

Subject: Treatment of Varicose Veins (Lower Extremities)

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Description

This document addresses various modalities for the treatment of valvular incompetence (reflux) of the great saphenous vein (GSV), anterior accessory great saphenous vein (AAGSV), or small saphenous vein (SSV) (also known as greater saphenous vein or lesser saphenous vein, respectively) and associated varicose tributaries as well as telangiectatic dermal veins.

Cosmetic: In this document, procedures are considered cosmetic when intended to change a physical appearance that would be considered within normal human anatomic variation. Cosmetic services are often described as those that are primarily intended to preserve or improve appearance.

Clinical Indications

Medically Necessary:

Endoluminal radiofrequency ablation or endoluminal laser ablation:

The following modalities are considered **medically necessary** when the criteria below (I, II, and III) have been met:

- I. Ablative Modalities:
 - A. Endoluminal radiofrequency; **or**
 - B. Endoluminal laser;

and
- II. The veins to be treated include one or more of the following:
 - A. Anterior accessory great saphenous vein (AAGSV); **or**
 - B. Great saphenous vein (GSV); **or**
 - C. Small saphenous veins (SSV)

and
- III. The following criteria are met:
 - A. There is ultrasound documented truncal vein incompetence with retrograde flow of 0.5 seconds duration or greater in the GSV, AAGSV, or SSV; **and**
 - B. The vein to be treated has not been treated with ablative modalities within the timeframes below (1 or 2):
 1. Within the previous 6 weeks; **or**
 2. More than 3 times in the previous 12 months;

and
 - C. One or more of the following criteria (1, 2, or 3) are met:
 1. There is ulceration secondary to stasis dermatitis; **or**
 2. There is hemorrhage from a superficial varicosity; **or**
 3. Symptoms of venous insufficiency or recurrent thrombophlebitis (including, but not limited to, aching, burning, itching, cramping, or swelling during activity or after prolonged sitting) which meet *all* of the following (a, b, and c):
 - a. Are causing discomfort to the degree that employment or activities of daily living are compromised; **and**
 - b. Persist despite appropriate conservative therapy, for no less than 6 weeks (for example, leg elevation, weight loss, and exercise); **and**
 - c. Persist despite a trial of properly fitted gradient compression stockings for at least 6 weeks;

and
 - D. The individual does **not** have untreated incompetent perforator veins.

Sclerotherapy or Echosclerotherapy (including ultrasound guided foam sclerotherapy [UGFS])

The following modalities are considered **medically necessary** when the criteria below (I, II and III) have been met:

- I. Sclerotherapy or Echosclerotherapy Modality:
 - A. Sclerotherapy; **or**
 - B. Echosclerotherapy; **or**
 - C. UGFS (for example, Varithena [polidocanol injectable foam]);

and
- II. The veins to be treated include one or more of the following:
 - A. Perforator veins; **or**
 - B. Varicose tributary or extension (for example, anterolateral thigh vein, anterior accessory saphenous vein, or intersaphenous vein[s]);

and
- III. The following criteria are met:
 - A. The vein being treated is greater than 3.0 mm in diameter; **and**
 - B. Reflux is confirmed by Doppler or duplex ultrasound; **and**
 - C. The service is provided during the *same* operative session as an endoluminal radiofrequency ablation procedure or endoluminal laser ablation procedure which meets the criteria above;

or
- D. The service is performed when *all* of the following criteria are met:

1. Surgical ligation and stripping, endoluminal radiofrequency ablation, or endoluminal laser ablation of the AAGSV, GSV or SSV was previously performed; **and**
2. It has been at least 6 weeks since any prior sclerotherapy, echosclerotherapy, or UGFS in the same extremity; **and**
3. One or more of the following criteria (a, b, or c) are met:
 - a. There is ulceration secondary to stasis dermatitis; **or**
 - b. There is hemorrhage from a superficial varicosity; **or**
 - c. Symptoms of venous insufficiency or recurrent thrombophlebitis (including but not limited to: aching, burning, itching, cramping, or swelling during activity or after prolonged sitting) which meet *all* of the following (i, ii, iii):
 - i. Are causing discomfort to the degree that employment or activities of daily living are compromised; **and**
 - ii. Persist despite appropriate conservative therapy for 6 weeks (such as leg elevation, weight loss and exercise), excluding similar management prior to the required treatment of the great or small saphenous vein; **and**
 - iii. Persist despite a trial of properly fitted compression stockings for at least 6 weeks, excluding similar management prior to the required treatment of the great or small saphenous vein; **and**
4. The service being performed is **not** the sole* treatment for any of the following:
 - a. Symptomatic varicose tributary or extension or perforator veins in the presence of valvular incompetence of the great or small saphenous veins (by Doppler or duplex ultrasound scanning); **or**
 - b. Symptomatic varicose tributary or perforator veins in the absence of saphenous vein reflux or major saphenous vein tributary reflux.

* The term “sole” refers to sclerotherapy without concomitant or prior treatment for valvular incompetence of the great or small saphenous veins, including ligation (with or without vein stripping), endoluminal radiofrequency ablation, or endoluminal laser ablation.

Not Medically Necessary:

Endoluminal radiofrequency ablation and endoluminal laser ablation, are considered **not medically necessary** when the above criteria are not met, including for the treatment of saphenous vein tributaries or extensions (for example, anterolateral thigh and intersaphenous veins).

Sclerotherapy, echosclerotherapy, and UGFS (for example *Varithena [polidocanol injectable foam]*) are considered **not medically necessary** when the above criteria are not met, including but not limited to treatment of secondary varicose veins resulting from deep-vein thrombosis or arteriovenous fistulae.

The COMPASS protocol (Comprehensive Objective Mapping, Precise Image-guided Injection, Antireflux Positioning and Sequential Sclerotherapy) is considered **not medically necessary**.

The following procedures and modalities are considered **not medically necessary** for the treatment of varicose veins of the lower extremities:

- I. Balloon catheter (for example, KAVS procedure)
- II. Coil embolization
- III. Cyanoacrylate adhesion (for example, VenaSeal Closure System)
- IV. Endoluminal cryoablation
- V. Mechanochemical ablation

Cosmetic and Not Medically Necessary:

The following are considered **cosmetic and not medically necessary** for the treatment of telangiectatic dermal veins**:

- A. Sclerotherapy; **or**
- B. Laser treatments (including tunable dye or pulsed dye laser, for example, PhotoDerm[®], VeinLase[™], Vasculite[™])

** Also known as “spider veins” or “broken blood vessels”

Coding

The following codes for treatments and procedures applicable to this guideline are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Radiofrequency or laser ablation, sclerotherapy, echosclerotherapy, UGFS

When services may be Medically Necessary when criteria are met:

CPT

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| 36465 | Injection of non-compounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; single incompetent extremity truncal vein (eg, great saphenous vein, accessory saphenous vein) [when specified as adjunctive to RF or laser ablation or follow-up treatment after ablation or stripping of the great saphenous vein, anterior accessory great saphenous vein, or small saphenous vein] |
| 36466 | Injection of non-compounded foam sclerosant with ultrasound compression maneuvers to guide dispersion of the injectate, inclusive of all imaging guidance and monitoring; multiple incompetent truncal veins (eg, great saphenous vein, accessory saphenous vein), same leg [when specified as adjunctive to RF or laser ablation or follow-up treatment after ablation |



	or stripping of the great saphenous vein, anterior accessory great saphenous vein, or small saphenous vein]
36470	Injection of sclerosant; single incompetent vein (other than telangiectasia)
36471	Injection of sclerosant; multiple incompetent veins (other than telangiectasia), same leg
36475	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; first vein treated
36476	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, radiofrequency; subsequent vein(s) treated in a single extremity, each through separate access sites
36478	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; first vein treated
36479	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, laser; subsequent vein(s) treated in a single extremity, each through separate access sites
37799	Unlisted procedure, vascular surgery [when specified as echosclerotherapy or ultrasound-guided sclerotherapy of other than truncal veins]

HCPCS

S2202	Echosclerotherapy
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ICD-10 Procedure

065P3ZZ-065Q4ZZ	Destruction of saphenous vein [right or left, by percutaneous or percutaneous endoscopic approach; includes codes 065P3ZZ, 065P4ZZ, 065Q3ZZ, 065Q4ZZ; when specified as laser or RF destruction]
06LP0ZZ-06LQ4ZZ	Occlusion of saphenous vein [right or left, by approach; includes codes 06LP0ZZ, 06LP3ZZ, 06LP4ZZ, 06LQ0ZZ, 06LQ3ZZ, 06LQ4ZZ]
3E030TZ	Introduction of destructive agent into peripheral vein, open approach
3E033TZ	Introduction of destructive agent into peripheral vein, percutaneous approach

ICD-10 Diagnosis

I78.0	Hereditary hemorrhagic telangiectasia
I80.00-I80.9	Phlebitis and thrombophlebitis
I82.501-I82.599	Chronic embolism and thrombosis of deep veins of lower extremity
I82.5Y1-I82.5Y9	Chronic embolism and thrombosis of unspecified deep veins of proximal lower extremity
I82.5Z1-I82.5Z9	Chronic embolism and thrombosis of unspecified deep veins of distal lower extremity
I82.811-I82.819	Embolism and thrombosis of superficial veins of lower extremities
I83.001-I83.899	Varicose veins of lower extremities [with complications]
I87.011-I87.099	Postthrombotic syndrome [with complications]
I87.2	Venous insufficiency (chronic) (peripheral)
I87.8	Other specified disorders of veins (phleboscclerosis)
I96	Gangrene, not elsewhere classified
L97.101-L97.929	Non-pressure chronic ulcer of lower limb, not elsewhere classified
M79.604-M79.606	Pain in leg
M79.661-M79.669	Pain in lower leg
Q27.32	Arteriovenous malformation of vessel of lower limb
Q27.8	Other specified congenital malformations of peripheral vascular system
R22.40-R22.43	Localized swelling, mass and lump, lower limb
R60.0	Localized edema
Z86.718	Personal history of other venous thrombosis and embolism
Z86.72	Personal history of thrombophlebitis

When services are Not Medically Necessary:

For the procedure and diagnosis codes listed above when criteria are not met (including for asymptomatic varicose veins diagnosis codes listed below), for all other diagnoses except as listed below as cosmetic and not medically necessary, or for the situations indicated in the Position Statement section as not medically necessary (including but not limited to UGFS codes 36465, 36466 when specified as the **sole treatment** of symptomatic varicose multiple incompetent extremity truncal veins [eg, great saphenous vein, accessory saphenous vein]).

ICD-10 Diagnosis

I83.90-I83.93	Asymptomatic varicose veins of lower extremities
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When services are Cosmetic and Not Medically Necessary:

For the procedure codes listed above, for the following diagnosis, or when the code describes a procedure indicated in the Position Statement section as cosmetic and not medically necessary.

ICD-10 Diagnosis

I78.1	Nevus non-neoplastic (spider veins)
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Other procedures

When services are Not Medically Necessary:

CPT

36473	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; first vein treated
36474	Endovenous ablation therapy of incompetent vein, extremity, inclusive of all imaging guidance and monitoring, percutaneous, mechanochemical; subsequent vein(s) treated in a single extremity, each through separate access sites
36482	Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging

36483	guidance and monitoring, percutaneous; first vein treated Endovenous ablation therapy of incompetent vein, extremity, by transcatheter delivery of a chemical adhesive (eg, cyanoacrylate) remote from the access site, inclusive of all imaging guidance and monitoring, percutaneous; subsequent vein(s) treated in a single extremity, each through separate access sites
37799	Unlisted procedure, vascular surgery [when specified as COMPASS protocol, endoluminal cryoablation, or coil embolization of varicose veins]
0524T	Endovenous catheter directed chemical ablation with balloon isolation of incompetent extremity vein, open or percutaneous, including all vascular access, catheter manipulation, diagnostic imaging, imaging guidance and monitoring [KAVS procedure]
37241	For the following code when specified as coil embolization for varicose veins: 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) [<i>when specified as coil embolization for varicose vein diagnoses</i>]

ICD-10 Procedure

065P3ZZ-065Q4ZZ	Destruction of saphenous vein [right or left, by percutaneous or percutaneous endoscopic approach; includes codes 065P3ZZ, 065P4ZZ, 065Q3ZZ, 065Q4ZZ; when specified as delivery of a chemical adhesive] For the following codes when specified as coil embolization for varicose veins:
06LP0DZ	Occlusion of right saphenous vein with intraluminal device, open approach [<i>when specified as coil embolization for varicose vein diagnoses</i>]
06LP3DZ	Occlusion of right saphenous vein with intraluminal device, percutaneous approach [<i>when specified as coil embolization for varicose vein diagnoses</i>]
06LP4DZ	Occlusion of right saphenous vein with intraluminal device, percutaneous endoscopic approach [<i>when specified as coil embolization for varicose vein diagnoses</i>]
06LQ0DZ	Occlusion of left saphenous vein with intraluminal device, open approach [<i>when specified as coil embolization for varicose vein diagnoses</i>]
06LQ3DZ	Occlusion of left saphenous vein with intraluminal device, percutaneous approach [<i>when specified as coil embolization for varicose vein diagnoses</i>]
06LQ4DZ	Occlusion of left saphenous vein with intraluminal device, percutaneous endoscopic approach [<i>when specified as coil embolization for varicose vein diagnoses</i>]

ICD-10 Diagnosis

All diagnoses

When services are Cosmetic and Not Medically Necessary:

CPT

36468	Injections of sclerosant for spider veins (telangiectasia); limb or trunk
96999	Unlisted special dermatological service or procedure [when specified as tunable dye or pulsed dye laser treatment for varicose veins]

ICD-10 Diagnosis

All diagnoses

Discussion/General Information

Veins carry deoxygenated and nutrient depleted blood back to the heart and lungs. The veins located in the legs must work against gravity to move the blood upward toward the heart and lungs. The vascular system in the legs consists of superficial and deep veins. The superficial veins lie on top of the muscles of the leg and include the GSV and the SSV and their associated tributaries. The deep veins lie deep within the muscle compartments and generally parallel their associated arteries. The deep veins include the tibial, popliteal and femoral veins. The superficial and deep veins run vertically within the leg and are connected by perforator veins in a ladder-like pattern. One-way valves are present in all the leg veins. These valves act against gravity to prevent the blood from flowing backwards (refluxing) to the legs instead of flowing towards the heart and lungs. Reflux of blood back into the vein causes dilation of the vessel, restriction of adequate blood flow to portions of the leg, and in some cases, discomfort or pain. Varicose veins are found most often on the back of the calf or on the inside of the leg between the groin and ankle. The most common valvular failures occur at the saphenofemoral junction (groin) between the GSV and the common femoral vein or at the saphenopopliteal junction (knee) between the SSV and the popliteal vein. Venous anatomy can vary significantly between individuals by the absence or presence of accessory and tributary veins. The following are examples and locations (GSV or SSV) of these veins:

- Anterior accessory (GSV): indicates any venous segment ascending parallel to the GSV and located anteriorly, both in the leg and in the thigh;
- Posterior accessory (GSV): indicates any venous segment ascending parallel to the GSV and located posteriorly, both in the leg and in the thigh;
- Superficial accessory (GSV): indicates any venous segment ascending parallel to the GSV and located more superficially above the saphenous fascia, both in the leg and in the thigh;
- Cranial extension (SSV): courses between the biceps femoris and semimembranosus muscles. A cranial extension of the SSV that communicates with the GSV via the posterior thigh circumflex vein is often termed the intersaphenous vein or vein of Giacomini;
- Superficial accessory (SSV): ascends parallel to the SSV and is located more superficially, above the saphenous fascia;
- Anterior thigh circumflex vein: is a tributary vein of the GSV (or of the anterior accessory GSV) ascending obliquely in the anterior thigh;
- Posterior thigh circumflex vein: is a tributary vein of the GSV (or of the posterior accessory GSV), which ascends obliquely in the posterior thigh.