

APAF-CRT trial

#ESCCongress

AV junction ablation and CRT in patients with permanent atrial fibrillation and narrow QRS

Conclusion



AV junction ablation plus cardiac resynchronisation therapy (CRT) is superior to pharmacological rate control in reducing mortality in severely symptomatic permanent atrial fibrillation (AF) patients with a narrow QRS.

Background



Previous research has shown that in patients with AF, atrioventricular (AV) junction ablation and right ventricular pacing improved symptoms, quality of life, and cardiac function by ensuring effective control rate. However, the therapy failed to reduce mortality. The authors of the current trial previously demonstrated that biventricular pacing with CRT may counteract the adverse effects of non-physiological right ventricular pacing in AF patients.

What is APAF-CRT?



APAF-CRT was a two-phase trial in patients with severely symptomatic permanent AF and a narrow QRS.

Phase 1

Morbidity

Previously showed that AV junction ablation and CRT reduced hospitalisation due to heart failure (HF) and improved HF symptoms compared with pharmacological rate control at 2 years of follow-up.

Phase 2

Mortality

Presented today. In a larger population with a longer follow-up, the trial tested the hypothesis that AV junction ablation and biventricular pacing is superior to pharmacological rate control therapy in reducing all-cause mortality.

Who and what?

Participants

- severely symptomatic permanent AF (>6 months)
- considered unsuitable for AF ablation or in whom AF ablation had failed
- narrow QRS (≤ 110 ms)
- ≥ 1 hospitalisation for HF in the previous year

133

randomised 1:1

Ablation + CRT arm

AV junction ablation + Biventricular pacing

Drug arm

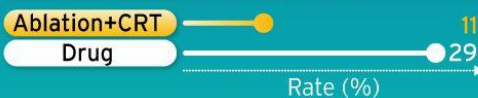
Optimal pharmacological rate control therapy



Patients in both arms could additionally be given a defibrillator at the discretion of their physician according to ESC guidelines

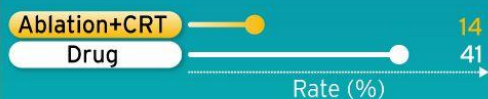
Primary endpoint

Death from any cause



HR: 0.26 (95% CI: 0.10-0.65), $p=0.004$

Estimated death rates at four years



Relative risk reduction: 74%

Absolute risk reduction: 27%

Number needed to treat: 3.7