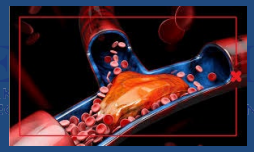
The Super Clot: Prothrombin Mutation and OCP's

ArnotHealth

Ganesh Arun DO, Halima Bakillah MD, Sowmya Srinivas MD, Mohamed Manaa MD, Dayakar Reddy MD



Background

Virchow's Triad in DVT's

- Venous stasis,
- Blood coagulation
- Venous damage

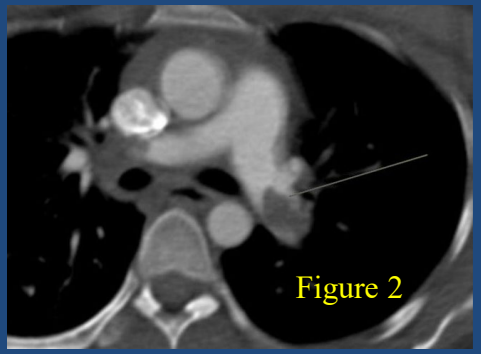
Case Presentation

A 30-year-old female with no significant medical history complained of three weeks of progressive shortness of breath on exertion. Only medication is OCP's.

Her symptoms progressed quickly once arriving to the ED. She coded for a total of 4 episodes.

Positive Prothrombin Factor II Mutation.

tPA was emergently administered for bilateral lower lobe pulmonary emboli. Heparin drip was eventually transitioned to oral anticoagulation with Eliquis (Apixaban), with plan to continue 6 months.



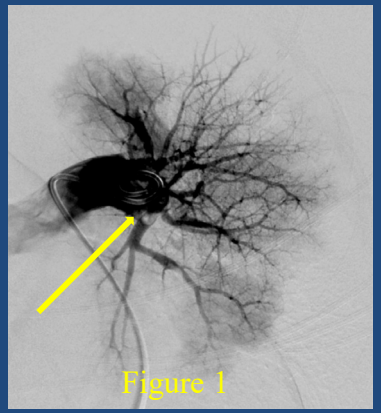


Fig 1: CT Angiogram of Pulmonary Arteries (CTPA) shows a large filling defect within the left main pulmonary artery compatible with pulmonary embolism (arrow).

Discussion

Fig 2: Left pulmonary angiogram demonstrates large obstructing pulmonary embolism (arrow) in the lower lobe branches of left pulmonary artery. Subsequent transcatheter thrombectomy restored flow into the left lower lobe pulmonary branches.

The risk for FII G20210A carriers (secondary cause of hereditary thrombophilia presents in 2% to 4% of Caucasians) is 16-fold increased.

She did develop a super clot with the combination of OCP's and eventual diagnosis of prothrombin factor II mutation.

Conclusion

Our patient didn't have classical thrombosis risk factors such as smoking, surgery, or malignancy. This case demonstrates the importance of hypercoagulability workup in an otherwise healthy young women as the risk for thrombosis is increased when in combination with OCP's