

## Medical Coverage Policy | Ovarian and Internal Iliac Vein Embolization as a Treatment of Pelvic Congestion Syndrome



**EFFECTIVE DATE:** 12|01|2014

**POLICY LAST UPDATED:** 10|18|2023

### OVERVIEW

Pelvic congestion syndrome is characterized by chronic pelvic pain that is often aggravated by standing; diagnostic criteria for this condition are not clearly defined well-defined. Endovascular occlusion (eg, embolization, sclerotherapy) of the ovarian and internal iliac veins has been proposed as a treatment for patients who fail medical therapy.

### MEDICAL CRITERIA

Not applicable

### PRIOR AUTHORIZATION

Not applicable

### POLICY STATEMENT

#### Medicare Advantage Plans

Embolization of the ovarian vein and internal iliac veins is considered not covered as a treatment of pelvic congestion syndrome as the evidence is insufficient to determine the effects of the technology on health outcomes.

#### Commercial Products

Embolization of the ovarian vein and internal iliac veins is considered not medically necessary as a treatment of pelvic congestion syndrome as the evidence is insufficient to determine the effects of the technology on health outcomes.

### COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Book, Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

### BACKGROUND

Pelvic congestion syndrome is characterized by chronic pelvic pain that is often aggravated by standing; diagnostic criteria for this condition are not well-defined. Embolization of the ovarian and internal iliac veins has been proposed as a treatment for patients who fail medical therapy.

For individuals who have pelvic congestion syndrome who receive ovarian and/or internal iliac vein endovascular occlusion, the evidence includes randomized studies, comparative cohort studies, non-comparative cohort studies, case series, and systematic reviews. Relevant outcomes are symptoms, quality of life, and treatment-related morbidity. Systematic reviews of prospective and retrospective data, as well as more recently published retrospective cohort studies, indicate consistently high clinical success rates (primarily in the form of significant pain reduction) ranging from 63.7% to 100% after ovarian and/or internal iliac vein endovascular occlusion at short-term, long-term, or overall follow-up. These data support guideline and international consensus recommendations for endovascular occlusion in this setting. In a randomized trial of embolization with vascular plugs or coils in patients with pelvic congestion syndrome,

adverse events were reported in 22% and 10% of patients, respectively. A retrospective analysis comparing coil embolization to endoscopic resection indicated significantly greater improvement in pain 1 month post-procedure with resection, but similar improvements in pain between the procedures at 5-year follow-up. Differences between these procedures, particularly the need for general anesthesia with resection versus local anesthesia with embolization, suggest the possibility of selection bias in this study. Randomized controlled trials using well-defined eligibility criteria and relevant comparators are needed. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

### **CODING**

The following CPT code(s) is not covered for Medicare Advantage Plans and not medically necessary for Commercial Products when filed with the ICD-10 Diagnosis Code(s) listed below:

**37241** Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary complete the intervention; venous, other than hemorrhage (e.g., congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles)

\*ICD-10 Diagnosis Code: N94.89

### **RELATED POLICIES**

Not applicable

### **PUBLISHED**

Provider Update, December 2023  
Provider Update, November 2022  
Provider Update, December 2021  
Provider Update, November 2020  
Provider Update, November 2019

### **REFERENCES**

1. Ball E, Khan KS, Meads C. Does pelvic venous congestion syndrome exist and can it be treated?. *Acta ObstetGynecol Scand.* May 2012; 91(5): 525-8. PMID 22268663
2. Tu FF, Hahn D, Steege JF. Pelvic congestion syndrome-associated pelvic pain: a systematic review of diagnosis and management. *Obstet Gynecol Surv.* May 2010; 65(5): 332-40. PMID 20591203
3. Brown CL, Rizer M, Alexander R, et al. Pelvic Congestion Syndrome: Systematic Review of Treatment Success. *Semin Intervent Radiol.* Mar 2018; 35(1): 35-40. PMID 29628614
4. Mahmoud O, Vikatmaa P, Aho P, et al. Efficacy of endovascular treatment for pelvic congestion syndrome. *J VascSurg Venous Lymphat Disord.* Jul 2016; 4(3): 355-70. PMID 27318059
5. Chung MH, Huh CY. Comparison of treatments for pelvic congestion syndrome. *Tohoku J Exp Med.* Nov 2003;201(3): 131-8. PMID 14649734
6. Guirola JA, Sanchez-Ballestin M, Sierre S, et al. A Randomized Trial of Endovascular Embolization Treatment inPelvic Congestion Syndrome: Fibered Platinum Coils versus Vascular Plugs with 1-Year Clinical Outcomes. *J VascInterv Radiol.* Jan 2018; 29(1): 45-53. PMID 29174618
7. Gavrilov SG, Sazhin A, Krasavin G, et al. Comparative analysis of the efficacy and safety of endovascular and endoscopic interventions on the gonadal veins in the treatment of pelvic congestion syndrome. *J Vasc Surg Venous Lymphat Disord.* Jan 2021; 9(1): 178-186. PMID 32464289
8. Liu J, Han L, Han X. The Effect of a Subsequent Pregnancy After Ovarian Vein Embolization in Patients with Infertility Caused by Pelvic Congestion Syndrome. *Acad Radiol.* Oct 2019; 26(10): 1373-1377. PMID 30660471
9. Hocquelet A, Le Bras Y, Balian E, et al. Evaluation of the efficacy of endovascular treatment of pelvic congestion syndrome. *Diagn Interv Imaging.* Mar 2014; 95(3): 301-6. PMID 24183954
10. Nasser F, Cavalcante RN, Affonso BB, et al. Safety, efficacy, and prognostic factors in endovascular treatment of pelvic congestion syndrome. *Int J Gynaecol Obstet.* Apr 2014; 125(1): 65-8. PMID 24486124

11. Laborda A, Medrano J, de Blas I, et al. Endovascular treatment of pelvic congestion syndrome: visual analog scale(VAS) long-term follow-up clinical evaluation in 202 patients. *Cardiovasc Intervent Radiol.* Aug 2013; 36(4): 1006-14. PMID 23456353
12. Gandini R, Chiocchi M, Konda D, et al. Transcatheter foam sclerotherapy of symptomatic female varicocele with sodium-tetradecyl-sulfate foam. *Cardiovasc Intervent Radiol.* Jul-Aug 2008; 31(4): 778-84. PMID 18172712
13. Kwon SH, Oh JH, Ko KR, et al. Transcatheter ovarian vein embolization using coils for the treatment of pelvic congestion syndrome. *Cardiovasc Intervent Radiol.* Jul-Aug 2007; 30(4): 655-61. PMID 17468903
14. Kim HS, Malhotra AD, Rowe PC, et al. Embolotherapy for pelvic congestion syndrome: long-term results. *J VascInterv Radiol.* Feb 2006; 17(2 Pt 1): 289-97. PMID 16517774
15. Society of Interventional Radiology (SIR). Diseases and conditions: Chronic pelvic pain (pelvic congestion syndrome) [Patient Center]. n.d.; <https://www.sirweb.org/patient-center/pelvic-venous-disease/>  
<https://www.sirweb.org/patient-center/conditions-and-treatments/pelvic-venous-disease/>. Accessed June 12,2022.

**CLICK THE ENVELOPE ICON BELOW TO SUBMIT COMMENTS**

This medical policy is made available to you for informational purposes only. It is not a guarantee of payment or a substitute for your medical judgment in the treatment of your patients. Benefits and eligibility are determined by the member's subscriber agreement or member certificate and/or the employer agreement, and those documents will supersede the provisions of this medical policy. For information on member-specific benefits, call the provider call center. If you provide services to a member which are determined to not be medically necessary (or in some cases medically necessary services which are non-covered benefits), you may not charge the member for the services unless you have informed the member and they have agreed in writing in advance to continue with the treatment at their own expense. Please refer to your participation agreement(s) for the applicable provisions. This policy is current at the time of publication; however, medical practices, technology, and knowledge are constantly changing. BCBSRI reserves the right to review and revise this policy for any reason and at any time, with or without notice. Blue Cross & Blue Shield of Rhode Island is an independent licensee of the Blue Cross and Blue Shield Association.

