Factor V Leiden

Factor V Leiden mutation (change in the core of a cell) is the leading cause of blood clots among Caucasian (white) populations. However, only 5% of people with Factor V Leiden ever develop clots. The most common areas for clots to occur are in your leg (also known as deep venous thrombosis or DVT) or lungs (also known as pulmonary embolism or PE). There are two types of Factor V Leiden mutations, heterozygous and homozygous.

- Heterozygous is when only one of the Factor V genes are changed. This occurs in about 5-10% of white individuals. About 30% of patients that are diagnosed with a blood clot will be found to have a heterozygous Factor V Leiden mutation. Factor V Leiden gene alteration is the most common inherited risk factor for a clotting disorder.
- Homozygous is rare. This is where both Factor V genes are altered. These individuals have a much higher risk of developing a blood clot than those who do not have the gene alterations.

Many clots are triggered by events such as surgery, pregnancy, use of hormonal contraception or replacement therapy, or injury. It is important that you notify your provider prior to having surgery, pregnancy, use of hormonal contraception, or hormonal replacement therapy. The risk of blood clots is highest 6 to 8 weeks after birth of the child.

Factor V Leiden is uncommon in African American, Hispanic and Asian populations.

signs and symptoms

- Leg pain, tenderness, swelling, increased warmth or redness in one extremity.
- Cough
- Chest pain
- Shortness of breath, having a hard time breathing
- Rapid heartbeat
- Rapid breathing

If you experience any of these symptoms, please seek emergency care.

treatment

People with Factor V Leiden are likely only treated when they have a blood clot. This should be discussed with your medical provider. It is important to reduce or eliminate other risk factors and notify all your healthcare providers.

Information adapted from www.raredisease.info.nih.gov.

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