

MCQ Answer: No further workup is indicated

MCQ Explanation:

Her thrombus was considered provoked since she had both a predisposing risk factor and condition: an estrogen-containing contraceptive and May-Thurner Syndrome, respectively. In young women, the baseline risk for DVT is 2-8/10,000¹. Oral contraceptives are a major known risk factor for DVT, with a 3-6 times increased risk, especially in the first three months of use and with higher doses of estrogen². Although data is scarce, the vaginal ring may confer the same or increased thrombotic risk as the third generation oral formulation¹.

May-Thurner Syndrome is an anatomic variant where the left common iliac vein is compressed by the right common iliac artery. It has a 20-24% prevalence in the general population but is often underdiagnosed even in cases of extensive left-sided DVT. Thrombophilia and malignancy evaluations are not typically indicated in case of a provoked thrombus. A recent study showed that screening for occult malignancy following unprovoked venous thrombi did not provide a clinically significant benefit³.

MCQ 2: What is the recommended management of this patient's acute thrombus and underlying condition?

- A. Anticoagulation alone
- B. Angioplasty and stenting, without further anticoagulation
- C. Surgical thrombectomy
- D. Angioplasty, stenting and anticoagulation

MCQ Answer: D. Angioplasty, stenting and anticoagulation

MCQ Explanation:

The underlying anatomic defect, stenosis of the left common iliac vein, must be corrected. Case series have shown that thrombolysis and/or thrombectomy, followed by angioplasty with stenting, may accomplish this⁴. Anticoagulation is recommended for 3 months, as in other cases of provoked DVT.

References:

1. DeLoughery, Thomas G. Estrogen and thrombosis: controversies and common sense. *Reviews in Endocrine and Metabolic Disorders* 12.2 (2011): 77-84.
2. Vandenbroucke, Jan P., et al. Oral contraceptives and the risk of venous thrombosis. *New England Journal of Medicine* 344.20 (2001): 1527-1535.
3. Carrier, Marc, et al. Screening for occult cancer in unprovoked venous thromboembolism. *New England Journal of Medicine* 373.8 (2015): 697-704.
4. Kalu, Shivani, et al. May-thurner syndrome: a case report and review of the literature. *Case reports in vascular medicine* 2013 (2013).