COP-AF trial

#ESCCongress

Colchicine for the prevention of perioperative atrial fibrillation after major thoracic surgery

Conclusion

Colchicine does not significantly reduce perioperative atrial fibrillation (AF) or myocardial injury after non-cardiac surgery (MINS) in patients undergoing major non-cardiac thoracic surgery.

Impact on clinical practice

Despite no significant reduction in the co-primary outcomes with colchicine and an increased risk of non-infectious diarrhoea, several results provided an encouraging signal of benefit for colchicine to reduce the incidence of adverse CV outcomes in these patients.

Study objectives

The COP-AF trial tested the hypothesis that colchicine reduces the incidence of clinically important perioperative AF and MINS in patients undergoing major non-cardiac thoracic surgery.

Study population

Patients

- aged ≥55 years
- were undergoing major non-cardiac thoracic surgery.

Where?

11 countries

45 sites

Who and what?

3,209 patients randomised 1:1

- **Oral colchicine 0.5 mg twice daily**
- **Placebo**

First dose within 4 hours before surgery for a total of 10 days

Follow-up ▶ 14 days

Co-primary outcomes

Clinically important perioperative AF

	Rate%
	6.4%
	7.5%

Hazard ratio 0.85; 95% CI 0.65 to 1.10
absolute risk reduction (ARR) 1.1%;
95% CI -0.7 to 2.8, p=0.22

MINS

	Rate%
	18.3%
	20.3%

Hazard ratio 0.89; 95% CI 0.76 to 1.05
ARR 2.0%; 95% CI -0.8 to 4.7, p=0.16

Post-hoc analyses

Composite outcome of clinically important perioperative AF or MINS

	Rate%
	22.4%
	25.9%

Hazard ratio 0.84; 95% CI 0.73 to 0.97

Composite outcome of vascular mortality, nonfatal MINS, nonfatal stroke or clinically important perioperative AF

	Rate%
	22.6%
	26.4%

Hazard ratio 0.83; 95% CI, 0.72 to 0.96

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