What is the d-Dimer test?

The d-Dimer test is a blood test used to rule out active blood clot formation.

If you have a negative (normal) d-Dimer result, that nearly rules out the possibility that you have a blood clot actively forming.

If you have a positive d-Dimer test result, that does not mean that you have a blood clot; rather a positive d-Dimer result means that additional testing may be needed to see if a blood clot exists.

When the clotting system is activated to form a clot, part of the process produces a substance called thrombin.

Thrombin does several jobs, one of which is to covert a clotting protein, fibrinogen, to fibrin. Fibrin molecules then link together to form a net of protein strands that form the basis of the clot.

One of the other functions of thrombin is to activate the body's own clot dissolving system. In this manner, thrombin both activates the last step in the clot formation process, and it activates the system that helps dissolve clots.

If the d-Dimer blood test is negative (or normal), that virtually rules out active blood clot formation with a greater than 95% certainty.

If the d-Dimer test result is above normal, that does not mean that you have a blood clot because other factors such as infection, inflammation and pregnancy can increase the d-Dimer but it does means that additional testing may be needed to see if a blood clot exists.