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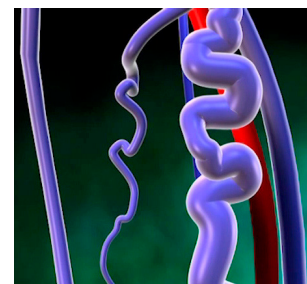
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Before delving into this letter, it is crucial for the reader to grasp, in a succinct manner, certain fundamental aspects regarding the functionality of the circulatory system and the triad of blood vessels: arteries, veins, and blood.

Primarily, arteries serve as conduits emanating directly from the heart, ferrying oxygen-rich blood to all our vital organs to facilitate their physiological processes. Subsequently, tissues extract oxygen from the blood, which then returns deoxygenated to the heart through the veins. It then proceeds to the lungs for oxygenation, completing the circuit as it returns once more to the heart, thus perpetuating the cycle.

1. What are varicose veins?

Varicose veins are twisted and enlarged veins. Any vein near the surface of the skin can become varicose. When we talk about varicose veins, we most commonly refer to the veins in the legs, but varicose veins can also occur in the rectum, known as hemorrhoids, or in the scrotum (where the testicles are located), known as varicocele.



2. Why do varicose veins form?

Veins are like "pipes" that have valves to prevent blood from flowing backward and thus aid in carrying blood to the heart. Therefore, if the valves do not function properly, blood stagnates due to gravity, increasing the pressure inside the vein. This dilation of the vein leads to the formation of varicose veins.



3. How do varicose veins manifest?

The symptoms vary depending on the size and location: small varicose veins usually do not cause any symptoms, only affecting aesthetics. When varicose veins are thicker and larger, they may manifest as:

- Sensation of pain or heaviness in the legs.
- Burning sensation, pulsating sensation, muscle cramps, and swelling in the lower limbs
- Increased pain after prolonged periods of sitting or standing.
- Burning sensation around one or more veins.
- Changes in the skin color around the varicose vein.
- Occasionally, a varicose vein may become inflamed, appearing as a red, warm, and very painful cord, known as Phlebitis.

4. How common are varicose veins and who can get them?

It is estimated that four out of every ten adults, both men and women, will develop varicose veins. However, there are risk factors that increase their likelihood of occurrence:

- **Advanced age:** Aging naturally wears down the valves in the veins that help control blood flow. Over time, this wear and tear can cause the valves to become insufficient, leading to blood returning to the veins, where it accumulates.
- **Female sex:** Women are more likely to suffer from the condition. Hormonal changes before menstruation or during pregnancy or menopause may be a factor, as female hormones tend to relax the walls of the veins. Hormonal treatments, such



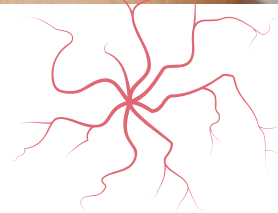
as birth control pills, can also increase the risk of varicose veins.

- **Pregnancy:** During pregnancy, the body's blood volume increases. This change contributes to the baby's development but can also enlarge the veins in the legs.
- **Family history:** If other family members have had varicose veins, there is a greater likelihood that you will develop them.
- **Obesity:** Being overweight puts additional pressure on the veins.
- **Prolonged standing or sitting:** Movement helps blood circulate, reducing the pressure exerted by blood within the veins.



5. How are varicose veins diagnosed?

During a physical examination, a general practitioner may detect the presence of varicose veins in a patient. In such cases, the patient should be referred to a specialist who will conduct a more precise diagnosis using advanced technology to



provide an accurate diagnosis and offer management strategies that only they can provide.

6. When should you seek medical advice?

If you notice one or more enlarged veins that you did not have before, and if you experience one or more symptoms (refer to question 3), it is advisable to consult a doctor.

7. How are varicose veins treated?

The treatment should be prescribed by a specialist, who will offer a treatment plan based on the clinical context: age, risk factors, location, additional diseases the patient suffers from (see question 3). Similarly, the treatment depends on the severity of the disease, with the initial stage being the presence of telangiectasias or "spider veins," and the most advanced stage being the development of a venous ulcer.

8. General measures to improve venous circulation:

- Avoid sitting or standing for long periods without moving your legs.
- When reading, watching TV, or listening to music, elevate your legs on a chair and rotate your feet in circles in both directions.
- When lying down, elevate your feet above the level of your heart.
- Extend your legs, stretch, and flex your feet.
- If you are going on a long car or plane journey, stand up and walk every hour. Throughout the trip, wear custom-fitted compression stockings with pressure gradients. Consult your doctor (this is for preventing leg clots).
- Avoid tight clothing or elastic bands for prolonged periods, especially if you will be sitting for long periods.
- Never wear tight stockings that are not prescribed by your doctor, as they hinder blood circulation in the superficial veins.
- During pregnancy, use appropriate elastic compression. Maintain a fiber-rich diet that includes water, proteins, fruits, and vegetables.
- Control your weight and exercise regularly to avoid overloading your veins.



Recommended readings

Varicose veins and telangiectasias of the lower extremities. Cardio VID Clinic. Medellín, Colombia.

Web pages consulted

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