

A PRACTICAL REGIMEN FOR AMIODARONE USE IN PREVENTING POSTOPERATIVE ATRIAL FIBRILLATION AFTER CORONARY ARTERY BYPASS GRAFTING: A RANDOMISED CONTROLLED TRIAL.

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Objective:

To compare the risk of the composite endpoint of postoperative atrial fibrillation, cerebral apoplexy/transitory cerebral infarction (TCI), acute myocardial infarction (AMI), or death after coronary artery bypass grafting (CABG) in two groups of patients: one receiving prophylactic amiodarone and the other receiving placebo.

Design:

A randomised, controlled, double-blinded trial

Setting:

Department of Cardiothoracic and Vascular Surgery & Institute of Clinical Medicine, Skejby Sygehus, Aarhus University Hospital and local hospitals. After discharge all participants were followed up for 30 postoperative days.

Subjects:

Two hundred and fifty eligible consecutively enrolled CABG patients.

Intervention:

Intravenous: Three hundred mg of amiodarone or placebo (5% aqueous dextrose solution) administered over 20 minutes.

Oral: Six hundred mg of amiodarone/placebo twice per day (8 a.m. and 8 p.m.) for the first five postoperative days.

Endpoints:

Primary: (I) Time to symptomatic atrial fibrillation, cerebral apoplexy/TCI, AMI, or death.

Secondary: (II) Time to symptomatic or asymptomatic atrial fibrillation, cerebral apoplexy/TCI, AMI, or death; (III) Time to symptomatic or asymptomatic atrial fibrillation; and (IV) Time to symptomatic atrial fibrillation.

Results at 30 days of follow-up:

For primary endpoint (I), risk reduction of 18% (10-27) for patients receiving amiodarone.

Number needed to treat 5.4 (3.7-10).

Secondary endpoints showed a risk reduction of 16% (6.4-26) (II), 14% (5.0-24) (III), and 18% (9.4-26) (IV).

Number needed to treat 6.3 (3.9-5.5) (II), 6.9 (4.2-20) (III), and 5.7 (3.9-11) (IV).

Thirty-two patients in the placebo group (n=125) developed atrial fibrillation, with 84% of these (n=27) experiencing a symptomatic attack. In the amiodarone group (n=125), only 14 patients developed atrial fibrillation, with 43% of these (n=6) experiencing a symptomatic attack.

Conclusions:

Postoperative use of high dose oral amiodarone after an intravenous bolus infusion is a safe, practical, feasible, and efficacious prophylactic regimen for CABG patients. It significantly diminishes the occurrence of postoperative atrial fibrillation.