

Deep vein thrombosis: a clinical prediction rule and investigation strategy can accurately diagnose DVT.



Diagnostic test: (1) clinical prediction rule used to rank patients into high, moderate or low risk for deep venous thrombosis:

- active cancer (on-going treatment or diagnosed within 6 months or palliative care)- score 1
- paresis, paralysis or recent plaster cast immobilisation of lower extremity- score 1
- recently bedridden for more than 3 days and/or major surgery within 4 weeks- score 1
- localised tenderness over distribution of deep veins- score 1
- entire leg swollen- score 1
- calf swelling more than 3 cm compared with asymptomatic side, measured at 10 cm below tibial tubercle- score 1
- pitting oedema (greater in symptomatic leg)- score 1
- collateral superficial veins (non-varicose)- score 1
- alternative diagnosis as likely or greater than that of DVT- score -2

(2) bilateral impedance plethysmography- minimum of five inflation-deflation sequences. A graph was used comparing venous capacitance and venous outflow. Impedance plethysmography was considered abnormal if highest rise and fall was on or below a set discrimination line.

- In patients with symptoms in both legs, the most symptomatic leg is used.
- Risk grouping according to clinical score
 - score 0 or less- low risk
 - score 1 or 2- moderate risk
 - score 3 or more- high risk
- Suggested approach: clinical risk grouping followed by IPG then;
 - high risk: IPG positive- DVT; IPG negative- venogram, positive- DVT; negative- no DVT
 - moderate risk: IPG positive- USS or venogram positive- DVT; negative- no DVT; IPG negative- repeat IPG in one week; if positive- DVT; if negative- no DVT
 - low risk: IPG positive- venogram, if positive- DVT; negative- no DVT; IPG negative- no DVT