Cockrill Clip 2 Transcript

AUDIENCE: So I think our group mentioned before, our patient has some risk factors for VTE. So when we talked before in our previous class, we talked about how stasis, endothelial injury and hypercoagulability can lead to a thrombosis event. And in this case, our patient has probable stasis from sitting in the plane for a long time and maybe some vascular injury from her fracture.

So that's two of the varicose triangle that might lead to a VTE event in the future.

BARBARA COCKRILL: Great. So the issue is, if this is negative, are you going to stop? No. I mean, because your pre-test probability, I mean, you're really worried that she's going to have a PE. So you're not going to stop with a negative test. And that's the whole point of having a screening test that's sensitive and not specific.

Matthew, do you have anything else to add on that?

MATTHEW HEENEY: By doing the scoring for pre-test probability, you could increase the specificity by applying tests only to certain populations that they meet certain scores. And so for venous thromboembolism and for DVT and PE, there are lots of scores that have been made over the years in internal medicine. And that's because this is such a common issue to see in the [INAUDIBLE] setting.

JOHN MAYER: So the converse is also true, though, that when you do a test for which there's a low likelihood of it being positive, then your incidence of false positives goes up. So if you had an otherwise totally healthy normal person walked in off the street, who had a low probability of having a pulmonary embolism, and you drew the D-dimer, the likelihood of a false positive would be quite high.

So that's sort of the flip side. This is Bayes' theorem. But that's the flip side. So when you're doing a test for which you have a low probability that it's likely to be positive, then the incidence of false positives goes up.

BARBARA COCKRILL: So if you have a low probability and it's negative, you're good. That make sense? I mean, if you don't really suspect a PE, but you're just kind of sending the test to make sure, and it's negative, you've got a low prior probability and it's negative, it helps you rule out the pulmonary embolism and you don't need to go further.

But the point is, this lady is not low probability. She's got a swollen leg. She's got a lot of risk factors. So we wouldn't-- even if it were negative, we wouldn't stop and we would keep moving on.