Antiplatelets

ACUTE ST-SEGMENT INFARCTION

Post Procedural Implantation PCI + STENT

FIBRINOLYTICS

Acute ST-Segment Elevation Condition Indication Recommendations Grade

Stent placement with a strong concomitant indication for PCI

Clopidogrel in addition to ASA

Stent placement with a strong concomitant indication for PCI

Anticoagulants

Primary prevention for patients with at least moderate risk (based on age

Primary prevention with moderate-intensity warfarin (2.0-3.0, for at least 3 months) PLUS ASA

Moderate-intensity warfarin (INR 3.0-4.0) monotherapy (up to 4 years)

High Risk patients post MI (e.g. large anterior MI, significant HF, mitral valve dysfunction, ejection fraction <40%)

Low-dose warfarin (target 1.5) 2A

High-risk patients with 2 or more risk factors (e.g. male, smoking, diabetes, hypertension, hypercholesterolemia)

Clinical indications for warfarin

Strength of recommendations: Grade 1 is strong; Grade 2 is moderate. A high-quality evidence is one of very low-quality evidence. Refer to Chest 2008;133:123S-131S for further details on the approach to grades of recommendations.

Moderate-to-high risk (Framingham 10-year risk ≥ 20%) patients (with readily available LMWH or fondaparinux)

Study limitations/alternatives: Further studies are needed to clarify the optimal indications, use, and management of intravenous UFH. The use of bivalirudin as an alternative to UFH needs further study. Patients with acute coronary syndromes with ongoing ischemic manifestations or imminent death should be considered for primary PCI with bare metal stent deployment unless contraindication exists (e.g. extensive or severe calcification). hunter, stein, et al. (2008). Antithrombotic and Thrombolytic Therapy: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines – 8th edition Chest 2008; 133(6;Suppl):675-6145

Streptokinase in addition to ASA

Streptokinase in addition to ASA

Streptokinase alone

Guidelines

Streptokinase in addition to ASA

Streptokinase in addition to ASA

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Streptokinase in addition to ASA
Atrial Fibrillation

Post-Operative

Follow the same risk-based recommendations as AF 1C

Atrial Flutter

Paroxysmal [Persistent or Non-Valvular

Condition Indication Recommendations Grade

Valvular Heart

Endocarditis

Infective & Disseminated cancer or debilitating disease with aseptic vegetations Full-dose IV UFH or SC LMWH 2C

Mechanical valve and endocarditis Warfarin INR (target intensity and addition of ASA dependent upon type of

Valves)

prosthesis, its position and other risk factors – see Mechanical Prosthetic

Values)

prosthesis, its position and other risk factors – see Mechanical Prosthetic

Prosthetic Valves

Acute 4 - 60 mg of an anticoagulant

Electrolyte Abnormalities

Non-electrolyte hemodynamically unstable (angina, CHF, LV function or heart failure

Mitra Valve Prolapse – High-risk: PT or document ES or recent ES attack

Mitra Valve Prolapse – Moderate-risk (Sx or echocardiographic

Infections & Non-Valvular Endocarditis

Infective Endocarditis and other indication for antithrombotic therapy Substitute full-dose IV UFH until stabilized without sign s of CNS involvement 2C

Non-ST-Elevation Acute Coronary Syndromes (ACS)

Acute Management

Acute ACS patient undergoing PCI Clopidogrel plus a Gp 2b/3a inhibitor 1A

Early invasive strategy of management UFH (with Gp 2b/3a inhibitor) over LMWH or fondaparinux 1B

Moderate or greater risk and will undergo an early invasive strategy of management

Non-ST-Elevation Acute Coronary Syndromes (ACS)

Acute Management

All Patients UFH or LMWH or bivalirudin or fondaparinux 1A

All Patients – MITRAL

With History of atherosclerotic vascular disease Suggest ASA 50-100 mg/d (avoid if > 80 yr or Hx GIB) 2C

With AF, hypercoagulable state, low EF [1C] Warfarin INR 2.5 (2.0 – 3.0) 1C

With LA thrombus at surgery Warfarin 2.5 (2.0 – 3.5) until thrombus resolution 1C

With History of SE Warfarin INR 2.5 (2.0-3.0) for 3 months from valve insertion then reassess 1C

All Patients – AORTIC

Warfarin INR 2.5 (2.0-3.0) for 3 months after surgery then every 3 months thereafter 1C

With History of atherosclerotic vascular disease [1B]; suggest ASA not be

High-risk: Aortic position:

Low-risk: Transcatheter aortic valve replacement (TAVR)

Moderate-risk: Aortic valve sclerosis with aortic insufficiency, or AV replacement

Low-risk: Severe aortic stenosis or AV replacement for severe AV regurgitation

High-risk: History of aortic dissection

Moderate-risk: History of aortic dissection with moderate residual aortic insufficiency

No risk: No risk factors

Acute Coronary Syndrome (ACS)

Elevated troponin level and clinical presentation of NSTEACS and TAVR postoperative period in NSTEACS patients lack of normal sinus rhythm for thrombolysis 2C

Early conservative or a delayed invasive strategy of management

All Patients

MODERATE RISK (Hemodynamic instability, hypotension or syncope)

High-risk: Hypertensive cardiac disease, level I of (2.5 – 3.5)

Low-risk: Patients with history of congestive heart failure or moderate/severe

Moderate-risk: Diabetes mellitus, moderately-severely impaired LV function or heart failure

High-risk: Mitral valve prolapse or mitral regurgitation

All Patients

High-risk: Cardiac surgery who are warfarin INR 2.5 (2.0 – 3.0) 1C

NSTE ACS patient undergoing PCI Clopidogrel plus a Gp 2b/3a inhibitor 1A

After TAVR or valvular surgery 1C

Antithrombotics

Antiplatelets

Bivalirudin with provisional Gp 2b/3a inhibitor and IV GP IIb/IIIa

Antiplatelets

Pregnancy

ACT• Current use of anticoagulants: the higher the INR, the higher the

Contraindications to Thrombolysis

Relative Contraindications

• History of chronic sepsis, poorly controlled hypertension

• Active peptic ulcer

• Pregnancy

• Active ulcer

• Known intracranial pathology not covered in contraindications

• Any prior intracranial hemorrhage

• Known serious cardiac or large vascular lesion (e.g. atherosclerotic

• Any prior intracranial hemorrhage

• Known significant aortic stenosis (primary or metastatic)

• History of prior ischemic stroke greater than 3 months, demen
ta or known intracranial pathology not covered in contraindications

• Traumatic or prolonged (greater than 10 minutes) CPR

• Major surgery (within 3 weeks)

• Recent ischemic stroke (within 2 to 4 weeks)

• Noncompressible vascular puncture

• Active ulcer

• Current use of anticoagulants: the higher the INR, the higher the risk of bleeding

Absolute Contraindications