

Statins for STEMI

1. Should all patients with an ST-elevation MI be considered for immediate statin therapy?

Question submitted by Dr. M.I. Ravalia, Twillingate, Newfoundland

Early studies demonstrated greater efficacy of statins post MI, when there was evidence of associated inflammation.

The recently published Pravastatin or Atorvastatin Evaluation and Infection Therapy (PROVE-IT) trial randomized patients with acute coronary syndrome within 10 days to atorvastatin, 80 mg, or pravastatin, 40 mg. The LDL-C levels on treatment were 1.60 mmol/L versus 2.46 mmol/L, respectively. The atorvastatin group had a 22.4% event rate, versus 26.3% in the pravastatin

group (a reduction of mortality/major adverse cardiac events). Patients who achieved lower high sensitive C-reactive protein levels in addition to lower LDL-C levels fared even better.

Some American experts suggest optional lowering of LDL-C to < 2.0 mmol/L. Canadian experts will likely follow with similar recommendations. Not all patients post MI need statins, but as we attempt to reach even lower LDL-C levels, a greater percentage will require statin therapy.

Answered by:

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Which meds for AF?

2. A 65-year-old patient with atrial fibrillation undergoes angioplasty of the coronary artery. Should I continue warfarin as well as ASA and clopidogrel?

Question submitted by Dr. S. Mecci, Sudbury, Ontario

In the setting of atrial fibrillation, warfarin is far more efficacious as prophylaxis against stroke than acetylsalicylic acid (ASA) alone, or even dual antiplatelet therapy with ASA and clopidogrel, based on the Atrial Fibrillation Clopidogrel Trial with Irbesartan for Prevention of Vascular Events.

Anticoagulants, including warfarin, have been tried in various combinations, including with antiplatelet agents, to prevent acute stent thrombosis. However, the safest and most efficacious protection is with ASA and a thienopyridine (clopidogrel is currently favoured). Neither drug should be discontinued prematurely without first discussing the matter with an interventional cardiologist, preferably the one involved with the stent insertion.

Thus, our patient would require at least temporary treatment with ASA plus clopidogrel (for the stent) in addition to warfarin (for the atrial fibrillation). Any increased bleeding risk must be weighed against the potentially higher risk of inadequate prophylaxis against thrombotic events. In a recent population-based analysis of an elderly (highest risk) cohort,¹ bleeding rates were 0.03 per patient-year with ASA alone, 0.07 per patient-year with a dual antiplatelet regimen, and 0.09 per patient-year with the three-drug combination of ASA, thienopyridine and warfarin (*i.e.*, still relatively low).

Finally, to the extent that use of the thienopyridine tends to be short-term—generally one to six months, depending on the type of stent—the period of

highest bleeding risk will be correspondingly brief. Careful monitoring of the patient for bleeding complications should be instituted during that time, and control over the international normalized ratio should, in particular, be kept tight, with the target value at the lower limit of the aimed-for therapeutic range.

Reference

1. Buresly K, Eisenberg M, Zhang X, et al: Bleeding complications associated with combinations of aspirin, thienopyridine derivatives, and warfarin in elderly patients following acute myocardial infarction. *Arch Intern Med* 2005; 165(7):784-9.

Answered by:

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ACEIs omitted

3. The new Canadian Hypertension Guidelines list ARBs as a first-line drug for treatment, yet omit ACE inhibitors. Why aren't they included?

Question submitted by Dr. Paul Stephan, Scarborough, Ontario

The list of first-line drugs mentioned in the Canadian Hypertension Guidelines is for patients with isolated systolic hypertension. The list for patients with systolic-diastolic elevations comprises five drugs, including angiotensin-converting enzyme (ACE) inhibitors and beta-blockers.

The missing ACE inhibitors on the isolated systolic hypertension (ISH) list reflect the lack of evidence of their effectiveness in both lowering blood pressure and reducing cardiovascular risk in patients with ISH, as

opposed to diuretics (as per the Systolic Hypertension in the Elderly Program), calcium channel blockers (as per the Systolic Hypertension in Europe Trial) and angiotensin receptor blockers (as per the Losartan Intervention for Endpoint Reduction Trial).

Answered by:

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The missing ACE inhibitors... reflect a lack of evidence of their effectiveness...




Warfarin and DVT

4. I have a paraplegic patient with deep vein thrombosis. How long should I continue warfarin therapy?

Question submitted by Dr. Aubrey Goldstein, Ottawa, Ontario

This patient should receive seven to 10 days of active anticoagulation with heparin while he/she has active deep vein thrombosis (DVT). This may prevent further propagation of the DVT, reduce the risk of pulmonary embolism and allow time for effective anticoagulation with warfarin.

The patient should be on long-term anticoagulation with warfarin for life. The target international normalized ratio is between 2 and 3. It is not as if the patient has a one time or reversible condition; as long as the paraplegia remains, then the risk and source for DVT remains. 

Answered by:

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