

Duration of therapy with medium-dose aspirin following a vascular event

Key points

- Several guidelines recommend early use of single doses of aspirin in the range 150 - 300 mg/day as prophylaxis against cardiovascular events.
- Aspirin 75 - 300 mg/day is recommended as long-term prophylaxis of cardiovascular events.
- The dose of aspirin varies not only with the indication but also between different guidelines.
- There is no evidence on which to select the most appropriate dose within the recommended ranges for individual patients; it may be prudent to use a higher dose for the first few weeks following a cardiovascular event but to reduce the dose as the risk of secondary cardiovascular events falls.

Recommendations for prophylaxis with aspirin

The use of medium-dose aspirin (150 - 300 mg) for cardiovascular indications is recommended in several guidelines. In summary, these are:

- The pre-hospital management of acute heart attacks. European Society of Cardiology, 1998 (1).

All patients with a suspected acute coronary syndrome should receive aspirin 150 - 300 mg immediately unless there are clear contraindications.
- Guidelines on acute myocardial infarction in the community. Scottish Heart and Arterial Disease Risk Prevention, 2001 (2).

Give patient with suspected myocardial infarction aspirin 300 mg to chew.
- Management of acute myocardial infarction in patients presenting with ST-segment elevation. European Society of Cardiology, 2003 (3).

Aspirin 150 - 325 mg immediately to be chewed, followed by 75 -160 mg/day thereafter.
- Secondary prevention of coronary heart disease following myocardial infarction. Scottish Intercollegiate Guidelines Network, 2000 (4).

Aspirin 75 - 150 mg/day is recommended post-myocardial infarction.

- Antithrombotic therapy. Scottish Intercollegiate Guidelines Network, 1999 (5).

In high risk patients with atrial fibrillation (aged over 65 with nonvalvular atrial fibrillation, or aged less than 65 with nonvalvular atrial fibrillation but at risk of stroke) in whom warfarin is contraindicated, aspirin 75 - 300 mg/day should be taken to prevent systemic embolism.

Long-term aspirin 300 mg/day is recommended in patients with bioprosthetic mitral heart valves.

It is strongly recommended that aspirin 75 - 300 mg/day be continued long-term in survivors of myocardial infarction.

It is strongly recommended that all patients with clinically suspected unstable angina should receive aspirin 150 - 300 mg/day as soon as possible. This should be continued at a dose of 75 - 300 mg/day in the long term as prophylaxis of cardiovascular events.

Patients with stable angina or intermittent claudication should also receive long-term aspirin 75 - 300 mg/day as prophylaxis of cardiovascular events.

In patients undergoing revascularisation, aspirin 300 mg/day should be given as antithrombotic prophylaxis, starting at least 2 hours prior to coronary angioplasty, or 6 hours following bypass grafting or peripheral angioplasty (unless contraindicated by bleeding) and continued long-term at a dose of 75 - 300 mg/day daily.

Early treatment with aspirin (150 - 300 mg/day) is recommended in acute ischaemic stroke, starting as soon as intracranial haemorrhage is excluded by CT brain scanning, to reduce the risk of death and cardiovascular events.

Antiplatelet therapy (normally aspirin 75 - 300 mg/day) should be prescribed as early as possible for secondary prevention of stroke and other vascular events in patients who have sustained an ischaemic stroke (or transient ischaemic attack). In acute ischaemic stroke, the starting dose should be 150 - 300 mg/day.

- National Clinical Guidelines for Stroke. Royal College of Physicians, 2000 (6).

Aspirin 300 mg should be given as soon as possible after the onset of stroke symptoms if a diagnosis of cerebral haemorrhage is considered unlikely. All

patients not on anticoagulation should be given aspirin (50 - 300 mg/day) as secondary prevention of ischaemic stroke.

- Stroke care. Irish Heart Foundation, 2000 (8).

Most patients with a history of transient ischaemic attacks will be treated with aspirin 75 - 300 mg/day.

References

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3. Van de WF, Ardissino D, Betriu A, Cokkinos DV, Falk E, Fox KA et al. Management of acute myocardial infarction in patients presenting with ST-segment elevation. The Task Force on the Management of Acute Myocardial Infarction of the European Society of Cardiology. *Eur Heart J* 2003;24:28-66.
4. Secondary prevention of coronary heart disease following myocardial infarction: a national clinical guideline. SIGN Guideline No. 41. Scottish Intercollegiate Guidelines Network. January 2000.
5. Antithrombotic therapy: A National Clinical Guideline. SIGN Guideline No. 36. Scottish Intercollegiate Guidelines Network. March 1999.
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Date created: 14/03/2003

Date last modified: 01/12/2003