

72. DVT, PE: symptoms

Last Updated: 5/13/2004

Q1: "I was wondering how do you know when you have a blood clot? Are there specific signs, things that tip you off?"

A1: Yes, often there are specific symptoms that tip you off; however, symptoms can also be subtle and can be confused with other disease. Importantly: presence or absence of risk factors for deep vein thrombosis (DVT) and pulmonary embolism (PE) are important to assess the likelihood that a patient's symptoms may be due to DVT or PE. For details see the patient stories and discussion below.

Q2: "When I had my DVT, it pretty well hit me all at once. I remember having a little bit of backache the weekend before, but I had passed it off as coming from the road trip I had done earlier. When I was walking to work my leg suddenly stiffened up and hurt bad. It was also very swollen. By the time I was admitted to the hospital it was starting to change color."

A2: This patient presented with the classic symptoms of DVT: (a) leg pain, (b) leg swelling, (c) leg discoloration. Patients may also have lower back pain if the clot is in the veins in the pelvic area or abdominal vein (= inferior vena cava = IVC). It sounds as if a prolonged road trip may have been the external triggering factor in this patient.

Q3: "I had what I thought was a pulled muscle in my left calf for about three weeks. I play golf about 4 times per week and usually walk and carry my bag. I figured this was why it wasn't getting better. While golfing one day I felt like my heart skipped a beat; then I became very weak and didn't have the energy to carry my bag. I felt no pain and could take a full breath, but knew I wasn't getting enough oxygen to my lungs. It was 2 days later that my calf started swelling and went to my Dr., where he found I had a DVT and 2 days earlier had a PE."

A3: This patient also presents in a classical manner: unspecific leg symptoms, such as muscle cramp, leg tightness, leg heaviness, but initially no discernible swelling. The suspicion that this may be a DVT is increased if the patient has risk factors for venous clots:

1. is taking contraceptives or hormone replacement therapy,
2. is pregnant or delivered within the last few weeks,
3. has had a thrombosis before,
4. has a family history of thrombosis,
5. had surgery within the last several weeks,
6. had recent trauma,
7. has been immobilized,
8. has been on a long car-, bus-, or airplane trip,
9. is overweight,
10. smokes,
11. has a malignant tumor or is receiving chemotherapy,
12. had no preceding unusual activity that could otherwise explain these symptoms.

Patients and physicians not infrequently mistake symptoms of DVT for:

- Charley horse,
- muscle sprain,
- twisted ankle,
- muscle ache,
- sore muscle.

The above patient then develops symptoms of PE: he/she has air-hunger (in medical terms: dyspnea). The full blown classic symptoms of PE are:

1. shortness of breath, either at rest or with exertion; typically of sudden onset,
2. chest pain in any area of the chest, front or back, upper or lower; typically worse on taking a deep breath in,
3. cough, sometimes with bloody phlegm,
4. heart racing or pounding,

5. passing out (if it is a big PE),
6. Sudden death (if it is a hug PE).

The above patient then develops leg swelling. Some patients develop significant symptoms within a few hours or a day; in others symptoms develop slowly and creep up over several days or sometimes even a few weeks. **The classic symptoms of DVT are:**

1. leg pain; often diffuse in the calf or calf plus thigh; pain is typically not localized in one specific, well-circumscribed area of the leg; it often feels like a deep ache;
2. leg swelling, typically diffuse,
3. bluish or reddish discoloration, typically diffuse,
4. warmth - the whole calf or whole thigh may feel warmer.

Not typical for DVT is when a patient has very well circumscribed tenderness, pain, swelling, redness, or warmth, when the skin is exquisitely tender and the pain feels like it is right in the skin, or when the patient is able to feel a clot or a firm cord. Those symptoms suggest a superficial clot (=superficial thrombophlebitis).

Q4: "How much pain does a DVT give? My DVT 3 years ago gave pain that was at the screaming level. Are they always like that? The pain level this time is much less; does that mean it is NOT a DVT? It's more like a cramp."

A4: Some patients have a lot of pain from an acute DVT, others have none. Some have a lot of swelling, others none; some have diffuse warmth and bluish/purplish discoloration, others none. It is often difficult and not infrequently impossible to tell whether leg symptoms are a DVT or something that is not serious, such as a Charley horse. A high level of suspicion for DVT, especially when the risk factors mentioned in "A3" are present, is needed, if one does not want to miss a DVT.

Q5: "My biggest frustration is discerning when symptoms should be addressed or ignored."

A5: This is indeed one of the biggest frustrations for patients as well as physicians: to know which leg symptoms are "just" due to post-thrombotic syndrome or which chest symptoms are just due to the previous PE, and, on the other hand, which symptoms should alert patient and physician for an acute recurrent clot and prompt imaging studies (Doppler ultrasound, chest CT, etc) to be done..

Q6: "When I had my DVT following foot surgery, my entire left leg became swollen. I had never had a blood clot before, so I did not recognize it; I just thought it was just sore and swollen from the surgery. 3 weeks post-op I put on a pair of comfortable pants and they would not fit over my calf. The swelling was much more noticeable than the pain. However, I was on pain meds and may be that's why I did not notice the pain. An ultrasound in the ER showed a clot in the upper thigh."

A6: This is a classic presentation - diffuse pain and swelling of one leg within 1 week of surgery. There should be a high suspicion for DVT in view of the risk factor of recent surgery. The patient should have received education about the risk of DVT after surgery and the signs to watch out for. The DVT should have been diagnosed earlier. She should have had a physical examination and a Doppler ultrasound immediately when the swelling started.

Q7: "Is it possible that I have had a DVT in the past without knowing it?"

A7: Yes. A fair number of DVTs, particularly the postoperative ones, go unnoticed, because they are too small (usually in the calf; = distal DVT) to cause any symptoms.

PE: symptoms

Q8: "I had shortness of breath and they treated me for asthma with an inhaler, which didn't seem to help. I had smallish chest pains off and on, attributed to my fibromyalgia. No one thought to check out my lungs until the third time I presented at the ER short of breath. I was diagnosed by a lung perfusion scan with a shower of pulmonary embolisms; probably had been throwing small clots for years."

A8: If an adult patient presents with shortness of breath, but has never had asthma as a young person, then a diagnosis of "adult-onset asthma" is unlikely. PE should be considered.

Q9: "When I had a PE (in my right upper lobe), the pain, when I was lying down, was like a pulled muscle or something. Then, when I sat up, it felt like the right lung had just shut off. I couldn't breathe on that side. Afterwards, in the hospital, it was painful to take a deep breath."

A9: Pain, worse on inspiration, plus shortness of breath - could be a PE, but could also be pneumonia with pleurisy. A

physician would want to know whether the patient has risk factors for PE, may want to obtain a D-dimer test (see Q/A 19), and a test to assess for PE (such as VQ scan = ventilation/perfusion scan, spiral CT, or pulmonary angiogram).

Q10: "A year ago I was feeling like I was having a heart attack, short of breath, no energy, had to sit up to try to sleep, couldn't lay down because I felt I was smothering. When I went to the bathroom and stood up, that's the last I remember except my children screaming and crying and yelling my name. I felt very at peace and knew this was the end. But they revived me and I was diagnosed with passing a blood clot to the lung. I never felt anything in my legs, but they said I had a clot in my right leg."

A10: This patient had, judged by symptoms of passing out, a big PE. A slightly bigger one or the lack of presence of family could have led to this patient's Death from PE. In most patients with PE a DVT is also found; however, in ca. 25 % of patients with PE no DVT is found; this may be due to (a) clot in the leg veins that was initially present, but has completely broken off and traveled to the lung; (b) the clot originated from the pelvic veins or the big abdominal vein (inferior vena cava), which can not be seen on Doppler ultrasound; (c) the clot formed in the lungs, or (d) the clot came from a DVT in the arms.