

Chronic Pelvic Pain Syndromes: Collaborative Management Between Gynecologists and Urologists

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Abstract: Pain syndrome located in the urogenital and pelvic area in a chronic way are a common and debilitating problem, with a significant impact on the quality of life of patients. Therefore, this current study aimed to enroll clinical findings of chronic pelvic pain syndrome alongside with assessed health quality of life in women who were diagnosed with CPPS. A data of 92 women patients with chronic pelvic pain syndromes were enrolled in this current study. We collected clinical findings of all 92 women from medical records at different hospitals in Iraq during a 12-month follow-up. We evaluated severity pain scores by the VAS scale and pelvic pain impact by pelvic pain and urgency/frequency questionnaire, and quality of life using the SF-12 PCS. Furthermore, this study was also investigate the satisfaction rate of women on the improvement throughout treatment. Our study enrolled improvements of women patients after referral to treatment. Based on clinical outcomes of chronic pelvic pain, pain scores had 7.3 ± 0.2 , lower urinary tract symptoms was 17.3 ± 1.2 , sleep quality was 2.2 ± 0.8 , sexual function was 1.7 ± 0.6 at baseline, while pain scores got 4.0 ± 0.3 with total improvement 46.8%, and sleep quality had 3.5 ± 0.8 with 42.1%, sexual function with 37.3%, and ability to perform daily activities had 44.7%, where 66.31% women patients were satisfied on referral to treatments. This study demonstrates that managing pelvic pain syndrome through therapy significantly improves the quality of life of women with this condition.

Keywords: Chronic Pelvic Pain Syndromes; Women; Gynecologists And Urologists; And Puf Questionnaire.

INTRODUCTION

Pain syndromes located in the urogenital and pelvic area in a chronic way are a common and debilitating problem, which has a significant impact on the quality of life of patients (Pain, C. P. 2020). These types of pain are some of the most common symptoms that occur in primary care and involve most medical specialties. Many urological, gastrointestinal, or gynecological disorders are associated with or seem to be the cause of chronic pelvic pain (CPD), and often lead to a diagnostic dilemma. (Latthe, P. *et al.*, 2006)

Localized pain in the lower abdomen and the pelvic and perineal region may be a warning sign of acute damage or chronic tissue injury of the contained organs, or it may be a chronic condition with no identifiable pathology (Ahangari, A. 2014; Mathias, S. D. *et al.*, 1996). Although patients seek medical attention to alleviate their discomfort, in many cases, the study does not reveal any pathology in clinical practice to explain that complaint (Rodríguez, M. Á. B. *et al.*, 2013). In addition, localized pain in the areas related to sexual function, defecation, and urination are often considered taboo and presents psychological and physiological complications (Sibert, L. *et al.*, 2010)

Urogenital CPD syndromes in males and females are quite frequent. Epidemiological data show that 16.8% of women of reproductive age have CPD, and the estimated number of women who suffer from it is 8.3 million in the United States. (Howard, F. M. 1996)

A large study conducted in Great Britain in the field of primary care showed that the annual prevalence of CPD is 38/1,000 women, comparable to the prevalence rate of asthma. This study found as possible causes of the diagnoses related to urinary or gynecological problems in half of the patients. (Merrill, R. M. 2008; Allaire, C. *et al.*, 2018)

In addition, 25-50% of women with CPD who received medical care have presented with more than one diagnosis. Therefore, a careful medical history and examination would show that patients with pelvic and urogenital pain often suffer from "more than one pain (Lamvu, G. *et al.*, 2006). Although in 30% of cases of CPD there is no identifiable pathology, if it is confirmed, its relationship is unclear. In addition, they share many characteristics with other functional somatic conditions. (Zondervan, K. T. *et al.*, 2001)

The difficulty in locating the etiological mechanisms and obtaining uniform therapeutic results probably leads to a heterogeneity of factors that contribute to CPD of urogenital origin. (Veasley C. et al., 2020)

The interaction with the central nervous system (CNS), which can lead to a persistent inflammatory situation, could lead to peripheral and central sensitization (International Association for the Study of Pain, 2020), as well as an abnormal or excessive response to minimal stimuli, even to the perception of pain without an acute cause of tissue damage. In addition, in most situations of CPD, where the cause is unknown, experts consider neuropathic pain to play an important role. (Royal College of Obstetricians & Gynaecologists, 2021)

PATIENTS AND METHODS

Patient Data:

The study was based on a cross-sectional study of 92 patients between the ages of 26 and 42 years diagnosed with chronic pelvic pain syndrome (CPPS), and most of the patients had moderate to severe symptoms. The medical records of the patients were conducted in different hospitals in Iraq, over 12 months of following up with the patients between January 2024 and January 2025. All the participating women were fully informed and thus took part in this study.

Inclusion and Exclusion Criteria:

Data for patients included in our study were obtained from the following criteria: 1) Women aged 26-42 years, 2) Only women diagnosed with CPPS, 3) Some women who smoked, 4) A history of abdominal/pelvic surgery, and 5) Only women who consented to participate in the study. In the current study, when it comes to exclusion criteria, it has excluded some groups of women and they include: 1) women who were below the age of 20 years, 2) women who did not give consent or whose data were not complete or missing, 3) women who were diagnosed with malignant tumors or uterine fibroids, and 4) pregnant women.

Data Collection:

Laparoscopy was done on all the participating women. A questionnaire question that was answered by all the patients concerned with the severity of their pelvic pain, which was classified as moderate or severe. Our study collected demographic and clinical parameters and characteristics of the female patients, including age, pain level, and history of pelvic surgery, body

mass index (BMI), ASA%, and socioeconomic status. The study results were designed and evaluated for all patient data recorded using SPSS version 24.0. All female patients underwent laparoscopic examinations for the diagnosis of chronic pelvic pain. This study confirmed that none of the participating women were using any oral contraceptives, antidepressants, anti-anxiety medications, or progestins before undergoing laparoscopic examinations. All women underwent a complete diagnosis, including identification of the location of pain, pain mechanisms or indicators, and urinary tract pain syndromes.

Treatments:

Regarding the treatments used after laparoscopic examination, all female patients underwent various therapies, which were implemented in different phases. These included initial pharmacological treatment, most notably amitriptyline or nortriptyline; non-pharmacological treatment (all patients were referred for pelvic floor physical therapy); and procedural/specialized treatment, which included hormone suppression, intravesical injections, and trigger point injections.

Tools:

We used a range of tools and measurements to assess the condition of the female patients before and after referral for treatment during the 12-month follow-up period. We used the Visual Analogue Scale (VAS) to assess pain intensity, which was scored on a scale of 0–10 cm, where 0 represents no pain, and 10 represents severe pain. We also rated the impact of pelvic pain on the patients, using a scale of 0–30, where higher scores represent the most severe impact on the patients' health, and 0 represents no impact. Additionally, we assessed the severity of lower urinary tract symptoms in women with chronic pelvic pain to determine the effectiveness of treatment in improving their health. This assessment was also scored on a scale of 0–21, where 0 represents no symptoms and 21 represents severe symptoms. In general, this study assessed the quality of life of patients, categorized by health condition (sexual, environmental, and psychological), using the WHOQOL-bref scale. All these elements were scored on a scale of 0 to 5, with higher scores representing optimal quality of life and 0 representing the lowest quality of life for women with chronic pelvic pain syndrome. Furthermore, our study explored the overall perception of the female patients regarding their treatment, measured by their satisfaction rate.

RESULTS

Table 1: Baseline and demographic features of patients who were diagnosed with CPPS.

Parameters	Frequency, {n = 92}	Percentage, {%}
Age, years, {mean ± SD}	34.4 ± 8.1	
Females	92	100%
Pelvic pain duration, months {mean ± SD}	29.5 ± 17.3	
Median pain score, {VAS}	7.4 (6-9)	
Body mass index (kg/m ² ± SD)	27.6 ± 5.2	
Smokers, n {%}	25	27.17%
History of Abdominal/Pelvic Surgery	42	45.65%
Severity, N {%}		
III	58	63.04%
II	34	36.96%
Socioeconomic status, N {%}		
Lower class	23	25.0%
Middle class	39	42.39%
Upper class	30	32.61%

Table 2: Diagnostics findings of women who suffer from CPPS.

Variables	Category	Frequency	Percentage
Primary Pain Location:			
	Suprapubic	39	42.39%
	Vulvar/Vestibular	23	25.0%
	Deep Pelvic/Generalized	21	22.83%
	Low Back/Sacral	9	9.78%
Mechanism of pain:			
	Pressure/Heaviness	36	39.13%
	Sharp/Stabbing	30	32.61%
	Burning	15	16.30%
	Aching	11	11.96%
Urological Pain Syndromes:			
	Bladder Pain Syndrome	60	65.22%
	Urethral Pain Syndrome	32	34.78%
Gynecological Pain Syndromes:			
	Endometriosis (suspected or confirmed)	40	43.48%
	Provoked Vestibulodynia (PVD)	21	22.83%
	Myofascial Pelvic Pain Syndrome	69	75.0%
Other/Co-morbid:			
	Irritable Bowel Syndrome (IBS)	28	30.43%
	Central Sensitization/Fibromyalgia	15	16.3%
Myofascial Tenderness (Pelvic Floor):			
	Hypertonic Pelvic Floor Muscles	77	83.7%
	Specific Trigger Points	61	66.3%
Vestibular Findings:			
	Positive Q-tip Test (Vestibulodynia)	27	29.35%
	Tenderness on Bladder Filling/Globe Compression	52	56.52%

Table 3: Determining types of treatments used in the patients.

Treatments	Categories	Frequency	Percentage
First-Line Pharmacological:			
	Amitriptyline or Nortriptyline	72	78.26%

	Gabapentinoids (Gabapentin/Pregabalin)	58	63.04%
Non-Pharmacological:			
	Referral to Pelvic Floor Physical Therapy	86	93.48%
	Dietary Bladder Modification	57	61.96%
Procedural/Specialist-Specific:			
	Gynecological: Hormonal Suppression	30	32.61%
	Urological: Intravesical Instillations	40	43.48%
	Trigger Point Injections	22	23.91%

Table 4:- Evaluate quality of life findings who report at 12 months follow-up.

Items	Baseline	12 months	Improvements
- Pain (0-10 VAS scale)	7.3 ± 0.2	4.0 ± 0.3	46.8%
- Pelvic pain impact (0-30)	24.5 ± 2.1	12.1 ± 1.6	39.7%
- ICIQ-FLUTS (Lower urinary tract symptoms)	17.3 ± 1.2	10.5 ± 1.1	38.6%
- QoL Domains			
Sleep quality	2.2 ± 0.8	3.5 ± 0.8	42.1%
Sexual function	1.7 ± 0.6	2.8 ± 1.4	37.3%
Ability to perform daily activities	2.4 ± 0.7	3.8 ± 1.0	44.7%

Table 5: Identifying the clinical findings of global impression of change during 12 months follow-up.

Variables	Frequency	Percentage, %
Very Much Improved	27	29.35%
Much Improved	34	36.96%
Minimally Improved	20	21.74%
No Change	8	8.70%
Worse	3	3.26%

Table 6:- Establishing healthcare utilization based on pre- and post-referral.

Items	Pre-Referral	After – Referral
Number of specialist visits	4.8 ± 0.1	2.4 ± 0.06
Patients with ≥1 ED visit for pain	30 {32.61%}	6 {6.52%}
Patients undergoing diagnostic laparoscopy	78%	4.4%

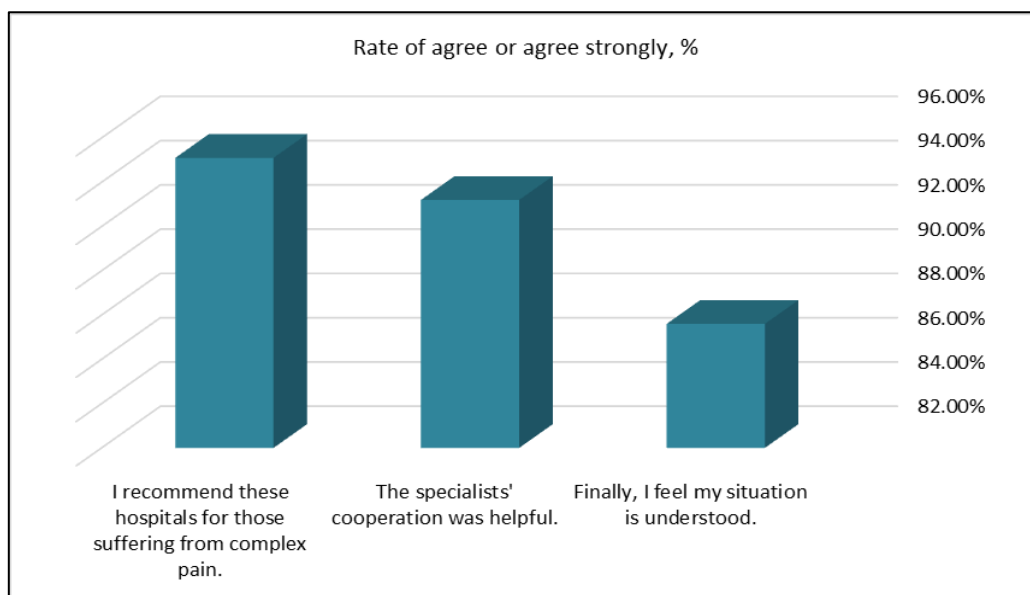


Figure 1: Assessment of the contribution of collaborative care by patient satisfaction.

DISCUSSION

This cross-sectional study was of 92 women who were diagnosed with chronic pelvic pain

syndromes. In terms of demographic features, all women were aged with 34.4 ± 8.1, pelvic pain duration was 29.5 ± 17.3 months, median pain

score was 7.4 (6-9), body mass index had 27.6 ± 5.2 , smokers was 27.17%, history of pelvic surgery got 45.65%, severity of pelvic pain found 63.04%. All women were diagnosed of chronic pelvic pain syndromes, where 42.39% had suprapubic pain, almost women patients were heaviness pain with 39.13%, pain throughout sharp with 32.61%, bladder pain syndrome got 60 cases, while endometriosis pain with 40 cases as well as myofascial pelvic pain syndrome with 75.0% and some women were also have hypertonic pelvic floor muscles were 77 cases. In myofascial tenderness, we noticed that hypertonic pelvic floor muscles got 77 cases, and specific trigger points got 61 cases.

All women were undergone to a group of treatment stages, where categorized into first-line pharmacological which the most item was amitriptyline or nortriptyline had 78.26%, non-pharmacological was found 93.48% of women had referral to pelvic floor physical therapy, as well as those women were treated by hormonal suppression of 30 cases, intravesical instillations of 40 cases, and trigger point injections of 22 cases.

Based on quality of life scores, this study assessed the health quality of life in patients. Pain score was 7.3 ± 0.2 , pelvic pain impact had 24.5 ± 2.1 , lower urinary tract symptoms was 17.3 ± 1.2 , sleep quality found 2.2 ± 0.8 , sexual function was 1.7 ± 0.6 , and ability to perform daily activities was 2.4 ± 0.7 at baseline. After referral women to treatment, health quality of life in the patients pain score was 4.0 ± 0.3 with improvement 46.8%, pelvic pain impact had 12.1 ± 1.6 with improvement 39.7%, lower urinary tract symptoms was 10.5 ± 1.1 with improvement 38.6%, sleep quality with improvement 42.1% found 3.5 ± 0.8 , sexual function was 2.8 ± 1.4 had improvement 37.3%, and ability to perform daily activities was 3.8 ± 1.0 who have improvement 44.7%. Furthermore, it showed 66.31% women patients had satisfied into improvements of health quality of life after referral to treatment.

Various research evidences prove the fact that patients with CPP frequently have a certain amount of hyperalgesia-enhanced sensitivity to the stimuli of pain-inducing nature, which is related to the poor QoL parameters quantified by the SF-36 (ISPOG, 2020), as well as both physical and mental health domains are affected, though mental health tends to be the most negatively impacted area, while physical activities may be relatively less affected. (Engeler D. et al., 2021)

When CPP arises primarily as a symptom of gynecological diseases such as endometriosis, the negative impact on QoL is even more pronounced compared to other conditions where pelvic pain is not the central symptom. Endometriosis patients have reported increased pain intensity and reduced QoL in terms of pain and mental health. (Jarrell, J. F. et al., 2005).

Pain is among the major concerns for endometriosis patients, and it significantly affects their QoL independently of infertility status (Levesque, A. et al., 2015). Infertility itself is a significant clinical manifestation, yet, interestingly, patients with infertility take a longer delay to be diagnosed than patients with pain, which demonstrates a diagnostic problem. The psychiatric morbidity, the decrease in social adjustment, and changes in the quality of sexual life are frequently encounter in CPP patients. (Dunselman, G. A. J. et al., 2014), where these changes appear to be independent of whether endometriosis is present, as CPP with or without endometriosis shows similar detriments in QoL and sexual function inventories (Kuznetsov, L. et al., 2017).

CONCLUSION

Chronic pelvic pain syndromes (CPPD) are severe factors that deteriorate the quality of life of women associated with several aspects such as physical, psychological, and social well-being, which the chronic pelvic pain that is a common feature of CPPD is often accompanied by fatigue and digestive upsets, which increases the overall symptom loading, as well as these physical symptoms are commonly accompanied with psychological problems like anxiety and depression, which will further increase the effect of these symptoms on the everyday functioning and social interactions of patients.

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