



INTERVAL CHANGE IN POSTOPERATIVE PAIN REPORTS AND PSYCHOLOGICAL CHARACTERISTICS AMONG WOMEN WITH ENDOMETRIOSIS

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BACKGROUND

Endometriosis affects 2.5-3.3% of reproductive age women and is a common diagnosis among women with chronic pelvic pain. Treatment for endometriosis ranges from conservative medical therapies to radical surgery. Endometriosis is an indication for 25-35% of laparoscopies and 10-15% of hysterectomies each year. Although the majority of women with endometriosis respond to conservative medical therapy, those with persistent pain often undergo hysterectomy. However, there exists limited data on the contribution of disease specific (e.g. stage of endometriosis) versus non-specific (e.g. biopsychosocial) factors on treatment outcomes (e.g. clinical pain report). We sought to investigate these factors at baseline as well as short and long term follow-up intervals for surgical endometriosis patients.

OBJECTIVE

To evaluate the contribution of disease specific versus biopsychosocial factors on surgical treatment outcomes at 1-year and 3-6 years post-surgery for endometriosis.

METHODS

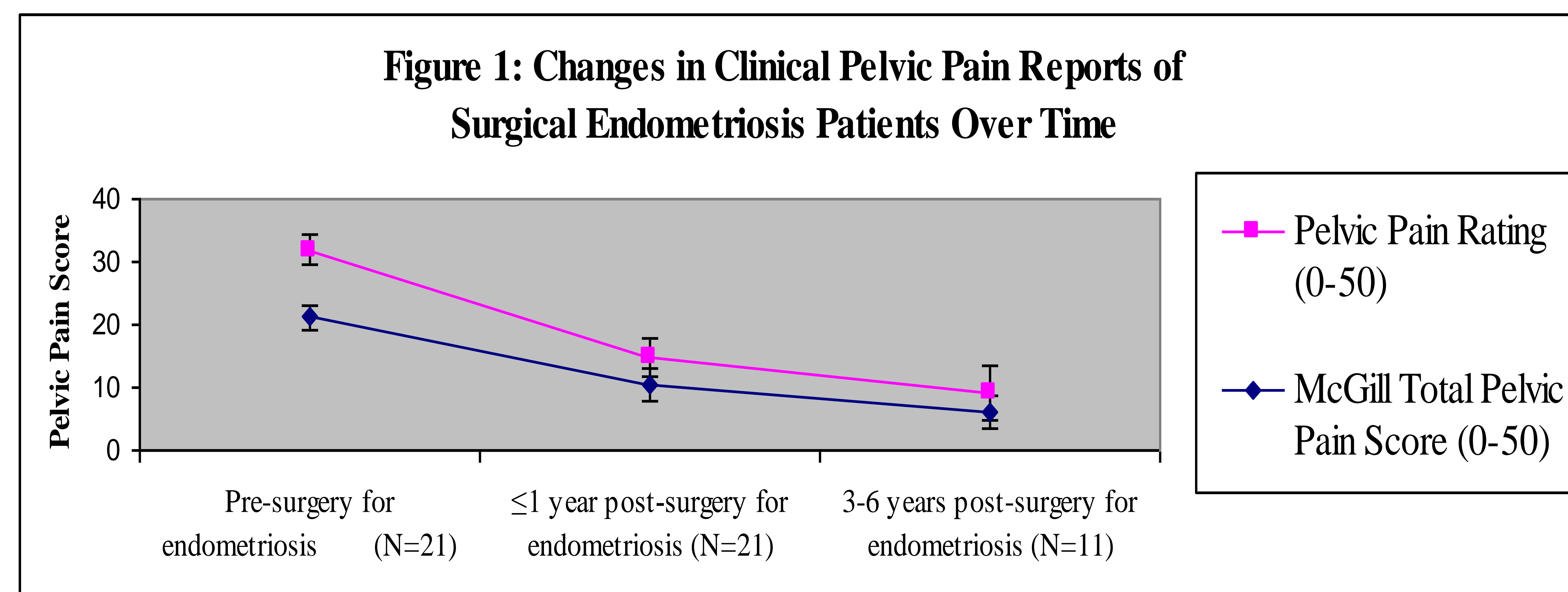
New pelvic pain patients seen at the UNC Pelvic Pain Clinic between 2003 and 2006 were approached for participation in our study. They were asked to complete a baseline and interval (3, 6, 9, 12 months) questionnaires assessing pain severity and psychological distress. Of the original cohort of 293 women, a total of 21 were **diagnosed with endometriosis and underwent surgical intervention** during the 1-year study period. Severity of endometriosis (American Fertility Society scoring) and surgical methods (hysterectomy vs. others) were abstracted from electronic medical records. Long-term follow-up questionnaires assessing the same variables were sent to these 21 women in 2008/2009 (3-6 years post-surgery). 52% (N=11) completed these additional questionnaires. Student's t test and partial correlations were analyzed using SAS software (SAS Institute Inc, Cary, NC).

RESULTS

- On average, women were 35 years old (SD=5.7), married (71%), Caucasian (76%), had 14 years (SD=2.3) of education
- 47.62% (N=10) were diagnosed with stage 2 endometriosis, 23.81% (N=5) with stage 3, 23.81% (N=5) with stage 1, and 4.76% (N=1) with stage 4 at the time of surgery
- 5 women underwent hysterectomy for treatment of their pain during the 1st year of follow-up
- Paired t-tests showed that patients improved dramatically in their pain ratings from baseline to one-year later (p=0.003)
- Significant predictors of pain improvement did not include the extent of surgery (hysterectomy vs. other procedure), stage of endometriosis, and duration of pelvic pain
- Significant changes in pain levels were associated with age, mental health and catastrophization: Regression analyses showed that patients who were younger (p=0.001), had poorer mental health (p<0.001), and were higher on catastrophizing their pelvic pain (p=0.01) had less pain improvement

Table 1: Baseline and Follow-Up Characteristics

	# Gynecological surgeries	Hysterectomy during follow-up	Catastrophization score (0-6)
Baseline	1.71 (SD=1.52)	23.81% (N=5)	2.65 (SD=1.51)
3-6 years post-surgery	3.27 (SD=2.61)	12.5% (N=2)	0.96 (SD=1.07)
	Duration of pelvic pain (years)	Previous abuse	PTSD score (0-4)
Baseline	5.45 (SD=3.07)	57.14% (N=12)	0.86 (SD=0.87)



At 3-6 years post-surgery :

- Women reported an average pain improvement of 55.9% (SD=9.7) since their last surgery for endometriosis
- 3 women underwent additional surgeries to treat their pelvic pain, including 2 hysterectomies
- Women who underwent additional surgeries reported very similar pain improvement (55.0±10.6%) as other women who did not (56.9±8.7%)

CONCLUSION

Thus, in this small group over short and long-term follow up intervals, psychological variables appear to be better predictors of pain after surgery than extent of disease and surgical intervention. Further research on the relationship between biopsychosocial factors and treatment outcomes for endometriosis chronic pelvic pain patients is warranted