



Title Clopidogrel Compared With Other Antiplatelet Agents for Secondary Prevention of Vascular Events in Adults Undergoing Percutaneous Coronary Intervention: Clinical and Cost-Effectiveness Analyses

Agency CADTH, Canadian Agency for Drugs and Technologies in Health
Suite 600, 865 Carling Ave, Ottawa, Ontario K1S 5S8 Canada;

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Aim

To compare the clinical and cost effectiveness of clopidogrel, alone or in combination, with acetylsalicylic acid (ASA) versus other antiplatelet regimens for secondary prevention of vascular events in adult patients undergoing percutaneous coronary intervention (PCI); to determine the optimal duration of treatment with clopidogrel in the same population; and, to review related North American clinical practice guideline recommendations for the use of clopidogrel.

Conclusions and results

Clopidogrel and ticlopidine are at least as effective as ASA in secondary prevention of vascular events. Compared to ASA, clopidogrel, and especially ticlopidine, are associated with a higher risk of major bleeds. A review of composite endpoint data (eg, death, MI, stroke, revascularization, and major bleeds) suggests that the use of ASA plus clopidogrel reduces the rate of cardiovascular events compared to ASA alone. A review of the composite endpoints data indicated that clopidogrel (compared to ticlopidine) was associated with fewer blood disorders. Economic evaluation showed that for patients undergoing PCI at age 60, one year of dual antiplatelet therapy with ticlopidine and ASA, followed by lifetime ASA, may be a more cost-effective treatment (compared to clopidogrel plus ASA, and ASA monotherapy) in secondary prevention of vascular events.

Recommendations

Not applicable.

Methods

We conducted systematic reviews of clinical and economic studies that compared clopidogrel to other antiplatelet agents in patients undergoing PCI. A primary economic analysis aimed to determine the cost effectiveness of clopidogrel plus ASA, ticlopidine plus ASA, or ASA in managing patients. Clinical practice guideline recommendations were reviewed and assessed.

Further research/reviews required

More research should directly compare several clinical outcomes and different dosages and should investigate quality of life. In addition, more information on the clinical effectiveness of ticlopidine would be of value to decision makers.