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

EFFECTIVE DATE: 11|01|2024
POLICY LAST REVIEWED: 10|01|2025

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 with analgesics.

MEDICAL CRITERIA

Medicare Advantage Plans and Commercial Products

Ovarian vein embolization or trans-venous occlusion using metallic coils or foam/gel sclerotherapy of pelvic vein incompetence is medically necessary for the treatment of pelvic congestion syndrome with varices when all of the following criteria are met:

- The patient has significant pelvic pain for greater than 6 months that interferes with ADLs; AND,
- The patient has had a definitive diagnostic venography, CT or MRI; AND,
- The patient has failed a 6-month trial of appropriate pharmacotherapy including analgesics AND hormonal therapy.

PRIOR AUTHORIZATION

Prior authorization is required for Medicare Advantage Plans and recommended for Commercial Products.

POLICY STATEMENT

Medicare Advantage Plans

Ovarian vein embolization or trans-venous occlusion using metallic coils or foam/gel sclerotherapy of pelvic vein incompetence for the treatment of pelvic congestion syndrome with varices is not covered when the medical criteria above is not met.

Commercial Products

Ovarian vein embolization or trans-venous occlusion using metallic coils or foam/gel sclerotherapy of pelvic vein incompetence for the treatment of pelvic congestion syndrome with varices is not medically necessary when the medical criteria above is not met.

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 a condition of chronic pelvic pain of variable location and intensity, which is associated with dyspareunia and postcoital pain and aggravated by standing. The syndrome occurs during the reproductive years, and pain is often greater before or during menses. The underlying etiology is thought to be related to varices of the ovarian veins, leading to pelvic congestion. As there are many etiologies of chronic pelvic pain, the pelvic congestion syndrome is often a diagnosis of exclusion, with the identification of varices using a variety of imaging methods, such as magnetic resonance imaging, computed tomography scanning, or contrast venography. For those who fail medical therapy with analgesics, surgical ligation of the ovarian vein has been considered. More recently, embolization therapy of the ovarian and internal iliac veins has been proposed. Vein embolization can be performed using a variety of materials including coils, glue, and gel foam.

Recommended Medical Records

- Current Medication List
- History and Physical Report
- Office Notes
- Radiology Report
- Duplex scan
- Diagnostic venography, CT or MRI report

No randomized controlled trials (RCTs) have been published comparing embolization therapy for pelvic congestion syndrome to an alternative or sham/placebo treatment. RCTs are especially needed in situations such as this where the primary symptom is pain, a subjective outcome for which a placebo response to treatment is likely. The published studies consist of case series, most of which were retrospective and conducted outside of the United States Laborda et al in (2013) reported longer term outcomes after coil embolization for pelvic congestion syndrome. The study included patients who were referred by a vascular surgeon. There were no clearly defined diagnostic criteria. A total of 179 (89%) of 202 women completed 5-year follow-up. Mean age at baseline was 43.5 years. Primary outcomes were pain improvement and patient satisfaction. Pain improvement was measured on a 10-point visual analog scale (VAS) with 0 defined as no pain at all and 10 defined as the worst pain imaginable. At baseline, mean VAS (SD) was 7.34 (0.7), and at 5 years mean VAS was 0.78 (1.2). The decrease in mean VAS score overtime was statistically significant ($p<0.001$). Mean patient satisfaction (SD) was 7.39 (1.5) on a 0 to 9 scale. There were 4 cases of coil migration (2%), and these were considered major complications. As with the other case series previously discussed, this study is limited by the lack a control group with which to compare outcomes.

Ovarian vein dilatation, stasis, and/or reflux on pelvic venography are common findings in multiparous premenopausal women, and most of these women are asymptomatic . Why these findings are associated with chronic pelvic pain in some women, but not in others, is unclear. A causal relationship has not been proven, but is supported by limited data showing pain relief upon administration of venoconstrictors or ovarian vein ligation/embolization

The higher prevalence of PCS in multiparous women may be related to the 50 percent increase in pelvic vein capacity during pregnancy, which may lead to venous incompetence and reflux in the non-pregnant state. The increased frequency of PCS symptoms on the left side may be due to extrinsic compression of the left renal vein between the aorta and superior mesenteric artery ("nutcracker phenomenon;" ie, pelvic congestion, left flank pain, and hematuria), or because valvular incompetence of the ovarian vein due to absent ovarian vein valves is more common on the left.

The absence of PCS in menopause has been attributed to the decline in estrogen, which acts as a venous dilator. This hypothesis is supported by observations that pharmacologic or surgical induction of a hypoestrogenic state may result in improvement or resolution of symptoms. The evidence is sufficient to determine the effects of the technology on health outcomes.

CODING

Medicare Advantage Plans and Commercial Products

The following CPT code(s), when filed with the ICD-10 Diagnosis Code(s) listed below, are considered medically necessary when the medical necessity criteria above is met:

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 2025
Provider Update, September 2024
Provider Update, December 2023
Provider Update, November 2022
Provider Update, December 2021

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