

# Terminology, Images and Explanations

If you don't work in the medical field, medical terminology can be difficult to understand. So, the AVLS has put together a list of some common terms and images you may come across in your research on vein disorders.

## Anatomical Vein Terms

**Anterior:** The front of a body part.

**Posterior:** Back of a body part.

**Deep Leg Vein:** The veins that are deep in the thigh and leg that carry blood back to the heart.

**Connective Tissue:** This strong tissue is the white tissue that covers muscle.

**Great Saphenous Vein:** (sometimes called GSV or long saphenous vein) A long vein that can be seen just in front of the anklebone. This vein travels along the inside of the leg and thigh (about one-half inch beneath the skin in the thigh) until it empties into the deep vein called the common femoral vein in the groin.

**Perforating Vein:** A vein that passes directly from a superficial vein to a deep vein.

**Popliteal Vein:** The deep vein located behind the knee. The small saphenous vein originates from the popliteal vein.

**Small Saphenous Vein:** (sometimes called SSV, Lesser Saphenous Vein, or LSV) A superficial vein that starts at the outside of the foot and travels up the back of the calf where it empties into the deep vein (popliteal vein) in the crease of the knee.

**Spider Vein:** A tiny varicose vein that may be blue or red color that does not protrude above the skin surface and frequently looks like a spider. Common medical terms you may hear for spider veins are telangiectasias and telangiectatic veins. Slightly larger varicose veins that do not protrude above the skin are called reticular veins.

**Superficial Vein:** Any vein in the lower extremity above the deep fascia that covers the muscles of the thigh and leg.

**Varicose Vein:** A bulging vein that protrudes past the skin surface and usually measures greater than one-fourth of an inch (6.4 mm) in diameter.

### **Vein Function Terms**

**Competent Vein:** Blood flow occurs in the proper direction back to the heart. Also referred to as Having No Reflux Or Normal Flow Direction.

**Incompetent Vein:** Blood flows in the wrong direction. Also referred to as a vein that has reflux.

**Reflux:** Blood that flows backward in the veins.

### **Anatomical Images and Explanations**

**Normal Blood Flow:** After the blood has been replenished with oxygen in the lungs, it is pumped to the body by the heart. Blood that is pumped to the lower extremities is pumped back to the heart partially by the action of the calf muscle pump. The blood returning from the lower extremities in the deep and superficial veins goes past a series of one-way valves. These valves stop the blood from flowing backwards in the veins.

**Reflux:** The valves in the veins close just as blood begins to flow backwards. If the valves do not close properly, the blood falls backwards through the poorly closing or leaking valves. The veins downstream that are now unprotected by valves further upstream are exposed to the weight of an increasingly high column of blood. These downstream veins cannot endure the pressure of the column of blood and expand becoming snake-like in appearance. This causes the veins to bulge through the skin surface and become varicose veins.

### **What is CEAP?**

Although vein problems are common in the legs and thighs, they are unique in everyone. Some might not have any visible abnormal veins. Some might have only spider veins and others might have spider and varicose veins. Or even worse, some may have an open sore (an ulcer) on their leg. In addition to being unsightly, vein problems are unhealthy and can cause a whole variety of symptoms. This has made it difficult in the past for doctors to describe vein disorders and discuss which treatments might be best for the various types of vein issues that different patients have.

In order to decrease confusion and have a standard way to talk about vein problems, a group of experts created a classification system known as **CEAP**. This acronym stands for:

- **Clinical** – what the patient’s veins look like
- **Etiology** – whether the problem is inherited or not
- **Anatomy** – which veins are involved
- **Pathophysiology** – in which direction the blood is flowing (either normal or abnormal flow) and whether blood flow is blocked.

In other words, this classification system describes what the doctor sees on the physical exam, the cause of the problem, the location in the leg, and the mechanism responsible for the manifestation of the vein problem. If you, as a patient, were able to recognize what CEAP classification you are in, it might be helpful for you to decide if and when you should seek help.

The most commonly-used portion of the CEAP classification is the Clinical section (C), which has 7 main categories, and are as follows:

C0 – the lowest degree in severity, means that there is no sign of venous disease when looking at the leg

C1 – means that the person has spider or reticular veins when looking at the leg

C2 – means that varicose veins are present when looking at the leg

C3 – denotes the presence of edema (swelling) of the ankle. Best visualized from the back rather than the front.

C4a,b – includes pigmentation (darkening) of the skin, eczema (redness, itching), lipodermatosclerosis (hardening of the soft tissues), and atrophie blanche (a whitish skin area)

C5 – means that a healed venous ulcer is present when looking at the leg

C6 – is the most severe category, means that an active open venous ulcer is seen on the skin

Do you recognize any of the descriptions that resembles your leg? What C (clinical) are you? Knowing this might assist you in determining what steps you should take to take care of your vein health.

**Information from [www.healthyveins.org](http://www.healthyveins.org)**