

ATRIAL FIBRILLATION

Colchicine lowers postoperative AF risk

A substudy of the COPPS trial has indicated that colchicine might be a useful prophylactic therapy for the prevention of postoperative atrial fibrillation (AF), a common complication of cardiac surgery.

According to Dr Massimo Imazio, “inflammation, and especially pericardial inflammation, may be an important contributing factor for the pathogenesis of postoperative AF.” Dr Imazio and colleagues, therefore, set out to test whether the anti-inflammatory agent colchicine was an effective preventative agent in patients undergoing cardiac surgery.

The COPPS substudy involved 336 patients who received colchicine 1 mg or placebo twice on day 3 after cardiac surgery, followed by twice-daily colchicine 0.5 mg or placebo for the next month (colchicine doses were halved for individuals <70 kg and for those intolerant to the higher dose). Of the patients included in the substudy, 10% had experienced AF onset on postoperative day 1 or 2, but were in sinus rhythm at the time of first

administration of colchicine or placebo, and an additional 16% experienced AF onset on or after postoperative day 3. Only AF events after postoperative day 3 were considered in the analysis of the primary end point—rate of postoperative AF. At the 1-month follow-up, colchicine was associated with a 45% reduction in risk of postoperative AF (which occurred in 12% vs 22% with placebo, $P=0.02$), and with shorter in-hospital and rehabilitation times.

Dr Imazio highlights the need for further research, “especially to test if the drug may be more efficacious if given before cardiac surgery in order to prevent postoperative AF in the first 48 h.” COPPS-2, which is due to start in early 2012, will specifically address this issue.

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Original article Imazio, M. *et al.* Colchicine reduces postoperative atrial fibrillation: results of the Colchicine for the Prevention of the Postpericardiotomy Syndrome (COPPS) atrial fibrillation substudy. *Circulation* **124**, 2290–2294 (2011)