



# Regarding Our March and May Issues

## Lower Extremity Edema

### To the Editor:

While I generally found Evaluation and Management of Lower Extremity Edema (by Michael S. Miller, DO, *JUCM* March 2009) interesting and informative, I was disappointed there is no mention of using a D-dimer as a screen.

It seems to me studies such as Evaluation of D-Dimer in the Diagnosis of Suspected Deep-Vein Thrombosis (Wells PS, et al, *N Engl J Med* 2003;349(13):1227-1235) show that D-dimer is useful at differentiating which urgent care patients need referral for further testing such as Doppler US or CT angio.

### David Hoyer, MD FAAEM

Clinical Assistant Professor of  
Emergency Medicine (Vol.)  
The University of Texas Health Science  
Center at Houston  
Attending Emergency Physician  
Clear Lake Regional Medical Center,  
Houston, TX

**Dr. Miller responds:** I agree with Dr. Hoyer and thank him for his response. Clearly, D-dimer has a place in screening for DVT. However, as with all tests, appropriate indications should be identified.

Despite good evidence that D-dimer is a valid screening test, there is still a tendency by many to go right to the deep venous Doppler as the “screening” test. However, it is unrealistic to use this in all patients due to the cost.

With respect to DVT, stratifying patients as having high, moderate, or low probability of DVT/PE can help identify which are most at risk. The D-dimer then can be used to identify which patients need additional evaluations.

Nonetheless, the cost of even this test needs to be considered, as at one of my facilities the cost of a D-dimer is \$198.50; it then takes 1 1/2 hours to get the results.

My goal in the article was to encourage clinicians to use common sense in establishing a diagnosis and initiating

treatment for the plethora of venous-related disorders.

## Pulmonary Embolism

### To the Editor:

The brief report on the diagnosis of pulmonary embolism (A Patient with Suspected Pulmonary Embolism, by John Shufeldt, MD, JD, MBA, FACEP and Kelli Hickie, *JUCM* March 2009) is a good overview. The best way to avoid missing a pulmonary embolism is to have a high index of suspicion. It

is imperative, as noted in the article, to know the risk factors for PE and to document those risk factors or their absence on the patient’s chart.

I must take issue, however, with the author’s reference to the use of the D-dimer to rule out PE.

The author states that a normal D-dimer can almost always rule out a PE in the outpatient setting. This statement should be qualified.

The fact is that the D-dimer test is only useful to rule out a PE in those patients with a lack of risk factors and in whom one has a low index of suspicion. In all other

patients, it is completely useless and I would not recommend its routine use.

In any patient who presents with any risk factors for PE, or in whom a PE is clinically suspected for whatever reason, the appropriate thing to do would be to arrange for a STAT outpatient CT angiogram or VQ scan. Alternatively, the patient should be sent to the ED for imaging.

Still, even if imaging is nondiagnostic, a PE is not ruled out if there is a high index of suspicion. Those patients should be admitted and treated with anticoagulation. Remember that the diagnostic gold standard is still the pulmonary angiogram.

### Joseph A. LiMarzi, MD

Newton Memorial Hospital, Newton, NJ  
Milford Urgent Care Center, Milford, PA

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