



Common Vascular Problems in Primary Care

Chronic Leg Swelling and Venous Insufficiency

General information:

Chronic leg swelling from venous insufficiency or lymphedema is a common problem in primary care. Chronic venous insufficiency can result from primary failure of venous valve function or it can be the sequela of an episode of venous thrombosis (post-thrombotic syndrome).

Surgical intervention is rarely indicated, usually only for wound management or other specific complications.

Bilateral lower extremity swelling may be a sign of heart failure, hepatic disease, renal insufficiency (especially with nephrotic syndrome), or hypoproteinemia.

Diagnostic tests to consider:

- Lower extremity venous duplex scan (UC Davis Medical Center Vascular Laboratory) - primary screening test for venous thrombosis or chronic obstruction.
- Also, evaluation for peripheral artery disease, with ankle/brachial index measurement

Primary care management:

- Elastic compression stockings (prescription stockings—knee-high often suffice, but thigh-high or other styles may be considered; 30-40 mm Hg compression for moderate to severe swelling, 20-30 mm Hg for mild swelling).
- Exercise (walking, swimming).
- Elevation.
- Diuretics may be useful, but generally have little benefit for swelling due to venous insufficiency or lymphedema.
- Venous ulcer management with layered compression dressing, such as Unna boot

Indications for referral:

- Wounds that fail to heal with local care and compression therapy
- Severe swelling associated with venous obstruction or other vascular disease

Telephone consultation is available from UC Davis Medical Center vascular surgeons for management advice. Contact the clinic resource nurse at (916) 734-7374 or page the surgeon on call through the medical center operator (916) 734-2011.

Indications for urgent referral:

- *Complicated wounds*
- *Serious infection*

Primary care follow-up and surveillance:

Regularly assess compliance with compression and elevation. Stockings need to be replaced at least every six months to ensure sufficient compression is provided.