



Suggested Readings ***Antithrombotic Pharmacotherapy Traineeship***

Acute coronary syndromes / PCI / stents

Grines CL, Bonow RO, Casey DE, et al. Prevention of premature discontinuation of dual antiplatelet therapy in patients with coronary artery stents: a science advisory from the American Heart Association, American College of Cardiology, Society for Cardiovascular Angiography and Interventions, American College of Surgeons, and American Dental Association, with representation from the American College of Physicians. *J Am Coll Cardiol* 2007;49:734-9.

Antman EM, Hand M, Armstrong PW, et al. 2007 focused update of the ACC/AHA 2004 Guidelines for the Management of Patients With ST-Elevation Myocardial Infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Group to Review New Evidence and Update the ACC/AHA 2004 Guidelines for the Management of Patients With ST-Elevation Myocardial Infarction). *Circulation*. 2008; 117:296-329.

Goodman SG, Menon V, Cannon CP, Steg G, Ohman M, Harrington R. Acute ST-segment elevation myocardial infarction: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl.):708S-775S.

Hilleman DE, Tsikouris JP, Seals A, Marmur JD. Fibrinolytic agents for the management of ST-segment elevation myocardial infarction. *Pharmacotherapy*. 2007; 27(11):1558-1570.

Anderson JL, Adams CD, Antman EM, et al. ACC/AHA 2007 guidelines for the management of patients with unstable angina/non-ST-elevation myocardial infarction-executive summary: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the 2002 Guidelines for the Management of Patients With Unstable Angina/Non-ST-Elevation Myocardial Infarction): developed in collaboration with the American College of Emergency Physicians, American College of Physicians, Society for Academic Emergency Medicine, Society for Cardiovascular Angiography and Intervention, and Society of Thoracic Surgeons. *J Am Coll Cardiol* 2007;50:652-726.

Harrington RA, Becker RC, Cannon CP, et al. Antithrombotic therapy for non-ST-segment elevation acute coronary syndromes. American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest*. 2008; 133(6 Suppl):670S-707S.

Antiphospholipid Antibody Syndrome

Bick, RL. Hereditary and acquired thrombophilic disorders. *Clin Appl Thromb Hemost* 2006; 2:125-135

De laet B, Mertens K, de Groot PG. Mechanisms of disease: antiphospholipid antibodies- from clinical association to pathologic mechanism. *Nat Clin Pract Rheumatol*. 2008; 4(4):192-9.

Framer-Boatwright MK, Roubey RA. Venous thrombosis in the antiphospholipid syndrome. *Arterioscler Thromb Vasc Biol*. 2009; 29(3):321-5.

Lim W, Crowther MA, Eikelboom J. Management of Antiphospholipid Antibody Syndrome. *JAMA* 2006; 295:1050-1057.

Ortel, TL. The antiphospholipid syndrome: what are we really measuring? How do we measure it? And how do we treat it? *J Thromb Thromboysis* 2006; 1:79-83.

Antiplatelet therapy (general)

Patrono C, Baigent C, Hirsch J, Roth G. Antiplatelet Drugs: American College of Chest Physicians evidence-based clinical practice guidelines (8th Edition). *Chest*. 2008; 133(6 Suppl):199S-233S.

Sullivan J, Amarshi N. Dual antiplatelet therapy with clopidogrel and aspirin. *Am J Health-Syst Pharm*. 2008; 65(6):1134-1143.

Atrial fibrillation

Nutescu EA. ASHP therapeutic position statement on antithrombotic therapy in chronic atrial fibrillation. *Am J Health-Syst Pharm*. 2007; 64(11):2281-91.

Dager WE. Improving anticoagulation management in patients with atrial fibrillation. *Am J Health Sys Pharm*. 2007;21:2279-80.

ACTIVE writing group. Clopidogrel plus aspirin versus oral anticoagulation for atrial fibrillation in the randomized controlled trial. *The Lancet* 2006; 367:1903-12.

Fuster V, Ryden LE, Cannom DS, et al. ACC/AHA/ESC 2006 Guidelines for the Management of Patients with Atrial Fibrillation. *Circulation* 2006; 114:e257-354.

Klein AL, Grimm RA, Jasper SE, et al. Efficacy of transesophageal echocardiography-guided cardioversion of patients with atrial fibrillation at 6 months: a randomized controlled trial. *Am Heart J* 2006; 151:380-9.

Oral H, Chugh A, Ozaydin M, et al. Risk of thromboembolic events after percutaneous left atrial radiofrequency ablation of atrial fibrillation. *Circulation* 2006; 114:759-65.

New Antithrombotic therapies

Baetz BE, Spinler, SA. Dabigatran etexilate: an oral direct thrombin inhibitor for prophylaxis and treatment of thromboembolic diseases. *Pharmacotherapy*. 2008; 28(11):1354-1373.

Weitz JI, Hirsh J, Samama MM. New antithrombotic drugs: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest*. 2008; 133(6 Suppl):234S-256S.

Hirsch J, Bauer KA, Donati MB, Gould M, Samama MM, Weitz JI. Parenteral anticoagulants: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl):141-159.

Riley AB, Tafreshi MJ, Haber SL. Prasugrel: a novel antiplatelet agent. *Am J Health-Syst Pharm*. 2008; 65(6): 1019-1028.

Abrams PJ, Emerson CR. Rivaroxaban: a novel, oral, direct factor Xa inhibitor. *Pharmacotherapy*. 2009; 29(2):167-181.

Bridge Therapy/ Peri-operative/Peri-procedure management of antithrombotic therapy

Muerin P, Tabet JY, Weber, H, et al. Low-Molecular-Weight Heparin as a Bridging Anticoagulant Early After Mechanical Heart Valve Replacement. *Circulation* Jan. 2006; 113(4):564-569.

Seshadri N, Goldhaber SZ, Elkayam U, et al. The clinical challenge of bridging anticoagulation with low-molecular weight heparin in patients with mechanical prosthetic heart valves: an evidence-based comparative review focusing on anticoagulation options in pregnant and nonpregnant patients. *Am Heart Journ* 2005; 150(1):27-34.

Douketis JD, Berger PB, Dunn AS, Jaffer AK, Spyropoulos AC, Becker RC, Ansell J. The perioperative management of antithrombotic therapy: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl):299-339.

Tinmouth AH, Morrow BH, Cruickshank MK, et al. Dalteparin as periprocedure anticoagulation for patients on warfarin and at high risk of thrombosis. *Ann Pharmacother* 2001; 35:669-74.

Cancer

Lyman GH, Khorana AA, Falanga A, Clarke-Pearson D et al. American Society of Clinical Oncology Guideline: Recommendations for Venous Thromboembolism Prophylaxis and Treatment in Patients With Cancer. *J Clin Oncol* 2007;34: 5490-5505.

Children and neonates

Mongale P, Chalmers E, Chan A. Antithrombotic therapy in neonates and children: American College of Chest Physicians evidence-based clinical practice guidelines (8th Edition). *Chest*. 2008;133(6 Suppl):887S-968S.

Clinic/Practice Management

Ansell JE, Oertel LB, Wittkowsky AK. *Managing Oral Anticoagulation Therapy – Clinical and Operational Guidelines*; 2005. Chapters 2, 3, 10, and 12.

Available at

<http://www.lww.com/search/advancedsearch/?rowStart=1&title=&author=&ISBN=&keyword=managing+oral+anticoagulant+therapy&exactTerm=1&allFields=1&yearFrom=&yearThru=&productTypes=&mediaTypes=&source=qs&action=search>

Gulseth M. Managing anticoagulation patients in the hospital, the inpatient anticoagulation service. 2007.

<http://www.ashp.org/bookstore/ProfessionalPractice/ProductDetails/tabid/201/Default.aspx?ProductId=4751>

Dager WE, Gulseth MP. Implementing anticoagulation management by pharmacists in the inpatient setting. *Am J Health Sys Pharm*. 2007;64:1071-79.

Epidural Management

Douketis JD, Rabbat C, Crowther MA. Anticoagulant prophylaxis in special populations with an indwelling epidural catheter or renal insufficiency. *Journal of Critical Care* 2005; 20(4):324-9.

Horlocker TT, Wedel DJ, Benzon H, Brown DL, Enneking FK, Heit JA, Mulroy MF, Rosenquist RW, Rowlingson J, Tryba M, Yuan CS. Regional anesthesia in the anticoagulated patient: defining the risks (the second ASRA Consensus Conference on Neuraxial Anesthesia and Anticoagulation). *Reg Anesth Pain Med*. 2003 May-Jun;28(3):172-97.

Genetics and genetic testing

Bussey HI, Wittkowsky AK, Hylek EM, Walker MD. Genetic testing for warfarin dosing? Not yet ready for prime time. *Pharmacotherapy*. 2008; 28(2):141-143.

Gulseth MP, Grice GR, Dager WE. Pharmacogenomics of warfarin: Uncovering a piece of the warfarin mystery. *Am. J. Health Syst. Pharm.*, Jan 2009; 66: 123 - 133.

The International Warfarin Pharmacogenetics Consortium. Estimation of the warfarin dose with clinical and pharmacogenetic data. *N Engl J Med*. 2009; 8(2):753-764.

Limdi NA, Veenstra DL. Warfarin pharmacogenetics. *Pharmacotherapy*. 2008; 28(9):1084-1097.

Hemorrhagic complications of anticoagulant and thrombolytic treatment

Schulman S, Beyth RJ, Kearon C, Levine MN. Hemorrhagic complications of anticoagulant and thrombolytic treatment: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest*. 2008; 133(6 Suppl): 257-298.

Heparin-Induced Thrombocytopenia

Warkentin TE, Greinacher A, Koster A, Lincoff AM. Treatment and prevention of heparin-induced thrombocytopenia: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). 2008; 133(6 Suppl): 340S-380S.

Baroletti SA, Goldhaber SZ. Heparin-induced thrombocytopenia. *Circulation* 2006; 114(8):e355-6.

Dager WE, Dougherty JA, Nguyen PH, Militello MA, Smythe MA. Heparin-induced thrombocytopenia: a review of treatment options and special considerations. *Pharmacotherapy* 2007;564-587.

High Risk Populations

Seshadri N, Goldhaber SZ, Elkayam UG, et al. The clinical challenge of bridging anticoagulation with low-molecular-weight heparin in patients with mechanical prosthetic heart valves: an evidence-based comparative review focusing on anticoagulation options in pregnant and nonpregnant patients. *Am Heart J* Jul. 2005; 150(1):37-34. Review.

Spinler SA. The skinny on treatment of venous thromboembolism in obesity. *J Thromb Haemost* May 2005; 3(5):854-5.

Lim W, Dentali F, Eikelboom JW, et al. Meta-analysis: low-molecular-weight heparin and bleeding in patients with severe renal insufficiency. *Ann Intern Med* May 2006; 144(9):673-84.

Ischemic stroke

Adams HP Jr, del Zoppo G, Alberts MJ, et al. Guidelines for the early management of adults with ischemic stroke: a guideline from the American Heart Association/American Stroke Association Council, Clinical Cardiology Council, Cardiovascular Radiology and Intervention Council, and the Atherosclerotic Peripheral Vascular Disease and Quality of Care Outcomes in Research Interdisciplinary Working Groups. *Stroke*. 2007; 38:1655-1711.

Adams RJ, Albers, G, Alberts, MJ, et al. Update to the AHA/ASA recommendations for the prevention of stroke in patients with stroke and transient ischemic attack. *Stroke*. 2008; (5):1-6.

Vande Griend JP, Sassen JJ. Combination antiplatelet agents for secondary prevention of ischemic stroke. *Pharmacotherapy*. 2008; 28(10):1233-1242.

Albers GW, Amarenco P, Easton JD, Sacco RL, Teal P. Antithrombotic and thrombolytic therapy for ischemic stroke: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest*. 2008; 133(6):630-669.

Hacke W, Kaste M, Bluhmki E, Brozman E, et al. Thrombolysis with alteplase 3 to 4.5 hours after acute ischemic stroke. *N Engl J Med*. 2008; 259(9):1317-29.

Diener HC, Bogousslavsky J, Brass LM, et al. Aspirin and clopidogrel compared with clopidogrel alone after recent ischaemic stroke or transient ischaemic attack in high-risk patients (MATCH): randomized double-blind, placebo-controlled trial. *Lancet* 2004; 364:331-7.

Goldstein LB, Adams R, Alberts MJ, et al. Primary prevention of ischemic stroke: a guideline from the American Heart Association/American Stroke Association Stroke Council. *Circulation* 2006; 113:e873-923.

Hylek EM, Go AS, Chang Y, et al. Effect of intensity of oral anticoagulation on stroke severity and mortality in atrial fibrillation. *N Eng J Med* 2003; 349:1019-26.

Peripheral artery occlusive disease

Sobel M, Verhaeghe R. Antithrombotic therapy for peripheral artery occlusive disease: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest*. 2008; 133(6 Suppl):815S-843S.

Hirsch AT, Haskal ZJ, Hertzner NR, et al. ACC/AHA 2005 Guidelines for the Management of Peripheral Arterial Disease. *Circulation* Mar. 2006; 113(11):e463-654.

Sontheimer, DL. Peripheral vascular disease: diagnosis and treatment. *Am Fam Physician* 2006; 73:1971-1976.

Hankey GJ, Norman PE, Eikelboom JW. Medical treatment of peripheral arterial disease. *JAMA* 2006; 295:547-553.

Pregnancy

Bates SM, Greer IA, Pabinger I, Sofaer S, Hirsh J. Venous thromboembolism, thrombophilia, antithrombotic therapy, and pregnancy: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl.):844S-886S.

Greer IA, Nelson-Piercy C. Low-molecular-weight heparins for thromboprophylaxis and treatment of venous thromboembolism in pregnancy: a systematic review of safety and efficacy. *Blood* Jul. 15 2005; 106(2):401-7.

Valvular and structural heart disease

Salem DN, O’Gara PT, Madias C, Pauker SG. Valvular and structural heart disease: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl.):593S-629S.

ACC/AHA 2006 Guidelines for the Management of Patients with Valvular Heart Disease (Executive Summary). *Circulation* Aug. 2006; 114(5):e84-231.

Goldhaber, SZ. “Bridging” and Mechanical Heart Valves: Perils, Promises, and Predictions. *Circulation* 2006; 113(4):470-472.

Little SH, Massel DR. Antiplatelet and anticoagulation for patients with prosthetic heart valves (review). *The Cochrane Library* 2006, Issue 4.

Venous thromboembolism

Konstantinides, S. Acute pulmonary embolism. *N Engl J Med*. 2008; 359(12):2804-13.

Piazza G, Goldhaber SZ. Acute pulmonary embolism. Part II: Treatment and prophylaxis. *Circulation* 2006; 114:e42-e7.

Kucher N, Goldhaber SZ. Management of massive pulmonary embolism. *Circulation* Jul. 2005; 112(2):e28-32.

Ansell J, Hirsch J, Hylek E, Jacobson A, Crowther M, Palareti G. Pharmacology and management of the vitamin K antagonists: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl.):160-198

Geerts WH, Bergquist D, Pineo GF, Heit JA, Samama CM, Massen MR, Colwell CW. Prevention of venous thromboembolism. *Chest*. 2008; 133(6 Suppl.):381S-453S.

Kearon C, Kahn SR, Agnelli G, Goldhaber S, Raskob GE, Comerota AJ. Antithrombotic therapy for venous thromboembolic disease: American College of Chest Physicians (8th Edition). *Chest*. 2008; 133(6 Suppl.):454S-545S.

Bates SM, et al. Treatment of deep-vein thrombosis. *N Engl J Med* 2004; 351:268-77.

Scarvelis D, Wells PS. Diagnosis and treatment of deep-vein thrombosis. *CMAJ* 2006; 175:1087-92.

Blann AD, Lip GY. Venous Thromboembolism. *BMJ* 2006; 332(7535)215-9.

Palareti G, et al. D-dimer testing to determine the duration of anticoagulation therapy. *N Engl J Med* Oct. 2006; 355(17):1780-9.

VTE Prophylaxis

Dobesh PP, Wittkowsky AK, Stacy Z, Dager WE, Haines ST et al. Key articles and guidelines for the prevention of venous thromboembolism. *Pharmacotherapy* 2009; 29:410-58.