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Differences in Pelvic Distress and Psychological Wellbeing between New Patients with and without Endometriosis Presenting to a Urology Clinic based on Validated Questionnaires



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OBJECTIVES

- Endometriosis is an often underdiagnosed condition which can complicate the presentation of patients who seek care from urologists.
 - Employing multidisciplinary validated questionnaires on clinic intake may facilitate the differentiation of patients whose underlying diagnosis is endometriosis and direction to the appropriate providers for specialized care.
 - We sought differences in pelvic symptoms and psychological distress in patients with and without endometriosis among those presenting to a subspecialized Urology Urogynecology and Reconstructive Pelvic Surgery clinic
- METHODS
- All patients presenting to a Urology Urogynecology and Reconstructive Pelvic Surgery subspecialty clinic were asked to complete an electronic multidisciplinary intake.
 - A total of 262 patients were included in this database, and were ultimately sorted into 2 groups:
 - those with known endometriosis (n=44) and
 - those without (n=176).
 - The presence or absence of endometriosis was determined by patient-reported data in several of intake questionnaires, (e.g. surgical history of endometriosis excision).
 - Male and transgender female patients were excluded.
 - The degrees of pelvic and phycological distress were determined using the **PFDI-20** and **PHQ-4 questionnaires**.
 - PFDI-20 is a pelvic floor disability index questionnaire, where higher values indicate greater distress. It is comprised of 3 subsections: UDI-6, CRAD-8, POPDI-6.
 - UDI-6 is the urinary distress inventory
 - CRAD-8 is the colorectal-anal distress inventory, and POPDI-6 is the pelvic organ distress inventory.
 - Scores can be obtained from each subsection and for the entire test in total (up to 100 points each or 300 points overall).
 - PHQ-4 is a validated screening tool to determine generalized anxiety and depression for patients with serious illnesses. Scores are additive.

Pelvic Floor Disability Index (PFDI-20)

Instructions: Please answer all of the questions in the following survey. These questions will ask you if you have certain bowel, bladder, or pelvic symptoms and, if you do, **how much they bother you**. Answer these by circling the appropriate number. While answering these questions, please consider your symptoms over the last 3 months. The PFDI-20 has 20 items and 3 scales of your symptoms. All items use the following format with a response scale from 0 to 4.

Symptom scale:
0 = not present
1= not at all
2 = somewhat
3 = moderately
4 = quite a bit

Pelvic Organ prolapse Distress Inventory 6 (POPDI-6)

Do You...	NO	YES
1. Usually experience pressure in the lower abdomen?	0	1 2 3 4
2. Usually experience heaviness or dullness in the pelvic area?	0	1 2 3 4
3. Usually have a bulge or something falling out that you can see or feel in your vaginal area?	0	1 2 3 4
4. Ever have to push on the vagina or around the rectum to have or complete a bowel movement?	0	1 2 3 4
5. Usually experience a feeling of incomplete bladder emptying?	0	1 2 3 4
6. Ever have to push up on a bulge in the vaginal area with your fingers to start or complete urination?	0	1 2 3 4

Colorectal-Anal distress Inventory 8 (CRAD-8)

Do You...	NO	YES
7. Feel you need to strain too hard to have a bowel movement?	0	1 2 3 4
8. Feel you have not completely emptied your bowels at the end of a bowel movement?	0	1 2 3 4
9. Usually lose stool beyond your control if your stool is well formed?	0	1 2 3 4
10. Usually lose stool beyond your control if your stool is loose?	0	1 2 3 4
11. Usually lose gas from the rectum beyond your control?	0	1 2 3 4
12. Usually have pain when you pass your stool?	0	1 2 3 4
13. Experience a strong sense of urgency and have to rush to the bathroom to have a bowel movement?	0	1 2 3 4
14. Does part of your bowel ever pass through the rectum and bulge outside during or after a bowel movement?	0	1 2 3 4

Urinary distress Inventory 6 (UDI-6)

Do You...	NO	YES
15. Usually experience frequent urination?	0	1 2 3 4
16. Usually experience urine leakage associated with a feeling of urgency, that is, a strong sensation of needing to go to the bathroom?	0	1 2 3 4
17. Usually experience urine leakage related to coughing, sneezing or laughing?	0	1 2 3 4
18. Usually experience small amounts of urine leakage (that is, drops)?	0	1 2 3 4
19. Usually experience difficulty emptying your bladder?	0	1 2 3 4
20. Usually experience pain or discomfort in the lower abdomen or genital region?	0	1 2 3 4

Scoring the PFDI-20
Scale Scores: Obtain the mean value of all of the answered items within the corresponding scale (possible value 0 to 4) and then multiply by 25 to obtain the scale score (range 0 to 100). Missing items are dealt with by using the mean from answered items only.
PFDI-20 Summary Score: Add the scores from the 3 scales together to obtain the summary score (range 0 to 300).

PHQ-4: THE FOUR-ITEM PATIENT HEALTH QUESTIONNAIRE FOR ANXIETY AND DEPRESSION

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
TOTALS				

Total score is determined by adding together the scores of each of the 4 items. Scores are rated as normal (0-2), mild (3-5), moderate (6-8), and severe (9-12). Total score ≥3 for first 2 questions suggests anxiety. Total score ≥3 for last 2 questions suggests depression.

Reprinted with permission from Kroenke K, Spitzer RL, Williams JB, Löwe B. An ultra-brief screening scale for anxiety and depression: the PHQ-4. Psychosomatics. 2009;50(6):613-21. From Principles of Neuropathic Pain Assessment and Management, November 2011.

RESULTS

- 220 patients were included.
- 44 with endometriosis and
 - 176 without

- Of the endometriosis patients
- 77% had a score greater than 25 (i.e. clinically significant symptoms) on the UDI subsection,
 - 52% on the CRAD subsection, and
 - 45% on the POPDI subsection.

- Of participants without endometriosis,
- 55% had a score ≥ 25 on the UDI subsection
 - 25% on the CRAD subsection,
 - 44% on the POPDI subsection

- On binary logistic regression:
- There was a significant difference in CRAD8 scores (p = 0.037) between those with and without endometriosis.
 - There were no significant differences likelihood of endometriosis based on the PHQ 4 (p = 0.477),
 - UDI 6 (p = 0.304), or POPDI 6 (p = 0.474) questionnaires.

Abnormal Score	Odds Ratio of Endometriosis	95% CI
Pelvic Organ Prolapse (POPDI-6)	0.93	0.78-1.11
Bowel Symptoms (CRAD-8)	1.19	1.01-1.41
Urinary Symptoms (UDI-6)	1.08	0.93-1.25
Psychological Distress (PHQ-4)	1.03	0.93-1.14

CONCLUSIONS

Endometriosis is associated with a high prevalence of pelvic symptoms in patients presenting for subspecialty Urology Urogynecology and Reconstructive Pelvic Surgery/pelvic pain clinic evaluation.

Within this subspecialty population with high urinary and pain symptomatology, only bowel symptoms distinguished those with endometriosis versus those without.

Endometriosis is commonly underdiagnosed, with patients often waiting over 10 years to receive appropriate treatment.

Pelvic health specialists at the front line of pelvic health can potentially reduce time to accurate diagnosis, healthcare costs, and patient dissatisfaction by asking screening questions and coordinating effective multidisciplinary care at the earliest possible encounter. Based on data from intake questionnaires alone, providers should pay close attention to patients who report high multifactorial pelvic symptomatology inclusive of bowel symptoms as part of their pelvic distress.

REFERENCES

1. Kroenke K, Spitzer RL, Williams JBW, Löwe B. An ultra-brief screening scale for anxiety and depression: the PHQ-4. Psychosomatics. 2009;50(6):613-621. doi:10.1176/appi.psy.50.6.613
2. Barber MD, Walters MD, Bump RC. Short forms of two condition-specific quality-of-life questionnaires for women with pelvic floor disorders (PFDI-20 and PFIQ-7). Am J Obstet Gynecol. 2005;193(1):103-113. doi:10.1016/j.ajog.2004.12.025