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NHS
National Institute for
Health and Clinical Excellence

Quick reference guide

Clopidogrel and modified-release dipyridamole in the prevention of occlusive vascular events

1 Guidance

This guidance applies to people who have had an occlusive vascular event (OVE), or who have symptomatic peripheral arterial disease (PAD). This guidance does not apply to people who have had, or are at risk of, a stroke associated with atrial fibrillation, or who require treatment to prevent occlusive events after coronary revascularisation or carotid artery procedures.

1.1 As part of the prevention of occlusive vascular events:

1.1.1 the combination of modified-release (MR) dipyridamole and aspirin is recommended for people who have had an ischaemic stroke or a transient ischaemic attack (TIA) for a period of 2 years from the most recent event. Thereafter, or if MR dipyridamole is not tolerated, preventative therapy should revert to standard care (including long-term treatment with low-dose aspirin)

1.1.2 clopidogrel alone (within its licensed indications) is recommended for people who are intolerant of low-dose aspirin and either have experienced an occlusive vascular event or have symptomatic peripheral arterial disease.

1.2 For the purposes of this guidance, aspirin intolerance is defined as either of the following:

- proven hypersensitivity to aspirin-containing medicines
- history of severe dyspepsia induced by low-dose aspirin.

2 Implementation

2.1 Implications for the NHS

2.1.1 According to Prescription Cost Analysis from 2003 for England and Wales, £2.6 million was spent on MR dipyridamole in combination with aspirin, £7.7 million on MR dipyridamole and £86.8 million on clopidogrel. Clopidogrel is licensed for more than one indication. The proportion of this spending that is attributable to its use in the prevention of OVEs is not known.

2.1.2 The budget impact of the current guidance depends on both the use of the antiplatelet drugs in the incident population and the rate of aspirin intolerance, which has been estimated to lie between 6% and 20%. Thus, if it is assumed that 6% of people are aspirin-intolerant, the cost of treating all new aspirin-tolerant stroke survivors and people with TIA with MR dipyridamole in combination with aspirin would be approximately £11.9 million for the first year. This is based on an estimated 77,000 new cases of non-fatal stroke and 30,000 new cases of TIA in England and Wales. The cost of prescribing clopidogrel for new cases of OVEs or symptomatic PAD in aspirin-intolerant people would be £7.6 million in the first year. This is based on 76,479 hospital admissions for myocardial infarction (MI) with an estimated initial survival rate of 85%, 102,000 new cases of PAD and 77,000 non-fatal strokes. If the rate of aspirin intolerance is as high as 20% then the cost of MR dipyridamole falls to £10.1 million and the cost of clopidogrel rises to £25.2 million. As treatment continues for more than 1 year, these estimated costs would increase on an annual basis until a steady state is reached; for MR dipyridamole in combination with aspirin this is expected after approximately 2 years; for clopidogrel this is expected when new cases are balanced by deaths.

2.2 Local implementation and audit

This section presents proposals for implementation and audit based on the preliminary recommendations for guidance in Section 1 of the full guidance.

2.2.1 Clinicians who care for people who have had an OVE, that is, an ischaemic stroke, a TIA or an MI, or people who have symptomatic PAD, should review their current practice and policies to take account of the guidance set out in Section 1 of the full guidance.

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This guidance is written in the following context:

This guidance represents the view of the Institute, which was arrived at after careful consideration of the available evidence. Health professionals are expected to take it fully into account when exercising their clinical judgement. This guidance does not, however, override the individual responsibility of health professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

2.2.2 Local guidelines or care pathways for people with an OVE or symptomatic PAD should incorporate the guidance.

2.2.3 To measure compliance locally with the guidance, the following criteria could be used. Further details on suggestions for audit are presented in Appendix C of the full guidance.

2.2.4 As part of the prevention of OVEs:

2.2.4.1 For a person who has had an ischaemic stroke or a TIA, the combination of MR dipyridamole and aspirin is prescribed for 2 years from the most recent event. Thereafter, or if MR dipyridamole is not tolerated, preventative therapy reverts to standard care.

2.2.4.2 For a person who is intolerant of low-dose aspirin and who either has experienced an OVE or who has symptomatic PAD, clopidogrel alone is prescribed within its licensed indications.

Further information

Distribution

The distribution list for this quick reference guide is available on the NICE website at www.nice.org.uk/TA090distributionlist

Full guidance

The full guidance is available from www.nice.org.uk/TA090guidance

It contains the following sections:

1 Guidance

2 Clinical need and practice

3 The technology

4 Evidence and interpretation

5 Recommendations for further research

6 Implications for the NHS

7 Implementation and audit

8 Related guidance

9 Review of guidance

The full guidance also gives details of the Appraisal Committee, the sources of evidence considered and suggested criteria for audit.

Information for the public

NICE has produced information describing this guidance for people who have had an occlusive vascular event, or who have symptomatic peripheral arterial disease, their families, and the public. This information is available from the NHS Response Line and from www.nice.org.uk/TA090publicinfo

Related guidance

The Institute has issued a clinical guideline on prophylaxis for patients who have experienced an MI:

- National Institute for Clinical Excellence (2001) Prophylaxis for patients who have experienced a myocardial infarction. NICE Inherited Clinical Guideline A. London: National Institute for Clinical Excellence. All documents and further details are available from www.nice.org.uk/page.aspx?o=16479

The Institute has issued guidance on clopidogrel in the treatment of non-ST-segment-elevation acute coronary syndrome:

- National Institute for Clinical Excellence (2004) Clopidogrel in the treatment of non-ST-segment-elevation acute coronary syndrome. London: National Institute for Clinical Excellence. All documents and further details are available from www.nice.org.uk/page.aspx?o=113882

There is an ongoing appraisal of statins for the prevention of coronary events in patients at increased risk of developing CHD or those with established CHD; expected date of issue November 2005.

The Institute has issued a clinical guideline on the management of hypertension in adults in primary care:

- National Institute for Clinical Excellence (2004) Hypertension – management of hypertension in adults in primary care. London: National Institute for Clinical Excellence. All documents and further details are available from www.nice.org.uk/CG018

The Institute has commissioned a clinical guideline on the identification and management of hyperlipidaemia as part of cardiovascular risk assessment in primary care; expected date of issue September 2007.

Ordering information

This quick reference guide is available from www.nice.org.uk/TA090quickrefguide and from the NHS Response Line. Phone 0870 1555 455 and quote reference N0838. *Information for the public* can be obtained by quoting reference number N0754.

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