Postpartum Sexual Function in Women with Delivery-Related Injuries to the Pelvic Floor

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BACKGROUND

Intrapartum pelvic floor muscle trauma (PFT) may include trauma to the perineal levator ani and anal sphincter musculature. Women with PFT commonly experience pelvic organ prolapse, urinary incontinence, fecal incontinence, or overactive bladder. PFT may also interfere with sexual functioning during the postpartum period.

PURPOSE & HYPOTHESIS

Research Purpose: To determine if there is a difference in reported sexual function between women with and those without intrapartum pelvic floor muscle trauma.
H1: Women who experience intrapartum PFT will report poorer sexual function than women without intrapartum PFT at both 2 and 6 months postpartum [between group/within time analysis; PFT v. no PFT].
H2: Improvements in sexual function over time will be observed in women with and without intrapartum PFT [between time/within group analysis; T1 v. T2].

INSTRUMENTS

I. Carol Postpartum Sexual Function and Dyspareunia Assessment Scale (CS)
Lower Scores = Better Sexual Function

Raw
11 Items Scored By Participant
- 7 Items: Frequency of Experiences
  - Never [0] - Always [4]
- 4 Items: Pain Rating
  - No pain [0] - Worst pain imaginable [10]

Domain
Items Summed to Achieve Domain Scores
- Emotional (8 pts max)
- Intercourse Pain (14 pts)
- Lubrication (4 pts)
- Penetration Pain/Discomfort (14 pts)
- Sexual Activity Pain (14 pts)
- Vulval Pain/Discomfort (14 pts)

Severity Classification
Domain Score Determines Severity Classification
- Without Discomfort [0]
- Moderate Discomfort [1]
- Severe Discomfort [2]

II. Female Sexual Function Index (FSFI), IMPACT Version
Higher Scores = Better Sexual Function

Raw
9 Items Scored by Participant
- 5-point [1-5] or 6-point [0-5] Likert Scale
  - Very low or none at all [1] - Very high [5]
  - No sexual activity [0] - Very high confidence [6]

Mean
Composite Mean Calculation
- Likert mean of all FSFI items used to represent composite score

METHODS

Participant Inclusion: ≥18 years old; <2 months postpartum; vaginal delivery; access to internet; ability to speak and read English fluently; sufficient time to complete surveys
Recruitment: Partner hospital systems in Midwest USA offered invitation to participate at hospital discharge, during first postpartum visit, and at newborn's first well-baby check.
Procedures: Interested women contacted investigators, completed inclusion screen, and were assigned case managers who communicated with participants at T1 (2 months postpartum) and T2 (6 months postpartum) timepoints to prompt survey completion. Participants received reasonable participation incentives.

RESULTS

Participants: N=57, PFT=27, no PFT=30
- Chi-squared tests indicated no between-group differences in incidences of placental issues, postpartum hemorrhage, prolapse, vaginal wall laceration, and procedures/adjunct treatments as well as lengths of labor and hospital stay.
- Over time, resumption of sexual activity increased from 70% to 89% (PFT) and 73% to 93% (no PFT).

H1: Between-Group Comparison
Mann Whitney Test: Figure Series 1
- Women with PFT experienced greater discomfort with penetration at 6 months postpartum than women without PFT (*P*=0.006).

Chi-Squared Test: Figure Series 2
- At 6 months postpartum, the PFT group demonstrated significant change in severity classification distributions, reporting more severe discomfort with penetration at T2 (*P*=0.022)

H2: Comparison Over Time
Wilcoxon Signed Rank Test: Figure Series 1
- Women who experienced PFT demonstrated improvements in overall sexual function (*P*=0.013) and lubrication during sexual activity (*P*=0.015).
- Those without PFT demonstrated improvements in overall sexual function (*P*=0.001), lubrication during sexual activity (*P*=0.039), vulval pain/discomfort (*P*=0.046), and sexual activity pain/discomfort (*P*=0.046).

DISCUSSION

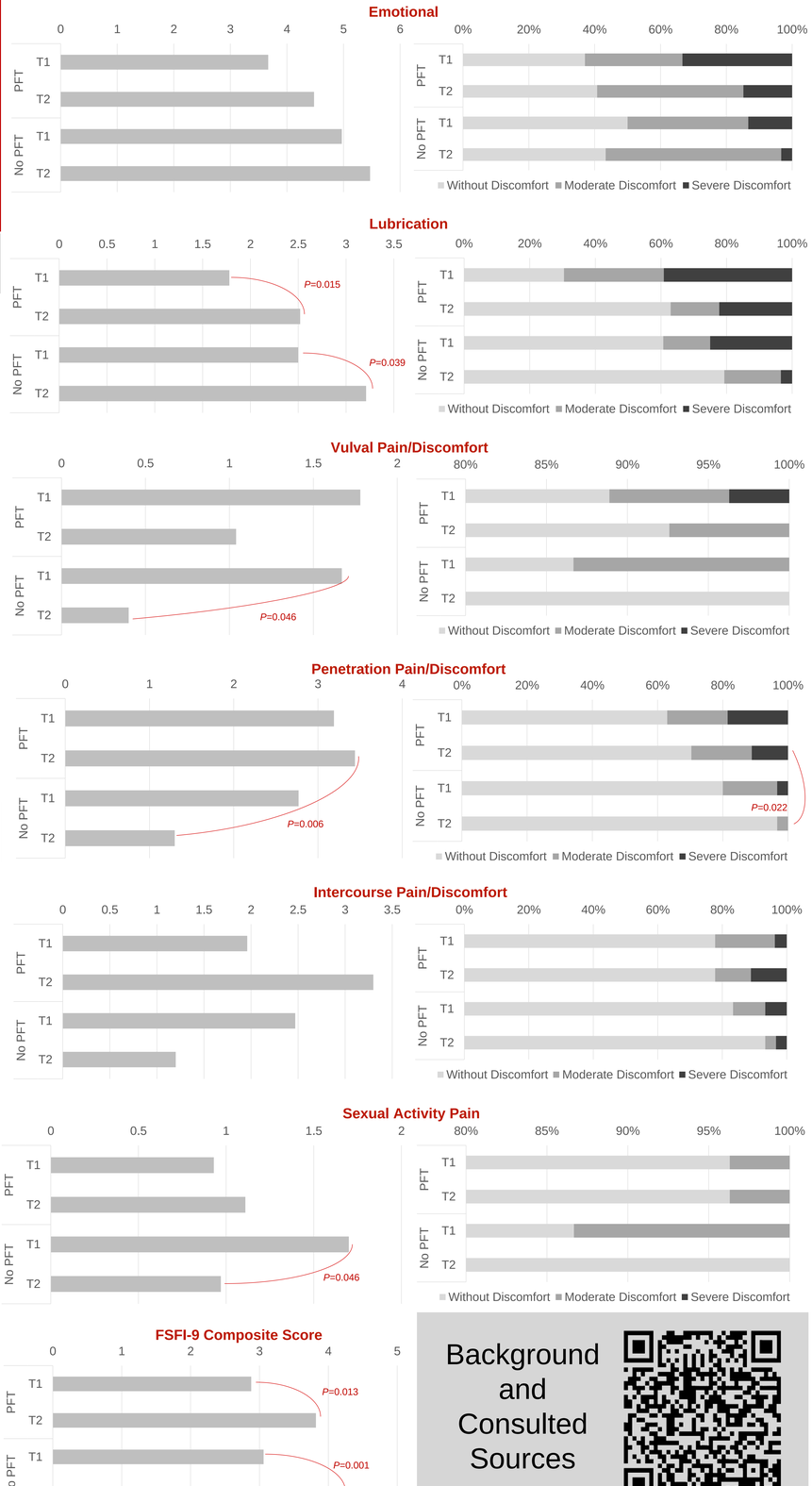
Conclusions:
Overall, sexual function improved over time for women with and without PFT. While all women in our study improved in overall sexual function and lubrication, women without PFT reported additional improvements, including vulval pain/discomfort and sexual activity pain/discomfort. Women without PFT showed greater sexual activity resumption overall; however, most women appeared to report resumption of sexual activity at a higher rate over time. Furthermore, while most women improved in severity classification over time, women with PFT reported more severe pain/discomfort with penetration at 6 months postpartum. Therefore, while a trend toward recovery in sexual function is seen for most postpartum women, additional variables need to be studied to explore other factors that may impact recovery and preventative measures that may be beneficial for reduction of severity.

Clinical Implications:
- Healthcare professionals can educate pregnant and postpartum women on typical recovery trends and expectations regarding sexual function in the postpartum period.
- Women should be educated on pain/discomfort associated with penetration, especially those with a history of PFT.
- Evaluations at key timepoints and assessments during postpartum appointments may identify and help with referral of patients who would benefit from physical therapy interventions.
- Future studies may consider factors such as tissue healing, psychological impact, hormonal influences, and PT interventions for deeper insight.

Possible study limitations:
- Samples of convenience/generalizability (response base from Midwest USA)
- Retention limitations
- Demands on participants' time
- Sensitive information within the surveys
- Study definition of PFT (definition of PFT as grade 2 tears or greater may have limited PFT classification)

Figure Series 1: Carol Scale Domain and FSFI Composite Means

Figure Series 2: Severity Classification Distribution



Background and Consulted Sources