

**GUNDERSEN/LUTHERAN ULTRASOUND DEPARTMENT**  
**POLICY AND PROCEDURE MANUAL**

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SUBJECT: Post Endovenous Laser Treatment Ultrasound Exam

SECTION: Vascular Ultrasound

ORIGINATOR: Deborah L. Richert, BSVT, RDMS, RVT

DATE: September 13, 2013

APPROVED BY:

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**Scheduling:** One half hour time slot.

**Prep:** None.

**Patient Position:** Supine, reverse Trendelenburg position with patient head elevated 10 – 20 degrees.

**Equipment:** Colorflow duplex ultrasound unit with a 5 MHz linear transducer. A 7MHz linear transducer may be used for superficial imaging. \*\*\*Procedure should be performed at the lowest possible power settings.

**Purpose:** Evaluation of the lower extremity for deep vein thrombosis, and evaluation of the ipsilateral greater saphenous vein for patency post endovenous laser treatment of venous valvular incompetency.

**Exam Protocol:** A complete DVT evaluation of the ipsilateral lower extremity will be performed first. Please refer to the “Lower Extremity Venous Ultrasound – DVT Exam” protocol. The ipsilateral greater saphenous vein (GSV) will then be evaluated for patency from the confluence with the CFV to as far distal as it can be seen (i.e. thigh and calf). It is not necessary to evaluate the status of any of the branch varices that were ligated. (These areas may be described as the “stab wound” areas). This exam will be billed as a venous DVT study, NOT a reflux exam.

**Imaging Protocol:** Complete evaluation of the ipsilateral lower extremity for DVT, however, the calf veins will be evaluated for DVT ONLY in patients that present with calf symptoms. (Please refer to the “Lower Extremity Venous Ultrasound – DVT Exam” protocol for the imaging protocol for that part of this exam).

The GSV imaging protocol:

- Transverse noncompression and compression GSV in proximal thigh.
- Transverse noncompression and compression GSV in mid thigh.
- Transverse noncompression and compression GSV in distal thigh/knee.
- Longitudinal color Doppler images should be taken in these areas as well.
- If the GSV is seen in the calf it should be documented with noncompression/compression images and longitudinal color Doppler images where seen.
- If the GSV is thrombosed as expected, the distance from the proximal end of the GSV thrombus to the CFV confluence should be measured.
- A bilateral exam will include all of the above images on both legs.
- If the GSV is patent in the thigh post EVLT it should be evaluated for venous reflux.