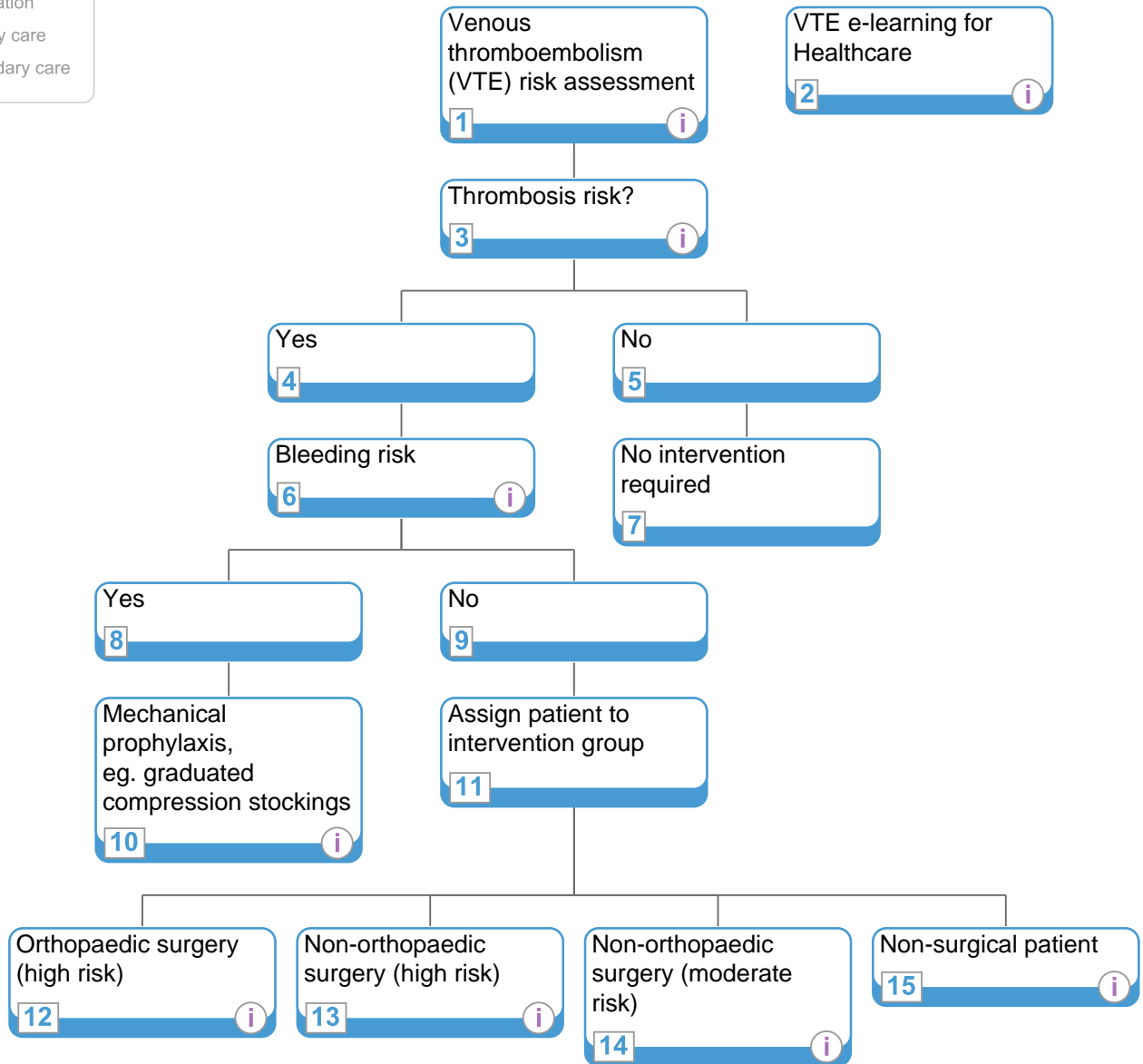


http://healthguides.mapofmedicine.com/choices/map/venous_thromboembolism_vte_risk_assessment1.html

i Information
 Primary care
 Secondary care



IMPORTANT NOTE

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Venous thromboembolism (VTE) risk assessment

Surgery > Vascular surgery > Venous thromboembolism (VTE) risk assessment

1 Venous thromboembolism (VTE) risk assessment

Quick info:

Scope:

- venous thromboembolism (VTE) risk assessment for adult inpatients in secondary care

VTE risk assessment:

- all patients should be assessed on admission and periodically during inpatient stay, as risk may change
- reassessment is recommended 48-72 hours after admission
- risk factors identified are not exhaustive – clinicians may consider additional risk factors in individual patients and appropriately offer thromboprophylaxis

References:

National Institute for Health and Clinical Excellence (NICE). Venous Thromboembolism: reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery. London; NICE: 2007.

Department of Health (DOH). Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. London; DOH: 2007.

2 VTE e-learning for Healthcare

Quick info:

e-VTE is a free and easy-to-use, interactive e-learning resource for healthcare professionals that helps to raise awareness and improve understanding of VTE within the medical community.

The course consists of a pre-learning questionnaire and a post-learning assessment together with four sessions of e-learning:

1. Demographics, Epidemiology and Risk of VTE
2. Methods of Thromboprophylaxis
3. Implementation of Thromboprophylaxis in Hospitals
4. Implementation of Thromboprophylaxis Challenges in Primary Care

[View e-VTE course](#)

e-VTE is delivered by the VTE Implementation Working Group (IWG) in partnership with e-Learning for Healthcare (e-LfH). For more information visit www.e-lfh.org.uk/projects/vte

Also, see the Department of Health's report on the [prevention of VTE in hospitalised patients](#).

3 Thrombosis risk?

Quick info:

- any thrombosis risk factor should prompt thromboprophylaxis
- a high risk factor will override a moderate risk factor
- patient related high risk factors including any of the following:
 - age over 60 years
 - previous pulmonary embolus or deep vein thrombosis
 - active cancer
 - acute on chronic lung disease
 - chronic heart failure
 - lower limb paralysis (excluding acute stroke)
 - acute infectious disease, eg. pneumonia
 - body mass index more than 30kg/m²
- procedure related high risk factors include any of the following:
 - hip or knee replacement
 - hip fracture
 - other major orthopaedic surgery
- procedure related moderate risks include any of the following:
 - surgical procedure lasting more than 30 minutes
 - plaster cast immobilisation of lower limb

6 Bleeding risk

Locally reviewed: 17-Jul-2009 Due for review: 30-Apr-2010 Printed on: 24-Sep-2009 © Map of Medicine Ltd

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Venous thromboembolism (VTE) risk assessment

Surgery > Vascular surgery > Venous thromboembolism (VTE) risk assessment

Quick info:

Patient related bleeding risks include any of the following:

- haemophilia or any other known bleeding disorder
- known platelet count of less than 100 x10⁹/L
- acute stroke in previous month (haemorrhagic or ischaemic)
- blood pressure more than 200mmHg systolic or more than 120mmHg diastolic
- severe liver disease (prothrombin time above normal or known varices)
- severe renal disease
- active bleeding
- major bleeding risk, existing anticoagulant therapy or antiplatelet therapy

Procedure related bleeding risks include any of the following:

- neurosurgery, spinal surgery, eye surgery
- other procedure with high bleeding risk
- lumbar puncture, spinal and/or epidural in past 4 hours

10 Mechanical prophylaxis, eg. graduated compression stockings

Quick info:

- use graduated compression stockings or alternative method of mechanical prophylaxis

12 Orthopaedic surgery (high risk)

Quick info:

- thromboprophylaxis should include both a pharmacological method and a mechanical method
- pharmacological interventional options include:
 - dabigatran 220mg once daily:
 - age 18-75 years, 100mg 1-4 hours after surgery, then 220mg once daily
 - over age 75 years, 75mg 1-4 hours after surgery then 150mg once daily
 - rivaroxaban 10mg oral daily
 - fondaparinux 2.5mg once daily (not recommended in those under age 17 years)
 - bemiparin 3500 units once daily
 - dalteparin 5000 units once daily
 - enoxaparin 40mg once daily
 - tinzaparin 4500 units once daily
- mechanical interventional options include:
 - graduated compression stockings
 - intermittent pneumatic compression
- duration for both interventions:
 - 28 days for hip and knee replacement
 - 28 days for hip fracture
 - for other procedures, continue intervention until patient is mobile and risk of venous thromboembolism (VTE) is considered to be low

For further information, see the [Department of Health's report on the prevention of VTE in hospitalised patients](#).

References:

National Institute for Health and Clinical Excellence (NICE). Venous Thromboembolism: reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery. London; NICE: 2007.

Department of Health (DOH). Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. London; DOH: 2007.

13 Non-orthopaedic surgery (high risk)

Quick info:

- thromboprophylaxis should include both a pharmacological method and a mechanical method
- pharmacological interventional options include:
 - fondaparinux 2.5mg once daily (not recommended in those under age 17 years)
 - bemiparin 3500 units once daily

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Venous thromboembolism (VTE) risk assessment

Surgery > Vascular surgery > Venous thromboembolism (VTE) risk assessment

- dalteparin 5000 units once daily
- enoxaparin 40mg once daily
- tinzaparin 4500 units once daily
- mechanical interventional options include:
 - graduated compression stockings
 - intermittent pneumatic compression
- duration for both interventions:
 - continue intervention until patient is mobile and risk of venous thromboembolism (VTE) is considered to be low

For further information, see the [Department of Health's report on the prevention of VTE in hospitalised patients](#).

References:

National Institute for Health and Clinical Excellence (NICE). Venous Thromboembolism: reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery. London; NICE: 2007.

Department of Health (DOH). Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. London; DOH: 2007.

14 Non-orthopaedic surgery (moderate risk)

Quick info:

- a mechanical method of prophylaxis is usually sufficient:
 - graduated compression stockings
 - intermittent pneumatic compression
- an alternative pharmacological intervention may include:
 - fondaparinux 2.5mg once daily (not recommended in those under age 17 years)
 - bemiparin 2500 units once daily
 - dalteparin 2500 units once daily
 - enoxaparin 20mg once daily
 - tinzaparin 3500 units once daily
- duration of intervention:
 - continue intervention until patient is mobile and risk of venous thromboembolism (VTE) is considered to be low

For further information, see the [Department of Health's report on the prevention of VTE in hospitalised patients](#).

References:

National Institute for Health and Clinical Excellence (NICE). Venous Thromboembolism: reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery. London; NICE: 2007.

Department of Health (DOH). Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. London; DOH: 2007.

15 Non-surgical patient

Quick info:

- thromboprophylaxis should include a pharmacological method only
- pharmacological interventional options include:
 - fondaparinux 2.5mg once daily (not recommended in those under age 17 years)
 - bemiparin 3500 units once daily if high risk (2500 units if moderate risk)
 - dalteparin 5000 units once daily
 - enoxaparin 40mg once daily
- duration of intervention:
 - continue intervention until patient is mobile and risk of venous thromboembolism (VTE) is considered to be low

For further information, see the [Department of Health's report on the prevention of VTE in hospitalised patients](#).

References:

National Institute for Health and Clinical Excellence (NICE). Venous Thromboembolism: reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery. London; NICE: 2007.

Department of Health (DOH). Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. London; DOH: 2007.

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Venous thromboembolism (VTE) risk assessment

Surgery > Vascular surgery > Venous thromboembolism (VTE) risk assessment

Key Dates

Due for review: 30-Apr-2010

Locally reviewed: 17-Jul-2009, by England & Wales

Updated: 17-Jul-2009

Evidence summary for Venous thromboembolism (VTE) risk assessment

The pathway is based on an interpretation of the following references (1. 2).

Search date: Sep-2008

Evidence grades:

- 1** Intervention node supported by level 1 guidelines or systematic reviews
- 2** Intervention node supported by level 2 guidelines
- E** Intervention node based on expert clinical opinion
- U** Non-intervention node, not graded

Evidence grading:

Graded node titles that appear on this page	Evidence grade	Reference IDs
Venous thromboembolism (VTE) risk assessment	1	1, 2
Orthopaedic surgery (high risk)	1	1, 2
Non-orthopaedic surgery (high risk)	1	1, 2
Non-orthopaedic surgery (moderate risk)	1	1, 2
Non-surgical patient	1	1, 2

References

This is a list of all the references that have passed critical appraisal for use in the pathway Venous thromboembolism (VTE) risk assessment

ID Reference

- 1 National Institute for Health and Clinical Excellence (NICE). Venous Thromboembolism: . reducing the risk of venous thromboembolism (deep vein thrombosis and pulmonary embolism) in inpatients undergoing surgery. London: NICE; 2007.
<http://www.nice.org.uk/nicemedia/pdf/VTEFullGuide.pdf>
- 2 Department of Health (DOH). Report of the independent expert working group on the prevention of venous thromboembolism in hospitalised patients. London: DOH; 2007.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073944

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