THE CLINICAL QUESTION

When is an intracoronary drug-eluting stent (DES) in the treatment of significant coronary artery disease indicated over medical therapy alone?

TAKE HOME MESSAGE

Current guidelines recommend intracoronary drug-eluting stents (DES) in the treatment of significant coronary artery disease. However, the relative benefits and harms of DES compared with medical therapy alone are not well established. This review assessed the evidence for intracoronary DES in the treatment of significant coronary artery disease.

BACKGROUND

The long-term benefit of DES compared to medical therapy alone is not well established. While initial randomized trials suggested that DES were better than medical therapy alone, many randomized trials have not shown clear improvements in clinical outcomes. A meta-analysis of randomized trials comparing DES to medical therapy alone found no significant differences in mortality, but a significant decrease in the rate of myocardial infarction. A Cochrane review of randomized trials comparing DES to medical therapy alone found no significant differences in mortality, but a significant decrease in the rate of myocardial infarction.

STUDY DESIGN

We searched MEDLINE and EMBASE for randomized trials comparing DES to medical therapy alone. We included all randomized trials comparing DES to medical therapy alone in the treatment of significant coronary artery disease. Study characteristics and outcomes were extracted by two reviewers.

POPULATION

Included were all randomized trials comparing DES to medical therapy alone in the treatment of significant coronary artery disease. We included trials comparing DES to medical therapy alone in the treatment of significant coronary artery disease.

Excluded trials

We excluded trials comparing DES to medical therapy alone in the treatment of significant coronary artery disease.

OUTCOMES

The primary outcomes were mortality and myocardial infarction. Secondary outcomes were stroke, major adverse cardiac events, and hospitalization for heart failure.

COMMENTARY

Most of the evidence on the use of DES in the treatment of coronary artery disease comes from randomized trials. However, the evidence is limited by the lack of long-term follow-up and the variability in patient characteristics. The use of DES may be limited by the increased risk of stent thrombosis and the need for lifelong antiplatelet therapy. The evidence is limited by the lack of long-term follow-up and the variability in patient characteristics. The use of DES may be limited by the increased risk of stent thrombosis and the need for lifelong antiplatelet therapy.

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SUGGESTED READING


ARTICLE CITATION