Clinical Guideline for Work Up of Pulmonary Embolism (PE)

Well's Score

3.0 Suspected DVT
3.0 Alternative Dx less likely than PE
1.5 Heart rate ≥ 100
1.5 Immobilization or surgery ≤ 4 wks
1.5 Previous DVT/PE
1.0 Hemoptysis
1.0 Malignancy (treated last 6 mos., or palliative)

PERC RULE
Further diagnostic testing is not needed if:
1. Physician has a low clinical gestalt for pulmonary embolism (≤ 15%)
2. All of the following are present:
   a. Age < 50
   b. HR ≤ 100
   c. O2 sat ≥ 94%
   d. No Prior history of DVT/PE
   e. No Recent Trauma or Surgery
   f. No Hemoptysis
   g. No Exogenous Estrogen
   h. No Clinical Signs suggesting DVT

Determine Pre-TEST Probability using either Expert Physician Gestalt, Wells or Geneva Criteria

Low risk or wells < 2 → Low risk or wells 2-4

Apply PERC Rule

Low Risk for PE
Abort work up

Contraindications to C/T?

Yes → Appropriate for V/Q
No → CTA-CTV or CTA

Treat as PE
and/or consider consult to PE Response Team

V/Q Scan

Int or high prob + Wells ≤ 4
Low prob + Wells ≤ 4
Low, int or high prob + Wells ≥ 4
Normal

Treat as PE or consider formal angiography if high risk for anticoagulation
No Treatment
Treat as PE or consider formal angiography if high risk for anticoagulation
No Treatment

V/Q Scan

Treat for PE
Abort work up unless high clinical suspicion for PE*

*If patient has a high pretest probability and poor quality or no lower extremity imaging for deep venous thrombosis, consider obtaining lower extremity doppler. If negative, discharge patient and consider repeat lower extremity doppler within 7 days.

This guideline was ratified by the emergency department faculty at Maine Medical Center in July 2020. It reflects our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for clinicians caring for patients and is not intended to replace providers' clinical judgement.

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