

## Hematology – Localized Edema: What You Cannot Afford to Miss

### Whiteboard Animation Transcript

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Localized edema, especially in the extremities, can be due to harmless causes or can potentially result in life threatening complications. It is important that you make the right diagnosis, because not treating a serious condition can be fatal for the patient. Localized edema is most frequently found in the extremities, but can also be seen elsewhere, for example in the face.

The most common reasons for localized edema are venous problems such as a deep venous thrombosis, cellulitis and a Baker's cyst. When somebody presents with unilateral swelling of one extremity, it is extremely important to rule out a blood clot in the deep venous system.

A patient with a thrombus in the deep venous system has a high risk of developing a **pulmonary embolus**, a potentially lethal condition.

The history and physical examination of the patient are crucial to raise the suspicion for a thrombosis. A patient has a higher likelihood of having a blood clot when he or she has not moved for a long time, for example **after surgery** or **long airplane flights** or has a condition that increases the risk for venous thrombosis, such as **clotting disorders** or **cancer**. **Pregnancy** and certain medications can also increase the risk for a blood clot.

The most important clinical findings in a patient with a deep venous thrombosis are **swelling** and **pain**. Unfortunately, though, the physical findings are neither sensitive nor specific for diagnosing a blood clot as other causes for localized edema can present the same way.

To assist in the accuracy of diagnosing a blood clot the **Well's score** was developed. Points are given for findings in the history and physical exam known to be associated with a deep venous blood clot. Based on the score, patients are stratified into low, moderate and high probability for a deep venous thrombosis.

Another helpful test to evaluate patients is a blood test, called the **D-Dimer**. If the Wells score is low and the patient has a negative D-Dimer it can be safely assumed that the localized swelling is not due to a DVT and no further testing to rule out a blood clot needs to be done. However, if the clinical probability is high and the patient has a positive D-Dimer further testing, for example with a Doppler Ultrasound, should be done.

**If the patient has a confirmed blood clot, therapy with anticoagulation must be initiated to prevent complications.**