Postpartum Patients and Effect of Physical Therapy of Those with Pelvic Floor Dysfunction

Alexandra Orahovats[1], MS; Sydney Mattox[1], MS; Carson Keeter[2], MS; Rachael Loebach[3], PT, DPT; Alexandra Nabers[3], DPT; Emily Gibson[4], DO; James Genuario[5], MD; Kristin Putnam[6], DO

1. College of Osteopathic Medicine, Rocky Vista University COM, Parker, CO
2. Lead Biostatistician, Department of Orthopedics, University of Colorado Anschutz Medical Campus, Aurora, CO
3. Physical Therapist, UCHealth Physical Therapy and Rehabilitation Clinic – Inverness, Englewood, CO
4. Assistant Professor of Osteopathic Principles and Practices, Rocky Vista University COM, Parker, CO
6. Associate Professor, Department of Orthopedics Sports Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO; Orthopedic Surgeon, UCHealth Steadman Hawkins Clinic Denver, Englewood, CO
7. Vice Chair of Osteopathic Principles and Practices, Assistant Professor, Rocky Vista University COM, Parker, CO

BACKGROUND

Pelvic floor dysfunction (PFD) and associated pain are common in parous women. Many retrospective studies have found risks associated with PFD including, stress urinary incontinence, large fetal head circumference, large fetal weight at delivery, vacuum extraction, connective tissue deficiencies, vaginal delivery, etc. Many experience other symptoms such as pain on defecation, organ prolapse, rectal bleeding, and sexual dysfunction postpartum (PP), some of which may be treated with physical therapy (PT). Few studies prospectively evaluate PT PP patients, and few retrospective studies have patients with more than one PT visit after 6 weeks PP. There is little to no data reported on outcomes of PFD patients within the first 6 months of recovery PP. A recent meta-analysis agrees, suggesting that little research has been dedicated to analyzing the effects of exercise PP.

METHODS

After IRB approval, we worked with Health Data Compass to pull data of potential subjects. Data was pulled from Oct 2019 through May 2023 of women who had delivered in a hospital setting with 12 different providers. These providers practice at UCHealth's Highlands Ranch Hospital or Lone Tree Clinic. Over 1,000 patients were identified. This project aims to address multiple research questions, thus multiple data points were collected. For the purposes of this project, patients were filtered down to those who have then also been seen by UCHealth's Steadman Hawkins and Lone Tree Clinics by one of six pelvic floor physical therapists (PFPT). Subjects who have also completed the patient reported outcome measure - the pelvic floor distress inventory (PFDI-20) - within a year of delivery, were included. 89 subjects were isolated. All include at least one pelvic floor diagnosis and one delivery.

All patients delivered at UCHealth Highlands Ranch Hospital and were seen by a physical therapist at either the UCHealth Steadman Hawkins Clinic Denver or the UCHealth Lone Tree Clinic.

QR for poster & references

RESULTS

Figure 1: PFDI20 Sub Scores Boxplots By Diagnosis

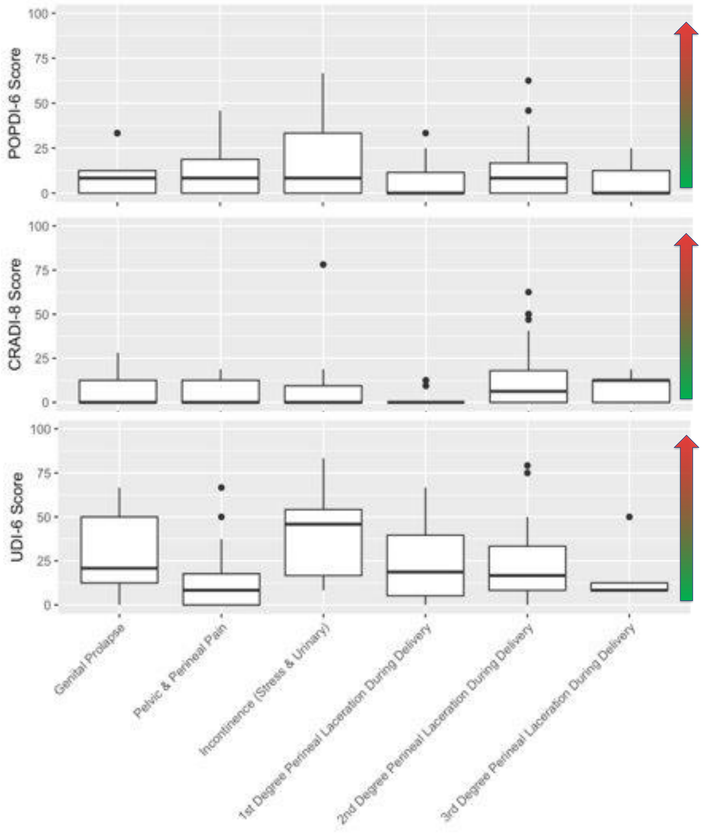


Table 1: Self-reported Ethnicity

	Hispanic, Latino/a, or Spanish Origin	Non-Hispanic, Latino/a, or Spanish Origin
Female Genital Prolapse	0	11
1st Degree Perineal Laceration During Delivery	3	23
Pelvic And Perineal Pain	1	28
2nd Degree Perineal Laceration During Delivery	4	48
Stress Incontinence	2	12
3rd Degree Perineal Laceration During Delivery	0	6
Unspecified Urinary Incontinence	0	1
Total	**10**	**129**

Table 2: Self Reported Race

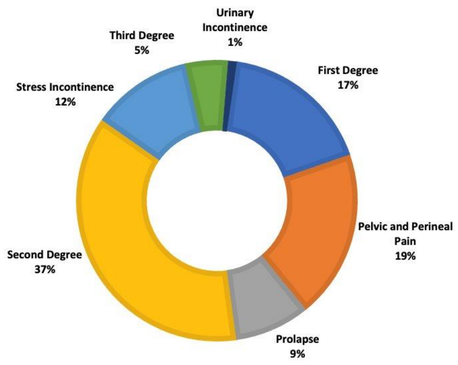
Black or African American	Korean	More Than One Race	Other	White or Caucasian
1	1	10	14	113

Table 3: Medians and Interquartile Range (IQR) By Sub Score

	POPDI-6		CRADI-8		UDI-6		Days Completed Post DX	
	Median	IQR	Median	IQR	Median	IQR	Median	IQR
Genital Prolapse	8.33	12.5	0	12.5	20.83	37.5	31.43	40.56
Pelvic and Perineal Pain	8.33	18.75	0	12.5	8.33	17.71	81.11	108.99
Incontinence (Stress & Urinary)	8.33	33.33	0	9.38	45.83	37.5	91.25	91.25
1st º PLDD	0	11.46	0	0	18.75	34.38	76.04	83.14
2nd º PLDD	8.33	16.67	6.25	17.97	16.67	25	100.38	129.02
3rd º PLDD	0	12.5	12.5	12.5	8.33	4.17	192.64	173.38

POPDI = pelvic organ prolapse distress inventory
CRADI = colorectal-anal distress inventory
UDI = urogenital distress inventory
PLDD = perineal laceration during delivery

Figure 2: Proportion of Each Diagnosis



CONCLUSIONS

A significant portion of individuals diagnosed during pregnancy or pre-partum did not receive care from a PFPT. We are unable to provide an exact percentage due to inconsistencies in the completion of the PFDI20, but we estimate that approximately 10% of those in need of treatment were treated. The three most common diagnoses were second-degree perineal lacerations during delivery, pelvic and perineal pain, and first-degree lacerations. Among those with available PFDI scores, four had the same diagnosis for their subsequent deliveries, 25 had multiple diagnoses, and six had different diagnoses for each delivery. The remaining 54 subjects had at least one diagnosis before or during their delivery. 68% of subjects received treatment from a PFPT 42 days or more after their diagnosis. While this sample is representative of the areas we serve, further analysis is required before drawing any definitive conclusions.

FUTURE ANALYSIS

- When increasing the data collection window, do any of these results significantly change?
- Is there a self-reported improvement post PFPT for incontinence (fecal and/or urinary)?
- Is there a predictable patient population that adheres to PFPT?
- Is there a relationship between delivery and diagnoses (i.e., mother's age, mother's vitals, baby height/weight, parity, demographics, SES, etc.)?
- How likely are those with a diagnosis during pregnancy to see a PFPT?

IMPLICATIONS

There is limited available data concerning this patient population within our facilities. Our objective is to offer more targeted support to these patients, and to achieve this, we need to gain a comprehensive understanding of the characteristics of this population. Existing literature underscores the importance of early intervention for pelvic floor diagnoses. Nevertheless, a relatively small number of these patients receive treatment from a PFPT, and among those who do consult a PFPT, only a minority follow through with subsequent appointments. We will continue to invest analyses of these data to better understand the potential outcomes of these patients.

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