

A Comprehensive Guide to Understanding the Increased Vulnerability of Women to Venous Insufficiency and Related Complications

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DESCRIPTION

Venous insufficiency (VI) is a condition that occurs when the veins in the legs are unable to pump blood back to the heart effectively, leading to a range of symptoms such as swelling, varicose veins, leg pain and in severe cases, ulcers. While both men and women can experience venous insufficiency, women are more likely to develop this condition and several gender-specific risk factors contribute to this increased prevalence. Understanding these factors is essential for both prevention and effective management.

One of the most significant risk factors for venous insufficiency in women is hormonal fluctuations. Female hormones, particularly estrogen and progesterone, have a direct impact on the venous system. These hormones relax the smooth muscle of the veins, which can weaken the vein walls and lead to poor circulation. This is why women are more prone to conditions like varicose veins, especially during periods of hormonal changes such as pregnancy, menstruation and menopause.

Pregnancy is particularly important when discussing venous insufficiency in women. The increased blood volume, combined with the pressure exerted by the growing uterus on the pelvic veins, can lead to poor blood flow in the legs. As a result, many women experience symptoms of venous insufficiency, including swollen legs, aching and visible veins. The risk of developing varicose veins and chronic venous insufficiency is significantly higher during and after pregnancy, particularly for women who have had multiple pregnancies.

Age is another major factor in the development of venous insufficiency and women are generally more likely to experience this condition as they grow older. With age, the veins lose elasticity and the valves inside the veins that help regulate blood flow become weakened or damaged. This can cause blood to pool in the lower legs, resulting in the characteristic symptoms of venous insufficiency. Since women tend to live longer than men, they also face a longer duration of exposure to these age-related changes, making them more susceptible to developing venous insufficiency later in life.

Genetic factors also play a significant role in the development of venous insufficiency. Women with a family history of the condition are at a higher risk of developing it themselves. Studies show that venous insufficiency tends to run in families and a woman with a mother or sister who has varicose veins or other signs of chronic venous disease is more likely to experience similar issues.

While hormonal and genetic factors are important, lifestyle choices also contribute to the development of venous insufficiency in women. Prolonged periods of standing or sitting can put excessive pressure on the veins in the legs, leading to venous stasis (sluggish blood flow). This is especially common in women who work in jobs that require long hours of standing, such as retail, teaching, or healthcare. Similarly, women who spend a lot of time sitting, particularly those who do so with their legs crossed, are also at risk of developing venous insufficiency.

Obesity is another critical factor that contributes to venous insufficiency. Excess weight places added pressure on the veins, making it more difficult for blood to flow upwards toward the heart. Women, who are statistically more likely to be overweight or obese than men, are more vulnerable to the adverse effects of this pressure. Furthermore, being overweight can exacerbate other risk factors, such as a sedentary lifestyle and hormonal imbalances.

Another aspect of venous insufficiency in women is the use of hormonal contraceptives or Hormone Replacement Therapy (HRT). Birth control pills, as well as HRT used during menopause, contain estrogen, which can contribute to weakened veins and increased risk of blood clots. This is especially true for women who smoke or have a family history of venous disorders. Although hormonal therapy can be essential for many women, it's important to recognize the potential risks and discuss them with a healthcare provider, especially for those with a higher risk of venous insufficiency.

The symptoms of venous insufficiency can vary from mild to severe and may include leg pain, swelling, cramping, itching and visible veins (such as varicose veins). Women may also experience

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fatigue, a feeling of heaviness in the legs and even skin changes such as pigmentation or ulcers in advanced cases. These symptoms can have a significant impact on a woman's quality of life, affecting her ability to work, exercise and perform daily activities.

In addition to the physical discomfort, venous insufficiency can lead to complications such as Deep Vein Thrombosis (DVT) or venous ulcers, particularly if left untreated. DVT is a serious condition that occurs when blood clots form in the deep veins of the legs, potentially leading to life-threatening complications like pulmonary embolism. Women with venous insufficiency who are pregnant or on hormonal therapy are at higher risk for DVT.

CONCLUSION

Venous insufficiency is a condition that affects both men and women, but women are disproportionately impacted due to a

combination of hormonal, genetic and lifestyle factors. Pregnancy, hormonal changes and age-related changes in vein elasticity are just a few of the factors that put women at greater risk. Understanding these gender-specific risks is important for both prevention and early intervention. By maintaining a healthy weight, avoiding prolonged periods of sitting or standing and seeking appropriate medical treatment, women can manage the symptoms of venous insufficiency and reduce the risk of complications. Early detection and modified treatment plans can help improve quality of life and prevent the progression of the condition.