



Gene Splash

Did you know...

Clotting abnormalities often have a genetic component. Over one third of unprovoked clots have at least one of the following factors.

Some blood clots are provoked like those that develop after surgery or because of a trauma. Others are because of the following five most common deficiencies or gene mutations.

- 1 Protein C deficiency
- 2 Protein S deficiency
- 3 Antithrombin deficiency
- 4 Factor V(Leiden) mutation
- 5 Prothrombin gene mutation

Clinical Relevance:

Further testing may be required if there is no determined reason for a blood clot. Patients with a second incidence of a blood clot should be tested for the presence of a clotting disorder.

In almost all cases, the presence of an inherited blood clotting disorder in an individual indicates

- At least one parent also has disorder
- There is a 50% chance that any sibling or child of that individual will have it as well
- Other blood relatives including aunts, uncles and cousins may also have mutation.



References:

1. U.S. Dept of Health and Human Services
The Surgeon General's Call to Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism
2. M Cushman, Inherited Risk Factors for Venous Thrombosis