

Corporate Medical Policy

Ovarian, Internal Iliac and Gonadal Vein Embolization, Ablation and Sclerotherapy

File Name: ovarian_and_internal_iliac_vein_embolization
Origination: 12/2004
Last CAP Review: 3/2018
Next CAP Review: 3/2019
Last Review: 7/2018

Description of Procedure or Service

Enlarged ovarian and internal iliac veins can lead to pelvic congestion syndrome in women. Enlarged gonadal veins can lead to varicoceles in men. Therapeutic intervention to treat varicose veins/venous insufficiency may be performed using embolization, ablation or sclerotherapy.

Pelvic congestion syndrome

Pelvic congestion syndrome (also called pelvic venous incompetence) is a condition characterized by 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 associated with dilation, incompetence and reflux of the pelvic veins. Hormonal and/or anatomic factors lead to venous insufficiency of the ovarian and/or internal iliac veins.

As there are many etiologies of chronic pelvic pain, 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 (MRI), computed tomography (CT) scanning, or contrast venography. The syndrome is not well defined and it is unclear whether pelvic congestion syndrome causes chronic pelvic pain. Although venous reflux is common, not all women with this condition experience chronic pelvic pain and, conversely, chronic pelvic pain is reported by women without pelvic congestion syndrome.

Initial treatment of pelvic congestion syndrome includes psychotherapy and medical therapy (e.g., nonsteroidal anti-inflammatory drugs) and hormonal therapy. For those who fail initial therapy, open surgical and laparoscopic ligation of pelvic varices has been considered. Embolization therapy of the ovarian and internal iliac veins has been proposed as an alternative to surgical ovarian vein ligation. Vein embolization can be performed using a variety of materials including coils, glue, and gel foam.

Varicocele

A varicocele is the abnormal dilation of the pampiniform venous plexus of the gonadal veins, the venous drainage from the testicle. The cause is usually retrograde flow in or impaired drainage of the testicular or internal spermatic vein and may be associated with infertility or pain. Varicoceles are present in 15-20% of post-pubertal males and generally get larger over time. Symptoms may include visible or palpable enlarged vein, dull, aching, scrotal pain, feeling of heaviness in the testicle(s), testicular atrophy, changes in testosterone levels, benign prostatic hyperplasia and related urinary or infertility issues.

There are no clear guidelines regarding the established treatment for varicoceles. The main goal of treatment is to interrupt retrograde flow into the pampiniform plexus by occluding the internal spermatic vein. There are many methods available to accomplish this. The traditional surgical approaches are the retroperitoneal internal spermatic vein ligation, now modified to spare the testicular artery; and the inguinal approach where access is through the external oblique to the

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inguinal canal. Robotic surgery and microsurgical varicocelectomy have been used as alternative surgical options for varicocelectomy.

Regulatory Status

Vein embolization is a surgical procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration (FDA). Various materials (eg, coils, glue, gel foam) would be used to embolize the vein(s), and they would be subject to FDA regulation. Several products have been cleared for marketing by FDA through the 510(k) process for embolization techniques (eg, Embosphere® Microspheres [South Jordan, UT], Cook Incorporated Polyvinyl Alcohol Foam Embolization Particles [Bloomington, IN]) and/or embolization of hypervascular tumors and arteriovenous malformations (eg, Contour® Emboli PVA [Marlborough, MA]).

This policy does not address varicose veins of the lower extremities. Refer to policy titled “Varicose Veins of the Lower Extremities, Treatment for”

****Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.*

Policy

Ovarian, Internal Iliac and Gonadal Vein Embolization, Ablation or Sclerotherapy is considered investigational as a treatment of Pelvic Congestion Syndrome and as part of treatment of lower extremity varicose veins. BCBSNC does not provide coverage for investigational services or procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Ovarian and Internal Iliac Vein Embolization is covered

Not applicable.

When Ovarian and Internal Iliac Vein Embolization is not covered

Embolization, ablation or sclerotherapy of ovarian veins, internal iliac veins, or gonadal veins is considered investigational as a treatment of pelvic congestion syndrome and as part of treatment of lower extremity varicose veins.

Policy Guidelines

There are no generally accepted, well-defined clinical criteria for the diagnosis of pelvic congestion syndrome, reflecting the residual uncertainty that there is a causal relationship between pelvic vein incompetence and chronic pelvic pain. Since it is predominantly observed in multiparous women of reproductive age, it suggests both a mechanical and a hormonal mechanism. The data supporting the diagnosis and treatment of pelvic vein incompetence in the presence of chronic pelvic pain are limited and of variable quality, and considerable further high-quality research is required to thoroughly address the research question. Although the research showed embolization provides symptomatic relief in some women, these studies were small case series and the authors concluded that more research is needed to determine what the diagnostic criteria for pelvic congestion syndrome are and the efficacy of embolization as a treatment.

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There is insufficient good quality research to show that embolization, ablation, or sclerotherapy improves long term health outcomes for people with pelvic congestion syndrome, compared to other forms of therapy. Therefore, embolization, ablation, or sclerotherapy of ovarian veins, internal iliac veins, or gonadal veins are considered investigational for the treatment of pelvic congestion syndrome and as part of treatment of lower extremity varicose veins.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcsnc.com. They are listed in the Category Search on the Medical Policy search page.

There are no specific CPT codes for this procedure. The following nonspecific CPT codes may be used: 36012 and 37241.

ICD-10 diagnosis codes: I86.1, I86.2, N94.89

CPT provides clarification regarding the intended use for 37241 as follows:

- *For sclerosis of veins or endovenous ablation of incompetent **extremity veins**, use 36468–36479*
- *Do **not** report 37241 in conjunction with 36468, 36470, 36471, 36475–36479, 75894, 75898 in the same surgical field*

Examples of intended use of 37241 (not an all-inclusive list):

- *Embolization/occlusion of gastric/esophageal varices;*
- *Embolization/occlusion of varicoceles;*
- *Embolization/occlusion of incompetent ovarian vein for pelvic congestion syndrome;*
- *Embolization/occlusion of patent perforators siphoning flow from dialysis access fistula;*
- *Embolization/occlusion of patent perforators siphoning flow from lower extremity venous bypass grafts;*
- *Injection/occlusion/embolization of vascular malformations that are primarily venous;*
- *Injection/occlusion/embolization of vascular malformations that are primarily lymphatic.*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

ECRI Hotline Response - Coil Embolization of the Ovarian Vein for Pelvic Congestion Syndrome (12/12/2003) retrieved on 10/6/04 from http://www.ta.ecri.org/Hotline/Prod/summary/detail.aspx?doc_id=7214&q=%22pelvic+congestion+syndrome&anm

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 4/16/04.

Specialty Matched Consultant Advisory Panel -12/2004.

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 3/7/06.

Specialty Matched Consultant Advisory Panel -12/13/2006

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/2/07.

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/14/08.

Specialty Matched Consultant Advisory Panel - 12/2008

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BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 5/13/2010

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 5/12/2011

Specialty Matched Consultant Advisory Panel – 3/21/12

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 5/10/2012

Specialty Matched Consultant Advisory Panel – 3/2013

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 5/9/2013

Specialty Matched Consultant Advisory Panel – 3/2014

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 6/12/2014

Specialty Matched Consultant Advisory Panel – 3/2015

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 6/11/2015

Specialty Matched Consultant Advisory Panel – 3/2016

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/11/2016

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/10/2017

Champaneria R, Shah L, Moss J, et al. The relationship between pelvic vein incompetence and chronic pelvic pain in women: systematic reviews of diagnosis and treatment effectiveness. *Health Technol Assess*. 2016 Jan;20(5):1-108. Available at: <https://www.journalslibrary.nihr.ac.uk/hta/hta20050/#/full-report>

Bittles M, Hoffer E. Gonadal vein embolization: treatment of varicocele and pelvic congestion syndrome. *Semin Intervent Radiol* 2008;25:261-270.

Medical Director review – July 2018

Policy Implementation/Update Information

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| 2/23/04 | Specialty Matched Consultant Advisory Panel review 12/9/04. Notification of new policy indicating that ovarian and internal iliac vein embolization for pelvic congestion syndrome is investigational. Notification given 12/23/04. Effective date 3/3/05. |
| 1/17/07 | Specialty Matched Consultant Advisory Panel review 12/13/2006. No changes to criteria. Reference sources added. (pmo) |
| 1/12/09 | Reference sources added. No changes to criteria. Specialty Matched Consultant Advisory Panel review 12/2008. (pmo) |
| 6/8/10 | Coding information added to the Billing/Coding section. There is no specific CPT code for this procedure, however CPT 75894 and 37204 might be used. (adn) |
| 6/22/10 | Policy Number(s) removed (amw) |
| 1/18/11 | Description section revised. Policy statement reworded but intent is unchanged. Policy Guidelines updated. Specialty Matched Consultant Advisory Panel review 12/16/2010. Policy accepted as written. (adn) |
| 4/17/12 | Specialty Matched Consultant Advisory Panel review 3/21/12. Added Related Guideline. Updated Policy Guidelines. No change to policy intent. (sk) |
| 4/16/13 | Specialty Matched Consultant Advisory Panel review 3/20/13. No change to Policy statement. (sk) |

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- 7/1/13 Reference added. Updated Billing/Coding section, adding code 36012. No change to Policy statement. ICD-10 diagnosis codes added to Billing/Coding section. (sk)
- 12/31/13 Coding update. CPT 37204 deleted. CPT 37243 added. (sk)
- 4/29/14 Specialty Matched Consultant Advisory Panel review 3/25/14. Senior Medical Director review. Deleted CPT 37243 and added CPT 37241 to Billing/Coding section. Added ICD-9 code 625.5 to Billing/Coding section. No change to Policy statement. (sk)
- 8/26/14 Reference added. No change to Policy statement. (sk)
- 4/28/15 Specialty Matched Consultant Advisory Panel review 3/25/15. (sk)
- 7/28/15 Reference added. Related Guideline removed. (sk)
- 4/29/16 Specialty Matched Consultant Advisory Panel review 3/30/2016. Policy statement unchanged. (an)
- 4/28/17 Updated Policy Guidelines. Added reference. Specialty Matched Consultant Advisory Panel review meeting 3/29/2017. No change to policy statement. (an)
- 4/27/18 Updated Description section. Deleted ICD-9 codes from Billing/Coding section. Reference added. Specialty Matched Consultant Advisory Panel review meeting 3/28/2018. No change to policy statement. (an)
- 9/7/18 Policy name changed from “Ovarian and Internal Iliac Vein Embolization” to “Ovarian, Internal Iliac and Gonadal Vein Embolization, Ablation and Sclerotherapy”. Description section updated with revisions for pelvic congestion syndrome and addition of information regarding varicocele. NOTE: This policy does not address varicose veins of the lower extremities. Refer to policy titled “Varicose Veins of the Lower Extremities, Treatment for”. Policy statement revised to read: **Ovarian, Internal Iliac and Gonadal Vein Embolization, Ablation and Sclerotherapy is considered investigational as a treatment of Pelvic Congestion Syndrome or Varicoceles.** When Not Covered section revised to read: Embolization, ablation or sclerotherapy of ovarian veins, internal iliac veins, or gonadal veins is considered investigational as a treatment of pelvic congestion syndrome or varicoceles. Policy Guidelines updated. Added codes *I86.1, I86.2* to Billing/Coding section. Additional coding instructions added to Billing/Coding section. References added. (an)
- 11/9/18 Policy statement clarified to read: “Ovarian, Internal Iliac and Gonadal Vein Embolization, Ablation or Sclerotherapy is considered investigational as a treatment of Pelvic Congestion Syndrome and as part of treatment of lower extremity varicose veins.” (an)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.