

# Varicose Veins Backgrounder



## What Are Varicose Veins?

Varicose veins are a clinical presentation of superficial venous insufficiency—a condition in which veins are inefficient in returning blood to the heart due to venous hypertension.<sup>1,2</sup> One-way valves that normally direct blood towards the heart are damaged or missing, and instead, some blood refluxes (moves in the opposite direction) and often pools in the vein.<sup>1,2</sup>

Varicose veins are 3 mm or greater in width<sup>3</sup>, appear twisted and cord-like, and tend to be blue to dark purple in color.<sup>4,5</sup>

## What Is the Prevalence of Varicose Veins?

In the United States, more than 30 million adults over 40 years old have varicose veins. Women are twice as likely as men to develop varicosities.<sup>3</sup>

## What Are the Causes of Varicose Veins?

Varicose veins can be the result of a partially blocked vein (e.g., due to deep vein thrombosis [DVT]), failure of venous valves, calf-muscle pump dysfunction or a combination of these factors.<sup>6</sup> Failure of venous valves is the most common form of venous disease.<sup>6</sup>

There are a number of risk factors that can contribute to the development of varicose veins, including<sup>1</sup>:

- Increasing age
- Female gender
- Being tall
- Family history of vein problems<sup>5</sup>
- History of DVT in the legs
- Obesity
- Pregnancy
- Lack of movement<sup>4</sup>, (i.e., sitting or standing for a long time)

## What Are Common Symptoms of Varicose Veins?

Varicose veins may not cause any problems, or they may cause symptoms and complications that may lead to absenteeism, disability and decreased quality of life<sup>3</sup>. Symptoms of varicose veins include<sup>3</sup>:

- Leg pain or aching
- Heaviness
- Restless legs
- Cramps
- Throbbing
- Fatigue
- Itchiness
- Tingling
- Edema or swelling
- Skin changes
- Ulcers

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## What Are the Consequences of Untreated Varicose Veins?

Untreated varicose veins tend to worsen over time and can lead to hemorrhage (in rare cases, fatal hemorrhage), thrombophlebitis, deep vein thrombosis and venous ulcers.<sup>7-12</sup>

Approximately 500,000 patients in the United States have venous ulcers,<sup>13</sup> and physical impairment seen with venous ulcers is comparable with that of congestive heart disease and chronic lung disease.<sup>14</sup>

In the United States, chronic venous ulcers cost approximately \$2 billion per year due to lost wages.<sup>15</sup>

## Why Do Varicose Veins Go Untreated?

Although the prevalence of varicose veins, or venous disease, is more than twice that of peripheral arterial disease (PAD),<sup>16, 17</sup> most vascular surgical practices are better equipped to care for PAD, with less attention placed on venous disease.<sup>18</sup>

The lack of treatment for venous disease may be due to the perception that varicose veins are primarily a cosmetic issue.<sup>3, 19, 20</sup> However, varicose veins are a real medical concern that often requires treatment.

## How Are Varicose Veins Treated?

Superficial venous insufficiency (SVI) and varicose veins can be managed and treated in a variety of ways. Conservative measures to manage the symptoms of varicose veins include compression stockings and avoidance of long periods without movement. More invasive treatment options include surgery or ablation. If you think you may be experiencing symptoms caused by SVI and varicose veins, it is important to talk to your doctor, who can diagnose your condition and determine which treatment plan is appropriate for you.

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