

Clinical + Etiology + Anatomy + Pathophysiology or “C.E.A.P.” is a comprehensive classification system for diagnosing venous disorders. “C” is for clinical severity rating and is most significant in physician-to-physician communication.



STAGE 1

Spider Veins

C1 refers to patients with telangiectasies (spider) and/or reticular veins.

D.O. Takeaway

Treatment of spider veins can help to slow or halt the progression of venous disease early and at its source.



STAGE 2

Varicose Veins

C2 describes patient with vein diameter that is larger than 3-4mm; the veins are pressurized enough to rise up off the skin.

D.O. Takeaway

If the varicose veins are tense and bulging when the patient stands, then become less so when the leg is elevated, then it is likely a superficial vein issue and easily treatable.



STAGE 3

Edema without Skin Changes

C3 is swelling related to venous disease, often below the knee.

D.O. Takeaway

Best visualized from the back than the front, diagnosis of C3 can be tricky. Only a valve study ultrasound can confirm edema is caused by venous disease, and sometimes the only symptom is swelling but no visible veins.



STAGE 4

Skin Discoloration

C4a, b refers to a variety of skin changes

a: corona phlebectasia (blue pigmentation and eczema)

b: lipodermatosclerosis (hardening of soft tissues) with hemosiderin staining, or atrophie blanche (whitish skin area that looks like scar tissue and can be mistaken for a healed ulcer)

D.O. Takeaway

C4 skin damage almost always occurs on the lower leg at the “gaiter area.” Although superficial venous reflux is usually the cause, this is also found in patients with more severe venous disease, such as post thrombotic syndrome (PTS).



STAGE 5

Skin Changes with Healed Ulceration

C5 is a healed skin ulcer. (One of the shortcomings of CEAP scale is once a C6, a patient can never do better than a C5.)

D.O. Takeaway

Although venous leg ulcers are the most common form of leg ulcer, there are other causes; if the area of healed ulcer is not surrounded by skin changes typical of C4, it may not be venous related. A healed venous leg ulcer is highly likely to recur if the underlying vein problem has not been treated.



STAGE 6

Skin Changes with Active Ulceration

C6 is an open active ulcer and the most severe category. (Despite advances in phlebology and prevention, C6 is still quite common.)

D.O. Takeaway

Venous leg ulcers can look markedly different in different people. The ulcer is an open sore with no skin covering the underlying tissue; it can appear pink with granulation tissue, or it can have yellow exudate. The surrounding skin is usually red as the body is using inflammation to try to heal the ulcer. Often, there is also brown skin around the ulcer.

C1

C2

C3

C4

C5

C6