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Corporate Medical Policy

Ovarian and Internal Iliac Vein Embolization, Ablation and Sclerotherapy

File Name: ovarian and internal iliac vein embolization

Origination: 12/2004 **Last Review:** 3/2023

Description of Procedure or Service

Therapeutic intervention to treat varicose veins/venous insufficiency may be performed using embolization, ablation or sclerotherapy.

This medical policy addresses the treatment of pelvic varices:

- 1. For pelvic congestion syndrome and
- 2. As part of treatment of lower extremity venous insufficiency.

Varices in the veins that originate in the pelvis may include the ovarian and iliac veins. The ovarian veins in women are also referred to as the gonadal veins. The gonadal veins in men are known as testicular or internal spermatic veins. Gonadal veins drain into the renal vein and inferior vena cava from the testicle or ovary. This policy does not address treatment of the gonadal vein in men for varicose veins of the scrotum (varicocele).

Pelvic congestion syndrome

Pelvic congestion syndrome (also called pelvic venous incompetence) is a condition described as a chronic pelvic pain syndrome 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 vascular congestion. Because 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, or contrast venography. However, the syndrome is still 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 (eg, nonsteroidal anti-inflammatory drugs) and hormonal therapy. For patients who fail initial therapy, surgical ligation of the ovarian vein may be considered. Embolization therapy and/or sclerotherapy of the ovarian and internal iliac veins has been proposed as an alternative to surgical ovarian vein ligation. Endovascular occlusion can be performed using a variety of materials including coils, vascular plugs, glue, liquid embolic agents, and gelatin sponge or powder (Gelfoam).

Treatment of pelvic varices for lower extremity venous insufficiency

Pelvic venous reflux into lower extremity leg varices has been suggested as a cause of recurrent varicose veins in the lower extremity, often in the setting of pelvic congestion syndrome. It has been proposed that in certain patients, the treatment of lower extremity varicose veins should also include treatment of the pelvic varices.

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 (e.g., coils, vascular plugs, glue, liquid embolic agents, 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 (e.g., Embosphere® Microspheres [South Jordan, UT], Cook Incorporated Polyvinyl Alcohol Foam Embolization Particles [Bloomington, IN]) and/or embolization of hypervascular tumors and arteriovenous malformations (e.g., Contour® Emboli PVA [Marlborough, MA]). Several embolization delivery systems have also been cleared via the 510(k) process for arterial and venous embolization in the peripheral vasculature featuring vascular plugs (e.g., ArtVentive Medical Group, Inc. Endoluminal Occlusion System [EOSTM]) or coils (e.g., Cook Incorporated MReye® Flipper®). FDA product code: KRD.

In November 2004, the sclerosant agent Sotradecol® (sodium tetradecyl sulfate injection) was approved by the FDA for use in the treatment of small uncomplicated varicose veins of the lower extremities that show simple dilation with competent valves (ANDA 040541).

This policy does not address isolated treatment of male gonadal veins or 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 and internal iliac 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 and internal iliac veins is considered investigational as a treatment of pelvic congestion syndrome and as part of treatment of lower extremity varicose veins.

Embolization, ablation or sclerotherapy of any other pelvic 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 higher quality research is required to thoroughly address the research question. Although some research has shown that treatment of pelvic varices provides symptomatic relief in some women, the studies are small case series from which conclusions cannot be drawn with certainty.

Likewise, there is insufficient good quality research to show that embolization, ablation, or sclerotherapy of pelvic varices improves long term health outcomes in the 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.bcbsnc.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: 186.2, 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 <u>not</u> 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

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/hta/20050/#/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

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/9/2018

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/9/2019

Specialty Matched Consultant Advisory Panel – 3/2020

BCBSA Medical Policy Reference Manual [Electronic Version]. 4.01.18, 8/13/2020

Specialty Matched Consultant Advisory Panel – 3/2021

Specialty Matched Consultant Advisory Panel – 3/2022

Medical Director review 3/2022

Ball E, Khan KS, Meads C. Does pelvic venous congestion syndrome exist and can it be treated?. Acta Obstet Gynecol Scand. May 2012; 91(5): 525-8. PMID 22268663

Specialty Matched Consultant Advisory Panel – 3/2023

Medical Director review 3/2023

Policy Implementation/Update Information

oncy implementation/Opdate information	
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)
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)
12/31/1	3 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 <i>186.1</i> , <i>186.2</i> 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)
4/16/19	Reference added. Specialty Matched Consultant Advisory Panel review 3/20/2019. No change to policy statement. (an)
12/31/19	Policy name changed from "Ovarian, Internal Iliac and Gonadal Vein Embolization, Ablation and Sclerotherapy" to "Ovarian and Internal Iliac Vein Embolization, Ablation and Sclerotherapy". Policy guideline and description section updated. Policy updated to no longer address treatment of the gonadal vein in men with varicocele. Removed <i>I86.1</i> from coding section. (eel)
3/24/20	Description section updated with definition of gonadal veins. When not covered section clarified with pelvic veins. No change to policy statement. (eel)
5/26/20	Reference added. Specialty Matched Consultant Advisory Panel review 3/18/2020. No change to policy statement. (eel)
3/31/21	Regulatory status updates. Reference added. Specialty Matched Consultant Advisory Panel review 3/9/2021. No change to policy statement. (bb)
3/31/22	References updated. Specialty Matched Consultant Advisory Panel review 3/2022. Medical Director Review 3/2022. No change to policy statement (tt)
3/31/23	Description updated for clarity. References updated. Specialty Matched Consultant Advisory Panel review 3/2023. Medical Director Review 3/2023. No change to policy statement (tt)

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.