Venous-Origin Chronic Pelvic Pain: Three Keys to Clearing Up Multispecialty Communication and Patient Confusion

Applying standardized nomenclature, ensuring accurate diagnosis, and using patient-centered outcomes to measure treatment success can lead to improved care and outcomes in venous-origin chronic pelvic pain.

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Chronic pelvic pain (CPP) affects approximately 26% of women and is defined as persistent pelvic pain lasting longer than 6 months. CPP has a broad range of potential etiologies, many of which are nongynecologic.[1] Despite this, CPP accounts for a substantial proportion of gynecologic surgical procedures in the United States, with approximately 40% of laparoscopies and 12% of hysterectomies performed annually for this indication.[2] Furthermore, the diagnosis of CPP is often challenging because it is frequently multifactorial and lacks a single identifiable cause. As a result, patients commonly experience delays in diagnosis and appropriate treatment, while providers and payors face uncertainty regarding evaluation and management of this complex and often debilitating condition.

Venous-origin CPP (VO-CPP) is a subtype of CPP caused by pelvic venous hypertension. It is one manifestation of pelvic venous disorder (PeVD), a broader spectrum of conditions resulting from abnormalities of the pelvic venous system. Patients with pelvic pain are often evaluated by multiple specialists, each with different areas of expertise, diagnostic approaches, and treatment algorithms. Effective multidisciplinary care for VO-CPP requires consistent terminology and nomenclature, accurate integration of clinical and imaging diagnoses, a clear understanding of underlying disease mechanisms, and a patient-centered approach to management. This article highlights three key ways to address the ongoing confusion and variability in the evaluation and treatment of VO-CPP.

1 CONSISTENT NOMENCLATURE

A recognized, widely adopted nomenclature is key to accurately describing pelvic pain. PeVD is a broad term that encompasses a spectrum of clinical manifestations resulting from abnormalities of the pelvic venous system. These manifestations include VO-CPP, lower extremity pain and swelling, vulvar varicosities, flank pain, and hematuria.[3] Historically, interventional radiologists, gynecologists, vascular surgeons, pain physicians, and other specialists have utilized overlapping or generic terms to describe these complex pelvic venous pathologies. This has resulted in the use of vague, catch-all terms such as pelvic congestion syndrome (PCS), as well as terms based on underlying pathology or hemodynamics, such as pelvic venous insufficiency, ovarian vein reflux, and iliac vein obstruction or compression.[4] Additionally, reliance on eponyms or descriptions such as May-Thurner (left common iliac vein compression), PCS, and nutcracker syndrome (left renal vein compression) provides little context or systematic description. It fails to account for the complex interplay between clinical symptoms and physiology.[3,5,6] This chronic mis-

classification obscures the true clinical picture and can confuse providers, increase patient anxiety, delay treatment, and lead to systematic insurance denials.[3,7,8]

Standardized Nomenclature

These communication challenges parallel those previously observed in the treatment of lower extremity venous insufficiency, where similar fragmented communication necessitated the creation of the CEAP (clinical, etiology, anatomy, pathophysiology) classification system in 1996. The CEAP classification is now an internationally used standardized reporting tool for both clinical care and research.[5] PeVD is inherently more complex than lower extremity venous insufficiency due to its pathophysiology and symptoms. A multispecialty work group developed and introduced the Symptoms, Varices, and Pathophysiology (SVP) classification using CEAP as a framework but specific for PeVD.[5] This pelvic-specific system mirrors the CEAP model's function, replacing vague nomenclature with a systematic grading grid and providing details on patients' symptoms, the location of varices, and the pathophysiology underlying their complaints.

Controversial Terms

In the past, the precise anatomic location of pelvic pain has been omitted from standard diagnostic coding. For example, while the eponym "nutcracker syndrome" describes symptomatic compression of the left renal vein, the exact etiology and location of this venous compression are frequently left undefined. Multiple anatomic variants of PeVD exist that have not been accurately captured by medical coding.[3,5] Transitioning from these eponyms and historic terms to standardized SVP nomenclature supports efforts to reduce diagnostic imprecision.

Clinical Utility

Specifying these details through the SVP during the clinical workup, referral process, and insurance authorization is critical to establishing a standard language, comprehensive understanding of treatment pathways, expected outcomes, and resource utilization. Because symptoms frequently overlap across distinct pathologies yet require vastly different therapeutic strategies, precise differentiation is essential. Accurate anatomic classification of nomenclature directly enhances patient safety, ensures appropriate billing stewardship, and fosters rigorous, reproducible clinical research.[3,5,9]

By objectively documenting the severity of clinical symptoms, the precise distribution of varices, and the underlying hemodynamic pathophysiology (eg, reflux vs obstruction), the SVP framework provides this necessary, unified language. Transitioning to this structured, pelvic-specific nomenclature allows all stakeholders to isolate true disease etiology, guide targeted endovascular interventions, and streamline payor approvals by translating complex clinical findings into clear evidence of medical necessity.

2 ACCURATE DIAGNOSIS AND EVALUATION

Correct diagnosis of the etiology or etiologies of CPP is crucial but often challenging, and helps guide appropriate treatment. This is best done with a multidisciplinary team with expertise in pelvic pain and thorough evaluation of history, patient symptoms, physical examination, and imaging. Diagnosis of VO-CPP cannot be made from patient history or imaging alone; it requires a combination of both. Additionally, it is important to recognize that the treatment algorithm for these patients may be complex in order to address differing etiologies of their symptoms, as treating only the venous origin may not be sufficient.

Symptoms

Symptoms of VO-CPP are often the main driver for treatment; however, they can be vague, nonspecific, and overlap with other causes of CPP. It is important for all clinicians who treat pelvic pain to be aware of VO-CPP as a possible etiology for CPP and proceed with appropriate workup if suspected.

Workup starts with an initial detailed history and physical examination, focusing on symptoms suggestive of VO-CPP: pelvic pressure, bloating, dull or throbbing pain, pain that is worse with standing or exercise, prolonged postcoital aching, tenderness at the ovarian point, dysmenorrhea, and dyspareunia.[10] Ovarian point tenderness, postcoital aching, and worsening symptoms with prolonged standing are most indicative of a diagnosis of VO-CPP.[11] However, clinicians should note that many symptoms of VO-CPP overlap with those of other etiologies, including gastrointestinal, urinary, musculoskeletal, gynecologic, and psychosocial causes. Additionally, multiple causes of CPP may coexist, further complicating the picture.

History and Physical Examination

The clinical history should include a detailed review of prior treatments for CPP and venous insufficiency, including the patient's response to each intervention. This information may help identify or exclude alterna-

tive etiologies of CPP and recognize secondary pain generators that may be contributing to the patient's symptoms. The physical examination should include evaluation for pelvic tenderness, specifically the ovarian point, and visible varices in the perineum, labia, thighs, groin, buttock, or lower extremities.[12]

Imaging

Imaging is important for identifying the anatomic venous causes of VO-CPP. Modalities can include ultrasound, MRI and MR venography, or CT. Imaging should evaluate for varices, venous reflux, and venous stenosis/occlusion. Ultrasound and time-resolved MRI can be useful to demonstrate hemodynamic flow and venous reflux.[13]

Establishing the Diagnosis

To correctly diagnose VO-CPP, the patient should have symptoms, physical examination, and imaging findings consistent with a venous etiology for pelvic pain. Clinical or imaging diagnosis alone is not sufficient to diagnose VO-CPP. Having a standardized way to evaluate and describe patient symptoms and imaging findings, such as the SVP, is key to communication among multidisciplinary providers, patients, and insurance carriers, and to more rapid implementation of appropriate treatment algorithms.

3 USE OF PATIENT-REPORTED OUTCOMES TO EVALUATE TREATMENT RESPONSE

In order to assess treatment response, patients must be followed and outcomes evaluated over time. Given the complex nature and interplay with other etiologies of pelvic pain, repeat interventions or continued multimodality treatment may be necessary. Physician- and patient-reported outcomes may differ or encompass distinct aspects of success or failure after treatment. Proceduralists and diagnostic imaging often report success in terms of technical or visual outcomes; however, this does not capture the patient experience nor priorities.

Visual Analog Scale

As pain and quality of life (QOL) are often the main drivers of treatment for VO-CPP, this is central to the patient experience and outcomes. Pain can be difficult to quantify and track because it is subjective, patient-dependent, and may be confounded by other factors. While there are specific patient-reported outcome measures for other gynecologic pathology, including the Endometriosis Health Profile-30 and the Uterine Fibroid Symptom and QOL scale, these measures have not been available for VO-CPP.[3,14,15] Instead, many clinicians and studies have relied on the visual analog scale (VAS), a nonspecific, generic measure of pain severity. However, VAS does not adequately capture the multidimensional impact of VO-CPP on patients' lives. It does not assess important aspects such as symptom characteristics, functional limitations, effects on personal and professional relationships, emotional health and well-being, or ability to perform activities of daily living.[16]

Patient-Reported Outcomes

In 2019, the Society of Interventional Radiology (SIR) Research Consensus Panel recognized the need to develop a patient-reported outcomes tool specifically for PeVD, given its complex presentations and pathophysiology. This tool was developed through funding from the SIR Foundation, which supported the formation of a multidisciplinary team to create a disease-specific, patient-reported outcome measure for VO-CPP. The instrument is currently being evaluated and validated in an ongoing clinical trial (NCT06083597).[16]

Once available, providers should incorporate disease-specific, patient-reported outcome measures for PeVD into routine clinical practice. These tools will facilitate longitudinal assessment of patients before and after intervention, support evaluation of value-based care, and promote greater standardization across clinical research studies.

CONCLUSION

CPP is complex, multifactorial, often underdiagnosed, and involves physicians from multiple different specialties. VO-CPP can result from varied pathophysiology, leading to a wide range of nonspecific symptoms that overlap with those of other CPP etiologies. This variability can lead to confusion, miscommunication, and delayed or denied diagnosis amongst patients, providers, and payors. We recommend three key actions that can help improve patient care, communication, and reduce confusion: (1) wide adoption of accepted terminology for PeVD, including use of the SVP classification; (2) accurate diagnosis, which includes clinical symptoms and patient history in addition to imaging demonstrating venous pathology; and (3) use of patient-reported or patient-centered outcomes instead of imaging or technical success. By following these three recommendations, confusion regarding patients with VO-CPP can be mitigated, allowing for improved care and outcomes. ■

1. Chronic pelvic pain: ACOG practice bulletin, number 218. Obstet Gynecol. 2020;135:e98-e109. doi: 10.1097/AOG.0000000000003716
2. Lamvu G, Carrillo J, Ouyang C, Rapkin A. Chronic pelvic pain in women: a review. JAMA. 2021;325:2381-2391. doi: 10.1001/jama.2021.2631
3. Khilnani NM, Meissner MH, Learman LA, et al. Research priorities in pelvic venous disorders in women: recommendations from a multidisciplinary research consensus panel. J Vasc Interv Radiol 2019;30:781-789. doi: 10.1016/j.jvir.2018.10.008
4. Kaufman CS, Winokur RS, Khilnani NM, et al. The Society of Interventional Radiology practice guidance document on venous-origin chronic pelvic pain in women. J Vasc Interv Radiol. 2026;37:107954. doi: 10.1016/j.jvir.2025.107954
5. Meissner MH, Khilnani NM, Labropoulos N, et al. The Symptoms-Varices-Pathophysiology classification of pelvic venous disorders: a report of the American Vein & Lymphatic Society International Working Group on Pelvic Venous Disorders. J Vasc Surg Venous Lymphat Disord. 2021;9:568-584. doi: 10.1016/j.jvsv.2020.12.084
6. Kachlik D, Pechacek V, Musil V, Baca V. The venous system of the pelvis: new nomenclature. Phlebology. 2010;25:162-173. doi: 10.1258/phleb.2010.010006
7. Khilnani NM, Winokur RS, Scherer KL, Meissner MH. Clinical presentation and evaluation of pelvic venous disorders in women. Tech Vasc Interv Radiol. 2021;24:100730. doi: 10.1016/j.tvir.2021.100730
8. Jeppson PC, Balgobin S, Washington BB, et al. Recommended standardized terminology of the anterior female pelvis based on a structured medical literature review. Am J Obstet Gynecol. 2018;219:26-39. doi: 10.1016/j.ajog.2018.04.006
9. Weber AM, Abrams P, Brubaker L, et al. The standardization of terminology for researchers in female pelvic floor disorders. Int Urogynecol J Pelvic Floor Dysfunct. 2001;12:178-186. doi: 10.1007/pl00004033
10. Clark MR, Taylor AC. Pelvic venous disorders: an update in terminology, diagnosis, and treatment. Semin Intervent Radiol. 2023;4:362-371. doi: 10.1055/s-0043-1771041
11. Ford RW, Winokur RS. Pelvic venous Disorders (PeVD). Semin Intervent Radiol. 2022;39:483-489. doi: 10.1055/s-0042-1757938
12. Khilnani NM, Xia JJ, Winokur RS, Meissner MH. Diagnosis and management of pelvic venous disorders in women. Cardiovasc Intervent Radiol. 2024;47:1650-1668. doi: 10.1007/s00270-024-03782-1
13. Topper SR, Winokur RS. Imaging of pelvic venous disorders (PeVD); should every patient get an MRI? Tech Vasc Interv Radiol. 2021;24:100731. doi: 10.1016/j.tvir.2021.100731
14. Jones G, Kennedy S, Barnard A, et al. Development of an endometriosis quality-of-life instrument: the Endometriosis Health Profile-30. Obstet Gynecol. 2001;98:258-264. doi: 10.1016/s0029-7844(01)01433-8
15. Spies JB, Coyne K, Guaou Guaou N, et al. The UFS-QoL, a new disease-specific symptom and health-related quality of life questionnaire for leiomyomata. Obstet Gynecol. 2002;99:290-300. doi: 10.1016/s0029-7844(01)01702-1
16. Khilnani NM, Winokur RS, Marvel RP, Meissner MH. Pelvic venous Disorders in women: 5-year update from a Society of Interventional Radiology Foundation–sponsored research consensus panel. J Vasc Interv Radiol. 2025;36:9-16. doi: 10.1016/j.jvir.2024.09.010

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