

Comment by Michel Perrin, Lyon, France

ABSTRACT

To view the PubMed abstract, please click here

Review

Following the publication of guidelines devoted to the care of patients with varicose veins in the Journal of Vascular Surgery (reviewed in VEINEWS on August 30th 2011), guidelines on the management of deep venous thrombosis (DVT), with recommendations made according to the grading methodology of Guyatt have now been issued by almost the same group of North American experts in venous disease.

Please note that the comments made hereafter in this review are the sole responsibility of their author and are, of course, influenced by European practice, which sometimes differs from North American practice.
A total of six guidelines, backed up by 107 references are discussed in the paper.

1. **Precision in the diagnosis of DVT**

Guideline 1.1: “We recommend use of precise anatomic terminology to characterize the most proximal extent of venous thrombosis as involving the iliofemoral veins, with or without extension into the inferior vena cava; the femoropopliteal veins; or isolated to the calf veins in preference to simple characterization of a thrombus as proximal or distal (Grade 1A).”

Comment: Full agreement with the **1C recommendation**. Ultrasound imaging does not provide the information needed when early thrombus removal is considered, which is crucial to avoid perioperative pulmonary embolism.

2. **Indications for early thrombus removal**

Guideline 2-1. “We suggest a strategy of early thrombus removal in selected patients meeting the following criteria: (a) a first episode of acute iliofemoral deep venous thrombosis, (b) symptoms <14 days in duration, (c) a low risk of bleeding, and (d) ambulatory with good functional capacity and an acceptable life expectancy. (Grade 2C).”
Comment: As stated, the 2C recommendation is logical here as there is no precise information on infra inguinal extension of iliofemoral thrombosis in the wording. In other words the question is: would the recommendation be higher in patients with DVT confined to the iliofemoral segment? This point and the management of femoro-popliteo-crural DVT when iliofemoral DVT is treated by thrombus removal should be clarified.

Guideline 2-2. “We recommend early thrombus removal strategies as the treatment of choice in patients with limb-threatening venous ischemia due to iliofemoral deep venous thrombosis with or without associated femoropopliteal venous thrombosis (phlegmasia cerulea dolens) (Grade 1A).”

Comment: Full agreement with a 1A recommendation.

Guideline 2-3. “We recommend that patients with isolated femoropopliteal deep venous thrombosis be managed with conventional anticoagulation therapy because there is currently insufficient evidence to support early thrombus removal strategies in this patient population (Grade 1C).”

Comment: Full agreement with a 1C recommendation.

3. Techniques for early thrombus removal.

Guideline 3.1. ” We suggest percutaneous catheter-based techniques (pharmacologic or pharmacomechanical) as first-line therapy for early thrombus removal in patients meeting the criteria in 1.1 (Grade 2C).”

Guideline 3.2. “We suggest a strategy of pharmacomechanical thrombolysis be considered over catheter-directed pharmacologic thrombolysis alone if expertise and resources are available (Grade 2C).”

Guideline 3.3. “We suggest open surgical venous thrombectomy in selected patients who are candidates for anticoagulation but in whom thrombolytic therapy is contraindicated (Grade 2C).”

Comment: Full agreement with the 2C recommendation for Guidelines 3.1, 3.2, and 3.3. The available data do not allow for a stronger recommendation. In Guideline 3.1 the wording “patients meeting the criteria in 1.1” must be read as “patients meeting the criteria in 2.1”.

4. Periprocedural inferior vena cava filters

Guideline 4.1. “We recommend against routine use of inferior vena cava filters (permanent or temporary) in conjunction with catheter-directed pharmacologic thrombolysis of the iliofemoral venous segments (Grade 1C).”
Comment: Agreement with the **1C recommendation.** This very weak recommendation is related to the fact that there are currently no RCT comparing procedure outcome with or without inferior cava filter.

Guideline 4.2. **“We suggest that the relative risks vs benefits of periprocedural retrievable inferior vena cava placement be considered in patients undergoing pharmacomechanical thrombolysis and in those with thrombus extending into the inferior vena cava or who have markedly limited cardiopulmonary reserve (Grade 2 C).”**

Comment: Although, there is no RCT, grade 2B seems more appropriate according to the small series of data.³

5. **Adjunctive use of venous stents.**

Guideline 5.1. **“We recommend the use of self-expanding metallic stents for treatment of chronic iliocaval compressive or obstructive lesions that are uncovered by any of the thrombus removal strategies (Grade 1C).”**

Comment: The 1C recommendation seems weak; we suggest grade **1B** as any venous lumen anomaly after thrombus removal increases the risk of rethrombosis.

Guideline 5.2. **“We suggest that stents not be used in the femoral and popliteal veins (Grade 2C).”**

Comment: Surprisingly a **1C recommendation** was given to femoro-popliteal stenting. In the absence of data, it would have made more sense to give a **1C recommendation**, as dedicated venous stent for this localization may become available in the future.

6. **Early thrombus removal strategies as an adjuvant to conventional management**

Guideline 6.1. **“We recommend that patients managed with early thrombus removal be treated with a standard course of conventional anticoagulation after the procedure (Grade 1A).”**

Guideline 6.2. **“We recommend that all patients be treated with knee-high compression stockings (30 to 40 mm Hg) for at least 2 years after the procedure (Grade 1C).”**

Comment: Guidelines 6.1 and 6.2 are respectively quoted as **1A and 1C recommendations.** We fully agree with both.

As underlined by the authors in the value statement chapter, the quality-of-life benefits and cost-effectiveness of this therapy need to be more thoroughly evaluated. As National Health regulations are different in every country, the task of determining which expenses should be supported by the patients themselves will not be easy.