



# CO-MORBIDITY OF IRRITABLE BOWEL SYNDROME AND CHRONIC PELVIC PAIN: A ONE-YEAR FOLLOW-UP STUDY



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## BACKGROUND

Significant co-morbidity between Irritable Bowel Syndrome (IBS) and chronic pelvic pain (CPP) has been reported (35-39%). IBS affects 10-20% of the general population, and is the most common condition diagnosed by gastroenterologists. Patients with IBS have abdominal pain and abnormal stool. CPP affects 12-39% of women and is defined as non-cyclical pain of at least 6-month duration. Previous research at UNC has reported a co-morbidity between IBS with CPP of 35% and has identified distinct characteristics between these two groups. It has been hypothesized that co-morbid IBS with CPP is associated with higher pain report, poorer quality of life and treatment response and should be evaluated thoroughly in the treatment of women with chronic pelvic pain.

## OBJECTIVE

To evaluate baseline pain and psychological characteristics, clinical pain improvement over time, and effectiveness of treatments among CPP patients with and without co-morbid IBS.

## 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, psychological distress, and IBS symptoms. Of the original cohort of 293 women, a total of 193 completed at least 2 of the 5 quarterly IBS questionnaires (Rome II) and were included in the analysis. Subjects diagnosed as having IBS at 2 or more time points were defined as having ‘persistent IBS’ (N=48). Medical and surgical interventions before and during follow-up were abstracted from electronic medical records. Clinical pain reports were compared between baseline and the average of those from 9 and 12 months. Student’s t test and partial correlations were analyzed using SAS software (SAS Institute Inc, Cary, NC).

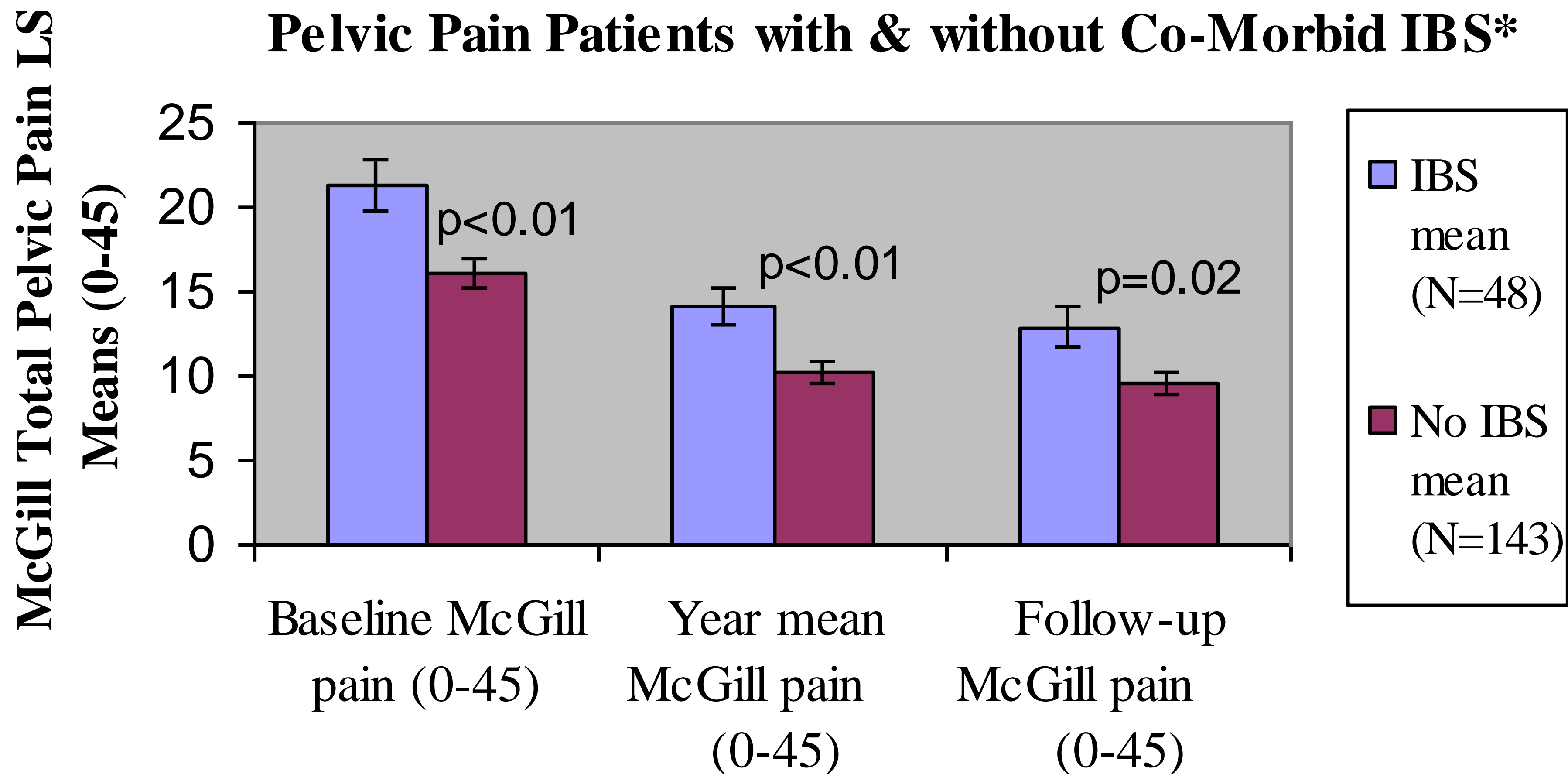
## RESULTS

- On average, women were 35.2 years old (SD=10.7), married (62.5%), Caucasian (80.8%), educated 15.1 years (SD=2.5)
- At baseline, 26.56% (N=51) were diagnosed with PTSD; and 24.87% (N=48) were diagnosed with (‘persistent’) IBS
- The most common surgical and medical treatments used during follow-up were the same between the 2 groups: enterolysis (IBS 10%, No IBS 6%), hysterectomy (IBS 6%, No IBS 9%), antidepressants (IBS 21%, No IBS 23%), narcotics (IBS 21%, No IBS 19%)

Table 1: Baseline & Follow-Up Characteristics

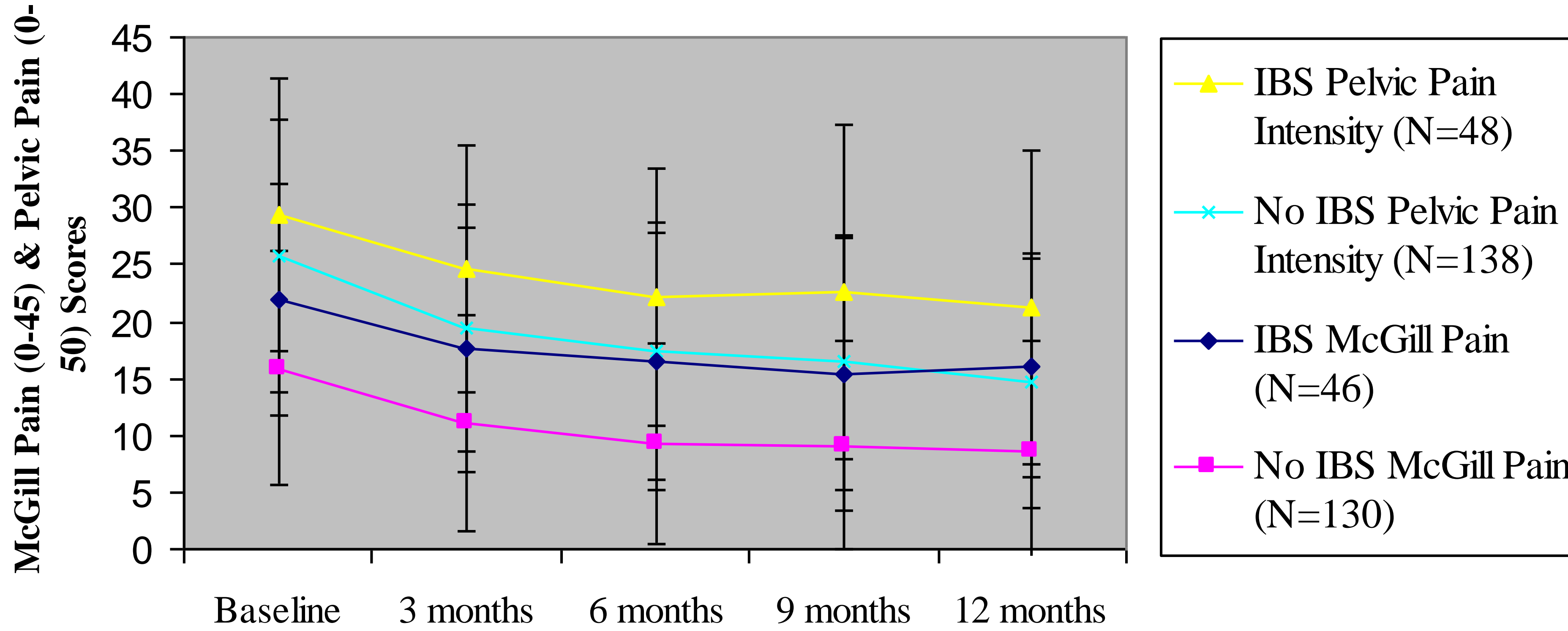
	IBS mean (SD) N=48	No IBS mean (SD) N=145
Years of pelvic pain; <u>P=0.05</u>	6.86 (SD=6.75)	4.77 (SD=4.84)
Average PTSD score (0-4); <u>P=0.02</u>	1.12 (SD=1.04)	0.74 (SD=0.71)
Average mental health (0-100); <u>P=0.03</u>	39.77 (SD=10.36)	43.23 (SD=9.62)
Previous surgeries for pelvic pain	1.24 (SD=1.69)	1.22 (SD=1.84)
Surgeries during follow-up	0.38 (SD=0.53)	0.30 (SD=0.50)
Previous trauma events	2.17 (SD=2.42)	1.54 (SD=1.73)
Doctor appointments in past 3 months	5.28 (SD=4.63)	4.71 (SD=4.36)
Pelvic pain doctor appts in past 3 months	3.93 (SD=3.68)	3.65 (SD=4.25)
1-Year mean catastrophization (0-6)	1.71 (SD=0.14)	1.42 (SD=0.08)
1-Year mean pelvic pain dysphoria (1-5)	2.38 (SD=0.10)	2.18 (SD=0.06)
Previous hysterectomy	20.83% (N=10)	24.83% (N=36)

Figure 1: Differences in Clinical Pain Reports over 1-Year of Pelvic Pain Patients with & without Co-Morbid IBS\*



\*Values reflect least squared means, controlling for baseline pelvic pain

Figure 2: Changes in Clinical Pain Reports Over a 1-Year Period of Pelvic Pain Patients with & without Co-Morbid IBS



## CONCLUSION

Our data show that even though CPP patients with and without IBS are treated very similarly (i.e., medically and surgically) and exhibit parallel pain improvement over a 1-year period, those with co-morbid IBS consistently have higher pain reports. Therefore, we propose that IBS compounds pelvic pain symptoms, and its evaluation and treatment are vital components of pelvic pain treatment in this population. Further research on therapeutic strategies targeted at the co-morbidity of IBS among women with CPP is warranted.