Catheter ablation versus medical therapy to treat atrial fibrillation in end-stage heart failure

Conclusion



Atrial fibrillation (AF) ablation is associated with lower rates of death, urgent heart transplantation or left ventricular assist device (LVAD) implantation compared with medical therapy in patients with end-stage heart failure (HF).

Impact on clinical practice



Patients with end-stage HF eligible for heart transplantation have been excluded from major trials, leaving them with no recommendations or evidence for the optimal treatment of AF and advanced HF. The trial showed that AF ablation improves outcomes in this group.

Study objectives



The CASTLE-HTx trial tested whether AF ablation is superior to medical therapy concerning mortality and need for urgent transplantation or LVAD implantation.

Study population

Patients

- with symptomatic AF
- with end-stage HF eligible for heart transplantation
- in New York Heart Association functional class II, III, or IV
- had left ventricular ejection fraction (LVEF) ≤35%
- were fitted with a cardiac device for continuous monitoring

Where?



Heart and Diabetes Center North Rhine-Westphalia, Bad Oeynhausen, Germany

Primary endpoint

Composite of all-cause mortality, worsening HF requiring urgent heart transplantation, or implantation of LVAD.



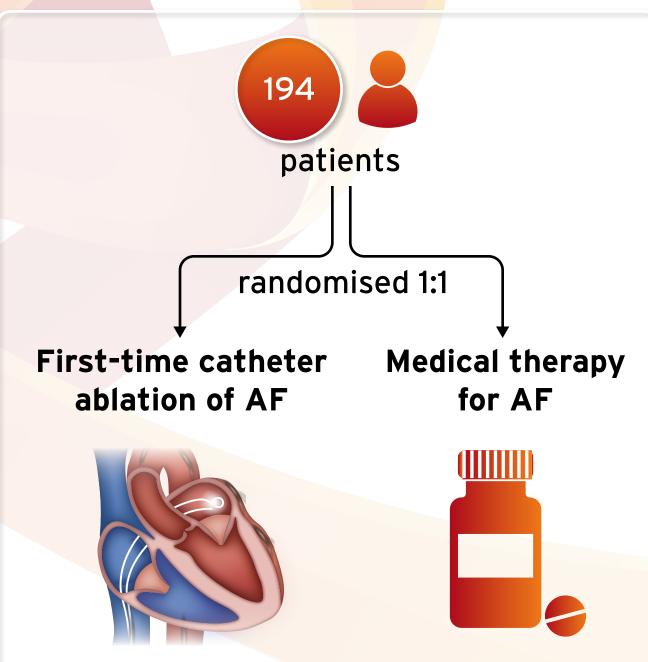
Rate% 8.2%



29.9%

hazard ratio 0.24 95% CI 0.11 to 0.52 p<0.001

Who and what?



Both groups received guideline-directed HF therapy.



The study was stopped for efficacy by the Data Safety Monitoring Board 1 year after randomisation was completed.