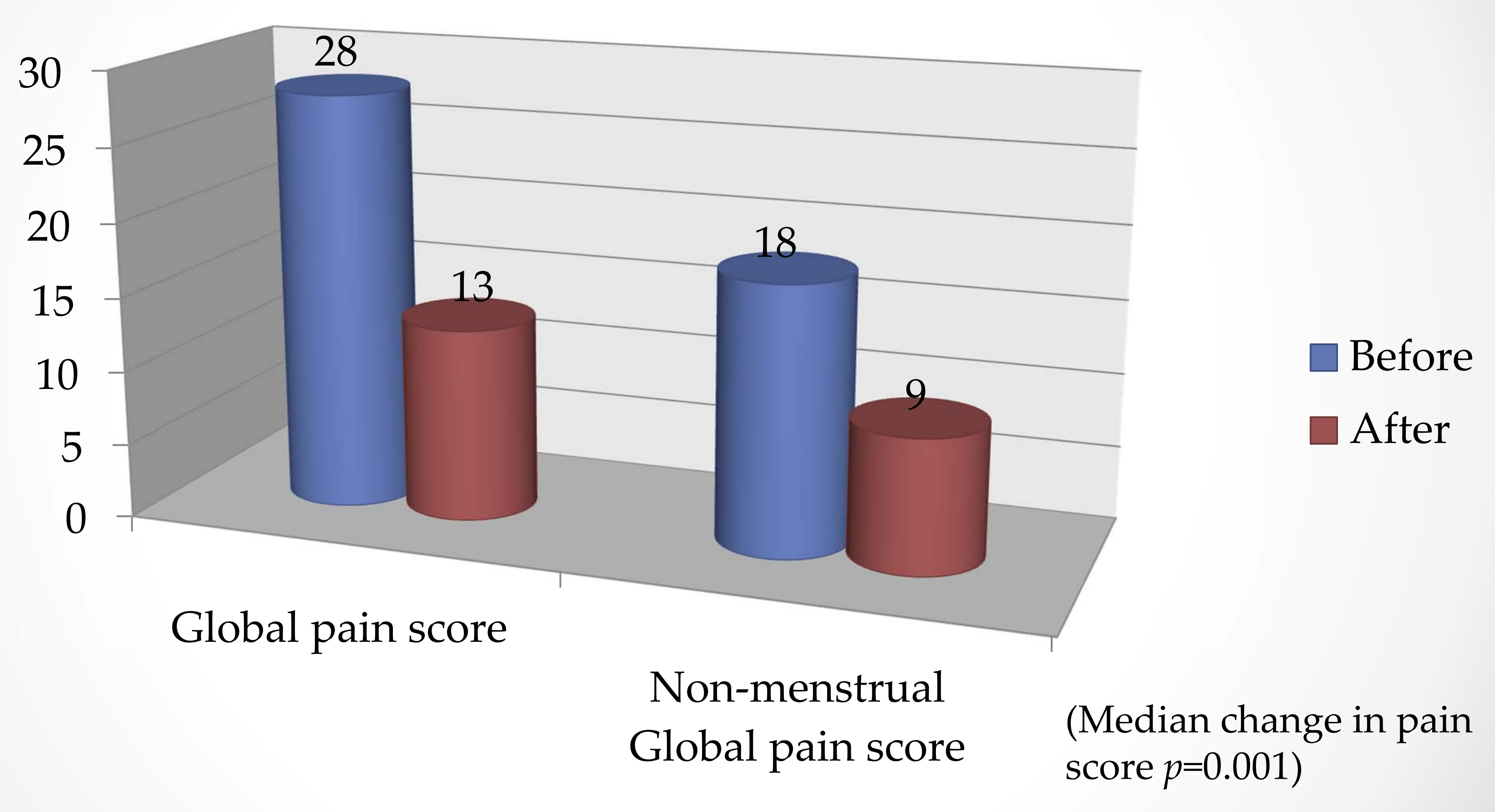
Questionnaire study: 117 (56.5%)

1-5 scale (scale 1 = never; scale 5 = always)

- Significant improvement in QOL ($p<0.001$)



Global and Non-menstrual global pain score pre and post op:



Patient’s view of the procedure

Question	Yes(no%)	No(no%)	Total
Has the operation improved your symptoms?	103(89.6%)	12(10.2%)	115
Would you recommend this to a friend who has the same condition?	111(98.2%)	2(1,8%)	113

Limitations:

- Retrospective
- Non-respondents 45.3%
- Only one surgeon's data

Future:

- Challenges for dealing with women who continue to have pain
- Consider measures to prevent ovarian adhesions
- Consider whether Oophorectomy is necessary

Conclusion:

Total Laparoscopic Pelvic Peritoneal Excision Justified :

- Effective at improving pain & QOL
  - Significant improvement ($p<0.001$)
- Safe
  - No major complication
- Re-operation
  - Mainly due to ovarian adhesions and hysterectomy
- Hospital Stay
  - 89.45% over night stay
- Recurrence
  - Low -mainly in the uterovesical fold and outside the excised area.
- Bilateral/unilateral oophorectomy
  - Not necessary for the management of endometriosis.

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Dewsbury and District hospital, UK

THANK YOU