Transcript Details

This is a transcript of a continuing medical education (CME) activity. Additional media formats for the activity and full activity details (including sponsor and supporter, disclosures, and instructions for claiming credit) are available by visiting:
https://reachmd.com/programs/cme/case-recognizing-the-signs-symptoms-of-vte/17972/

Released: 01/19/2024
Valid until: 01/19/2025
Time needed to complete: 1h 00m

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Case: Recognizing the Signs & Symptoms of VTE

Announcer:
Welcome to CME on ReachMD. This episode is part of our MinuteCE curriculum.

Prior to beginning the activity, please be sure to review the faculty and commercial support disclosure statements as well as the learning objectives.

Dr. Narcisse:
Hi everyone, my name is Dennis Narcisse. I'm a Cardiology Fellow at Duke University Medical Center and the Duke Clinical Research Institute. I'm going to talk through a case about recognizing the signs and symptoms of venous thromboembolism.

So, in the case, we have a 72-year-old lady here with COPD, hypertension, and obesity. She's got medications listed here. And she's presenting with acute chest pain and dyspnea over the last 12 hours. She's got no history of DVT or PE, or no cancer history. And she's tachycardic on exam on presentation, but otherwise unremarkable. And I think the question here is: What is the likelihood that the case is VTE?

So, venous thromboembolism is a single disease entity that encompasses two clinical presentations: deep vein thrombosis, or DVT, and pulmonary embolism. And it affects over 10 million people worldwide every year. And it remains one of the highest preventable causes of hospital death, and short- and long-term morbidity and disability in our health system. And it's important to diagnose these patients accurately to both treat them appropriately and reduce their risk, but also to reduce unnecessary exposure to anticoagulation.

For deep vein thrombosis, this impacts over 2 million Americans per year. And the features of it are nonspecific and many patients are asymptomatic. Some of the common risk factors include immobilization, recent surgery, obesity, malignancy, oral contraceptives, pregnancy, and age greater than 75.

And we use scoring systems such as the Wells score to give ourselves pretest probability of the likelihood that the patient has DVT. The factors that go into this include the risk factors such as active cancer or recent travel, and some of the symptoms that are listed here. And also, if there's an alternative diagnosis really is important.

And I think one of the questions that we often think as clinicians is: I'll know a DVT when I see it, right? And I think the slide is important to remind ourselves that that's not always the case. There are certainly symptoms that are consistent with DVT, such as pain in the lower extremities, tenderness, erythema, and swelling. However, many studies have shown over time that these have very low specificity and sensitivity. And these clinical features are really not useful in helping us, and clinical gestalt is more; however, the absence of these symptoms does significantly decrease the likelihood of DVT drastically.

In terms of acute pulmonary embolism, there's a wide variety of presentations in these patients. They can range from asymptomatic to shock or sudden death. And it's critical to have a high level of suspicion of these because missing the diagnosis can increase the mortality of these patients drastically. The most common symptoms in those patients who do have symptoms with pulmonary embolism include dyspnea at rest, chest pain, cough, or orthopnea. And less than half of the patients have calf or lower extremity symptoms, wheezing.

And back to our case here. So, I want to highlight some of the important features that suggest that this patient have a VTE. So, she's of advanced age, 72 years old. She has obesity with a BMI of 38. And her presenting symptoms was acute chest pain and dyspnea over 12 hours without clear etiology otherwise. She also had a recent hospitalization that was 3 days that would suggest some form of immobilization, and she had sinus tachycardia which is a common presenting symptom of PE. One note here is that she had normal EKG, and that is the most common presenting EKG of patients with pulmonary embolism. Often the V1 Q3 S3 is correlated with pulmonary embolism on EKG, but it's a very rare finding. And so, if we calculate her Wells criteria for PE, we can objectively say that PE is likely in this case, and further testing would be warranted.

So, in conclusion, VTE, or venous thromboembolism, is composed of DVT and PE, and these are often challenging both to recognize clinically due to varying degrees of symptoms. Clinical signs and symptoms of VTE lack specificity individually, but the absence of symptoms drastically reduces the likelihood. And we utilize, clinically, scoring systems such as Wells Scoring to help us determine the pretest probability of DVT and PE. This helps guide us in both next steps in diagnosis and future management.

Thank you so much for your attention.

Announcer:
You have been listening to CME on ReachMD. This activity is jointly provided by Global Learning Collaborative (GLC) and TotalCME, LLC. and is part of our MinuteCE curriculum.

To receive your free CME credit, or to download this activity, go to ReachMD.com/CME. Thank you for listening.