

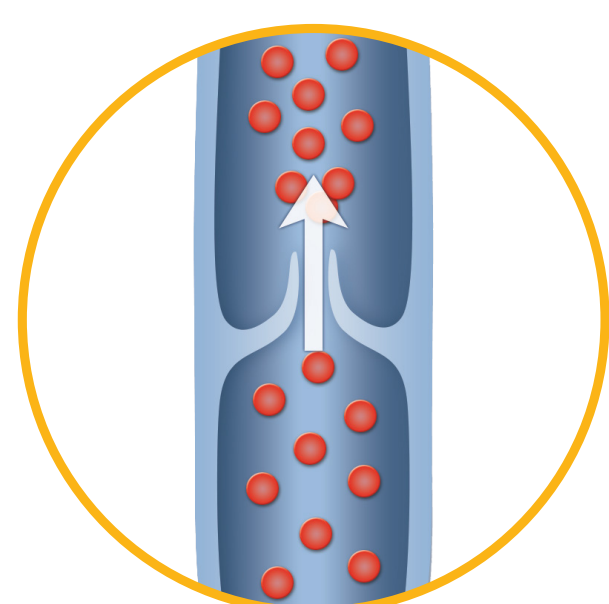


Varicose veins? Tired and aching legs? They could be signs of vein disease.

Understanding the cause

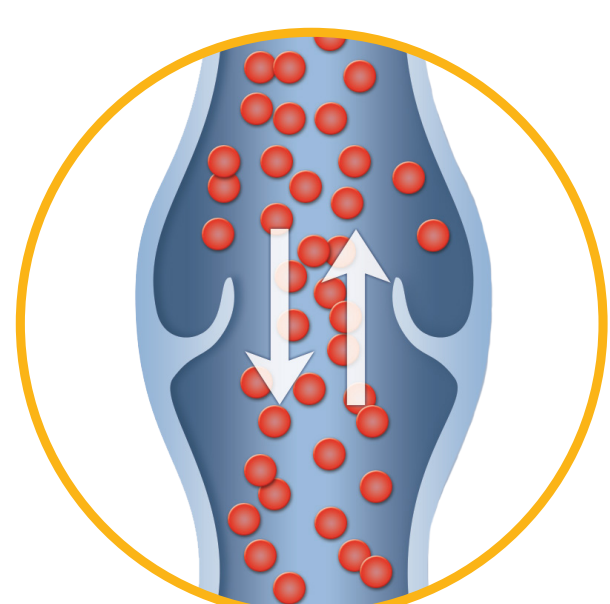
About vein disease

Healthy leg veins have valves that keep blood flowing to the heart.



Normal vein

Valves ensure blood flows in one direction



Diseased vein

Valves that cannot close allow blood to drain and pool

Venous reflux develops when the valves stop working properly and allow blood to flow backward (i.e., reflux) and pool in the lower leg veins.

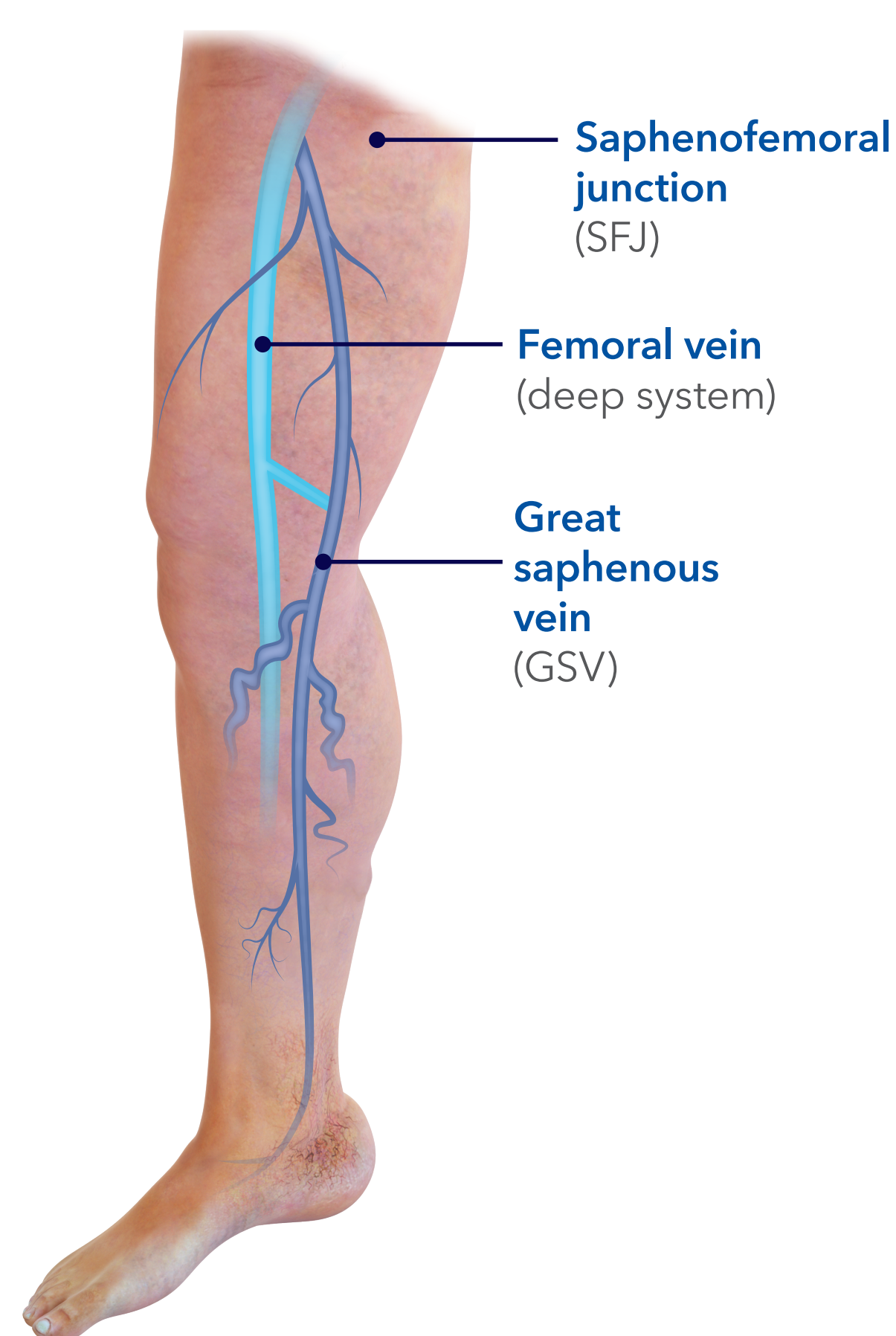
Chronic venous insufficiency

If venous reflux is left untreated, it may worsen over time and develop into a more serious form of vein disease called **chronic venous insufficiency (CVI)**.¹

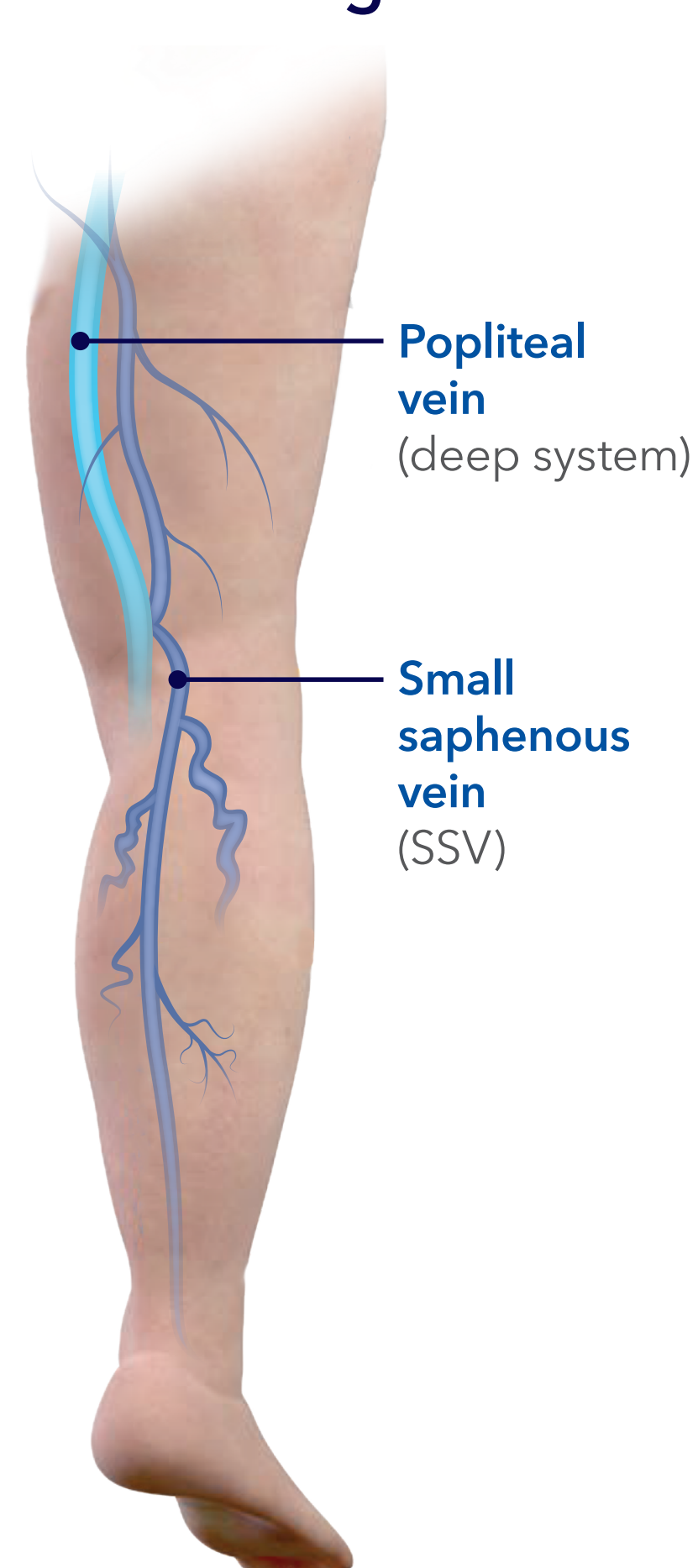
The goal when treating venous reflux disease is to reduce or stop the backward flow of blood.

Leg vein anatomy

Front of leg



Back of leg



CVI symptoms and risk factors

If CVI is left untreated, symptoms can worsen over time. Using ultrasound to scan your leg(s), your physician will determine if vein disease is present.

CVI signs and symptoms in the legs or ankles^{2,3}

- Varicose veins
- Aching or pain
- Swelling
- Cramping
- Heaviness or tiredness
- Itching
- Restlessness
- Skin changes and/or discoloration
- Open sores or ulcers

CVI risk factors²

- Family history
- Lack of exercise
- Leg injury or trauma
- Prolonged sitting or standing
- Obesity or excess weight
- Current or previous pregnancies
- Smoking
- Blood clot (deep vein thrombosis)

CVI and varicose veins are more common than you think. More than 30 million people in the United States have venous reflux or the more serious disease, CVI.³

Visible symptoms of vein disease



Varicose veins



Leg swelling



Skin color and texture change



Venous ulcers

References
¹ Eberhardt RT, Raffetto JD. Chronic venous insufficiency. *Circulation*. July 22, 2014;130(4):333-346.
² Johns Hopkins Medicine. Chronic Venous Insufficiency. Available at: <https://www.hopkinsmedicine.org/health/conditions-and-diseases/chronic-venous-insufficiency>. Accessed April 13, 2022.
³ Gloviczki P, Comerota AJ, Dalsing MC, et al. The Care of Patients with Varicose Veins and Associated Chronic Diseases: Clinical Practice Guidelines of the Society for Vascular Surgery and the American Venous Forum. *J Vasc Surg*. May 2011;53(5-Suppl):2S-48S.