Clinical Policy Bulletin: Pelvic Congestion Syndrome: Treatments

Number: 0441

Policy

Aetna considers ovarian vein embolization medically necessary for the treatment of pelvic congestion syndrome (PCS) when both of the following criteria are met:

- The member has had a definitive diagnostic venography, CT or MRI; and
- The member has failed a trial of appropriate pharmacotherapy (e.g., analgesics, hormonal therapy).

Aetna considers ovarian vein embolization for the treatment of PCS experimental and investigational when criteria are not met.

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

- The member has had a definitive diagnostic venography, CT or MRI; and
- The member has failed a trial of appropriate pharmacotherapy (e.g., analgesics, hormonal therapy).

See also CPB 50 -- Varicose Veins.

Background

Pelvic congestion syndrome (PCS, also known as pelvic venous incompetence [PVI]), a condition associated with ovarian vein incompetence, is manifested by pelvic pain of variable intensity, that is heightened before or during menses and that is aggravated by prolonged standing, fatigue and intercourse. Laparoscopic and venographic evidence of varicosities confirm the diagnosis of PCS. The traditional therapy for PCS includes both medical approaches (e.g., dihydroergotamine, ovarian suppression, and rheologic agents) and surgical approaches (e.g., hysterectomy, uterine ventro-suspension, ovarian vein
Ovarian vein embolization is a minimally invasive treatment alternative for PCS. The technique, usually performed by an interventional radiologist, involves threading a catheter, guided by X-ray imaging, through the groin to the ovarian veins. If the imaging reveals a cluster of serpentine veins, tiny stainless steel coils and/or absorbable sponges, or liquids such as glue are passed through the catheter into the ovarian vein, forming a clot that subsequently blocks the accumulation of blood in the varices. Careful selection of patients and use of appropriate angiographic and technical skills by the interventional radiologist are requisite for the success of this therapeutic alternative.

Chung and Huh (2003) assessed the effectiveness of various treatments for PCS in patients with different stress levels. These investigators analyzed 106 patients with PCS confirmed with laparoscopy and venography, who did not respond to medication after 4 to 6 months medication. They were divided into 3 groups: (i) embolotherapy; (ii) hysterectomy with bilateral oophorectomy and hormone replacement therapy; and (iii) hysterectomy with unilateral oophorectomy. The visual analog scale was used to measure degree of pain; stress level data were scored with the revised social readjustment rating scale. Embolotherapy was significantly more effective at reducing pelvic pain, compared to the other methods ($p < 0.05$). The mean percentage decrease in pain was significantly greater in the patients with lower stress scores ($p < 0.05$). The authors concluded that ovarian and/or internal iliac vein embolization appears to be a safe, well-tolerated, effective treatment for PCS that has not responded to medication.

Smith (2012) stated that PCS is one of many causes of chronic pelvic pain. It is generally accepted that this is attributable to ovarian and pelvic vein incompetence that may result in varices in the lower limb leading to presentation in varicose vein clinics. However, far more patients have pelvic varices associated with varicose veins in the lower limb than have PCS. Magnetic resonance imaging and computed tomographic venography are usually used in the diagnosis of this condition and criteria have been established to identify pelvic varices. Many different treatments have been used to manage the symptoms of pelvic congestion. Hysterectomy combined with oophrectomy, open surgical ligation of ovarian veins and laparoscopic vein ligation have been used in the past. The most common treatments used currently involve embolization of pelvic and ovarian veins. The results of this treatment have been published in a limited number of clinical series, usually with fairly short follow-up periods. These treatments may be complicated by migration of embolization of coils used to occlude veins. The longest duration of follow-up currently reported is 5 years. Limited clinical evidence supports the use of embolotherapy in the management of PCS.

**Trans-Venous Occlusion of Pelvic Vein Incompetence:**

Hansrani et al (2015) stated that chronic pelvic pain (CPP) affects 24 % of women worldwide; the cause cannot be identified in 40 % despite invasive investigations. Dilated, refluxing pelvic veins may be a cause of CPP and treatment by trans-venous occlusion is increasingly performed when gynecological causes are excluded, but is it effective? These investigators performed a systematic review of the literature published between 1966 and July 2014. Two authors independently reviewed potential studies according to a set of eligibility criteria, with a third assessor available as an arbiter. A total of 13 studies including 866 women undergoing trans-venous occlusion of pelvic veins for CPP were identified (Level of evidence: 1 study grade 2b, 12 studies grade 4). Statistical significant improvements in pelvic pain were reported in 9 of the 13 studies. Technical success was reported in 865 of 866 (99.8 %) with low complication rates: coil migration in 14 women (1.6 %), abdominal pain in 10 women (1.2 %) and vein perforation in 5 (0.6 %). In a study
on varicose veins of the legs, recurrence was seen in 13 % of 179 women 5-years following coil embolization. Subjective improvements in pain were seen in all 13 studies after treatment by trans-venous occlusion. All 13 studies were of poor methodological quality. Complication rates were low and no fatalities occurred. The authors concluded that well-designed studies are needed to examine if pelvic vein incompetence (PVI) is associated with CPP, and to explore whether trans-venous occlusion of PVI improves quality of life for these women.

An UpToDate review on “Vulvovaginal varicosities and pelvic congestion syndrome” (Johnson, 2015) states that, in patients with PCS and vulvar varices, the authors suggest treatment of ovarian vein reflux first. This generally leads to reduction in the size of vulvar varicosities. Local sclerotherapy can be performed subsequently, if needed.

### CPT Codes / HCPCS Codes / ICD-9 Codes

**CPT codes covered if selection criteria are met:**

- **36245**: Placement, arterial system; each first order abdominal, pelvic, or lower extremity artery branch, within a vascular family
- **36246**: Placement, arterial system; initial second order abdominal, pelvic, or lower extremity artery branch, within a vascular family
- **36247**: Placement, arterial system; initial third order or more selective abdominal, pelvic, or lower extremity artery branch, within a vascular family
- **+ 36248**: Selective catheter placement, arterial system; additional second order, third order, and beyond, abdominal, pelvic, or lower extremity artery branch, within a vascular family (List in addition to code for initial second or third order vessel as appropriate)
- **37241**: Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; venous, other than hemorrhage (eg, congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles)
- **75894**: Transcatheter therapy, embolization, any method, radiological supervision and interpretation
- **75898**: Angiography through existing catheter for follow-up study for transcatheter therapy, embolization or infusion, other than for thrombolysis

**Other HCPCS codes related to the CPB:**

- **J1110**: Injection, dihydroergotamine mesylate, per 1 mg
- **J1950**: Injection, leuprolide acetate (for depot suspension), per 3.75 mg
- **J9202**: Goserelin acetate implant, per 3.6 mg
- **J9217**: Leuprolide acetate (for depot suspension), 7.5 mg
J9219 Leuprolide acetate implant, 65 mg
S0132 Injection, ganirelix acetate, 250 mcg

ICO-9 codes covered if selection criteria are met:
625.5 Pelvic congestion syndrome

Sclerotherapy:

CPT codes not covered if selection criteria are met:
36012 Selective catheter placement, venous system; second order, or more selective, branch (eg, left adrenal vein, petrosal sinus)

ICO-9 codes not covered for indications listed in the CPB:
625.5 Pelvic congestion syndrome

The above policy is based on the following references:

Pelvic Congestion Syndrome: Treatments

27. Johnson NR. Vulvovaginal varicosities and pelvic congestion syndrome. UpToDate Inc., Waltham, MA. Last reviewed march 2015.
for medical advice and treatment of members. This Clinical Policy Bulletin may be updated and therefore is subject to change.

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