

Guideline topic: Antithrombotic therapy

General comments

Search coverage

Guidelines

Websites with relevant guidelines:

Agency for Health Care Research and Quality (AHRQ) <http://www.ahrq.gov/>
ASERNIP-S <http://www.surgeons.org/Content/NavigationMenu/Research/ASERNIPS/ASERNIPSPublications/default.htm>
Canadian Medical Association <http://mdm.ca/cpgsnew/cpgs/index.asp>
Centre for Clinical Effectiveness (Australia) <http://www.med.monash.edu.au/healthservices/cce/>
Health Technology Assessment <http://www.hta.nhsweb.nhs.uk/>
NHS Centre for Reviews and Dissemination <http://www.york.ac.uk/inst/crd/welcome.htm>
NHS Quality Improvement Scotland <http://www.nhshealthquality.org>
National Institute for Clinical Excellence (NICE) <http://www.nice.org.uk/>
National Electronic Library for Health <http://www.library.nhs.uk/guidelinesFinder/>
National Guideline Clearinghouse <http://www.guideline.gov/>
National Health and Medical Research Council (NHMRC) <http://www.health.gov.au/nhmrc/publications/index.htm>
New Zealand Guidelines Group <http://www.nzgg.org.nz/>
PRODIGY Knowledge <http://www.prodigy.nhs.uk/>
Swedish Council on Technology Assessment in Health Care (SBU) <http://www.sbu.se/www/index.asp>
TRIP Database <http://www.tripdatabase.com/>

Databases covered:

Total hits: 41

Systematic reviews

Terms for "antithrombotics" were combined with "thrombosis and embolism" terms then the reviews search filter was applied.

Databases covered: **Medline, Embase, CINAHL, PsycINFO, Cochrane, AMED** Dates covered: 1998-2008

Total hits: 2270

Sifted result: 422

Split into 2 by date:

1999-2003	151 refs
2003-2008	271 refs

Medline search strategy

1. exp Anticoagulants/
2. exp Thrombolytic Therapy/
3. exp Platelet Aggregation Inhibitors/
4. exp Fibrinolytic Agents/
5. anticoagulant\$.tw.
6. thrombolytic\$.tw.
7. antiplatelet\$.tw.
8. fibrinolytic\$.tw.
9. antithrombotic\$.tw.
10. or/1-9
11. exp "embolism and thrombosis"/
12. thrombosis.tw.
13. thromboembolism.tw.
14. embolism.tw.
15. emboli.tw.
16. or/11-15
17. 10 and 16

RCTs

*Databases covered: Medline, Embase, CINAHL, Dates covered and results: see table below
PsycINFO, Cochrane*

Observational studies/ Searches without filter

*Databases covered: Medline, Embase, CINAHL, Dates covered and results: see table below
PsycINFO*

Supplementary searches

*Databases covered: Medline, Embase, CINAHL, Dates covered: 2000-2010
PsycINFO, Cochrane*

Search strategies

The following are listings of the main Medline strategies used for this guideline. All conventions and symbols are from the Ovid implementation of Medline. Strategies used in other databases were substantially the same, though different terminology may have been used to take account of different thesauri used in non-Medline databases.

Search filters were added to identify studies of a particular type (systematic review, RCT etc.) Listings of the search filters used by SIGN can be found on the SIGN Web site.

Generic Stem:

Medline

1. exp Anticoagulants/
2. exp Thrombolytic Therapy/
3. exp Platelet Aggregation Inhibitors/
4. exp Fibrinolytic Agents/
5. anticoagulant\$.tw.
6. thrombolytic\$.tw.
7. antiplatelet\$.tw.
8. fibrinolytic\$.tw.
9. antithrombotic\$.tw.
10. or/1-9

Embase

(Search terms limited to focussed EmTree terms)

1. exp *Anticoagulant Agent/
2. exp *Anticoagulant Therapy/
3. exp *Antithrombotic Agent/
4. exp *Fibrinolytic Agent/
5. exp *Fibrinolytic Therapy/
6. or/1-5

Scope of searches for RCTs and observational studies

KQ	Type of studies	Date range	Initial recall	Sifted result
1	RCT	1998-2009	446	28
1 (drug eluting stents)	Observational	2004-2009	428	56
2	RCT	1998-2009	1650	54
4	RCT	2003-2009	1298	63
9	RCT	2004-2009	990	91
10	RCT	2004-2009	864	75
11	All (no filter)	2004-2009	2633	118
12	All (no filter)	2004-2009	2050	98
13	All (no filter)	2004-2009	4470	102
14	All (no filter)	1998-2009	729	69

15	All (no filter)	2004-2009	2034	111
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Medline Search strategies used for specific key questions:

KQ 1

1. exp Platelet Aggregation Inhibitors/
2. antiplatelet*.tw.
3. aspirin*.tw.
4. acetylsalicylic acid*.tw.
5. exp Dipyridamole/
6. dipyridamole*.tw.
7. clopidogrel*.tw.
8. thiopyridine*.tw.
9. or/1-8
10. exp Myocardial Infarction/
11. myocardial infarction*.tw.
12. MI.tw.
13. or/10-12
14. 9 and 13

KQ 1 (Drug eluting stents)

1. exp Platelet Aggregation Inhibitors/
2. antiplatelet*.tw.
3. aspirin*.tw.
4. acetylsalicylic acid*.tw.
5. exp Dipyridamole/
6. dipyridamole*.tw.
7. clopidogrel*.tw.
8. thiopyridine*.tw.
9. or/1-8
10. exp Drug-Eluting Stents/
11. drug eluting stent*.tw.
12. des.tw.
13. or/10-12
14. 9 and 13

KQ 2

1. exp Heparin/ or exp Heparin, Low-Molecular-Weight/

2. heparin*.tw.
3. heparin*.tw.
4. (UFH* or LMWH*).tw.
5. (enoxaparin* or bemiparin* or dalteparin* or nadroparin* or parnaparin* or reviparin* or tinzaparin*).mp.
[mp=title, original title, abstract, name of substance word, subject heading word]
6. fondaparinux*.tw.
7. danaparoid*.tw.
8. or/1-7
9. ((cardiac or heart) and thromboembol*).tw.
10. (coronary and thromboembol*).tw.
11. exp Ischemia/
12. (ischemia or ischaemia).tw.
13. peripheral arterial bypass.mp.
14. exp Peripheral Vascular Diseases/
15. exp Plasmapheresis/
16. (plasmapheresis or plasmaphoresis).tw.
17. or/9-16
18. 8 and 17
19. exp Angioplasty/
20. angioplast*.tw.
21. exp Renal Dialysis/ or exp Hemofiltration/
22. (hemodialysis or haemodialysis or hemofiltration or haemofiltration).tw.
23. exp Catheterization/
24. catheter*.tw.
25. or/19-22
26. or/23-24
27. 25 and 8
28. 26 and 8

KQ 4

1. exp Thrombolytic Therapy/
2. Fibrinolytic Agents/
3. thrombolysis.tw.
4. thrombolytic.tw.
5. exp Streptokinase/
6. streptokinase*.tw.
7. exp Tissue Plasminogen Activator/
8. alteplase*.tw.
9. exp Urokinase-Type Plasminogen Activator/
10. urokinase*.tw.

11. reteplase*.tw.
12. tenecteplase*.tw.
13. or/1-12
14. exp Peripheral Vascular Diseases/
15. peripheral arter*.tw.
16. exp Arteriovenous Fistula/
17. exp Arteriovenous Shunt, Surgical/
18. (arteriovenous and (fistula* or shunt*)).tw.
19. exp Catheterization/
20. catheter*.tw.
21. or/14-20
22. 13 and 21

KQ 9

1. exp dabigatran/ or exp dabigatran etexilate/
2. dabigatran*.tw.
3. exp Rivaroxaban/
4. rivaroxaban*.tw.
5. exp Lepirudin/
6. lepirudin*.tw.
7. exp Hirulog/
8. bivalirudin*.tw.
9. or/1-8

KQ 10

1. exp Aspirin/
2. aspirin*.tw.
3. exp Thrombolytic Therapy/
4. thrombolytic*.tw.
5. or/1-4
6. exp Warfarin/
7. warfarin*.tw.
8. exp Heparin/ or exp Heparin, Low-Molecular-Weight/
9. heparin*.tw.
10. or/6-9
11. 5 and 10

KQ 11

1. exp Pregnancy/
2. exp Pregnancy Complications/
3. pregnan*.tw.
4. exp Fetus/
5. (fetus or fetal).tw.
6. maternal.tw.
7. exp Prenatal Care/
8. exp Postnatal Care/
9. (antenatal or prenatal or postnatal).tw.
10. exp Abnormalities, Drug-Induced/
11. teratogenicit*.tw.
12. or/1-11

KQ 12

1. exp Anticoagulants/
2. exp Thrombolytic Therapy/
3. exp Platelet Aggregation Inhibitors/
4. exp Fibrinolytic Agents/
5. anticoagulant\$.tw.
6. thrombolytic\$.tw.
7. antiplatelet\$.tw.
8. fibrinolytic\$.tw.
9. antithrombotic\$.tw.
10. or/1-9
11. exp Drug Interactions/
12. exp Food-Drug Interactions/
13. exp Phytotherapy/
14. exp Nonprescription Drugs/
15. exp Contraceptive Agents/
16. exp Alcoholic Beverages/
17. or/11-16
18. 10 and 17

KQ 13

1. (bridg* adj5 therapy).tw.
2. exp Preoperative Care/
3. exp Perioperative Care/

4. exp Intraoperative Care/
5. exp Postoperative Care/
6. (preoperativ* or perioperativ* or intraoperativ* or postoperativ*).tw.
7. (cessation or interrupt* or uninterrupt* or discontinu* or withheld or withhold*).tw.
8. or/1-7

KQ 14

1. exp Hemorrhage/
2. (hemorrhag* or haemorrhag*).tw.
3. bleed*.tw.
4. revers*.tw.
5. or/1-3
6. 4 and 5

KQ 15

1. exp Anticoagulants/
2. anticoagulant*.tw.
3. exp Heparin/
4. exp Warfarin/
5. heparin*.tw.
6. warfarin*.tw.
7. or/1-6
8. exp Point-of-Care Systems/
9. (point of care or point-of-care).tw.
10. exp Decision Making, Computer-Assisted/
11. exp Decision Support Systems, Clinical/
12. (computer* adj5 decision).tw.
13. (computer-assisted or computer assist*).tw.
14. decision support.tw.
15. exp Patient Satisfaction/
16. (patient adj (satisfaction or preference)).tw.
17. exp Patient Care Management/
18. or/8-17
19. 7 and 18

Medline Search strategies used for supplementary searches:

Atrial Fibrillation

1. exp Atrial Fibrillation/
2. atrial fibrillation*.tw.
3. or/1-2
4. exp Warfarin/
5. warfarin*.tw.
6. exp Aspirin/
7. aspirin*.tw.
8. or/4-7
9. 3 and 8

Cardiac Disease

1. exp Heart Diseases/
2. ((heart or cardiac) adj3 (failure* or disease*)).tw.
3. rheumatic mitral valve disease.tw.
4. (mitral adj3 stenosis).tw.
5. (mitral adj3 prolapse).tw.
6. mitral annular calcification.tw.
7. (aortic adj3 disease).tw.
8. cardiomyopath*.tw.
9. (heart adj3 valve*).tw.
10. or/1-9
11. exp Warfarin/
12. warfarin*.tw.
13. exp Aspirin/
14. aspirin*.tw.
15. dabigatran*.tw.
16. rivaroxaban*.tw.
17. or/11-16
18. 10 and 17