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Clinical And Hemodynamic Evaluation Of The Perceval And Intuity Rapid Deployment Valves In Patients With Small Aortic Annulus

21 ISMICS RE-IMAGINED 18-20 June 2021 www.ISMICS.org

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Background

- Small aortic annulus = risk of prosthesis-patient mismatch (PPM)
- Rapid deployment valves may reduce this risk.
- Little is known about the outcomes associated with different types of valves.

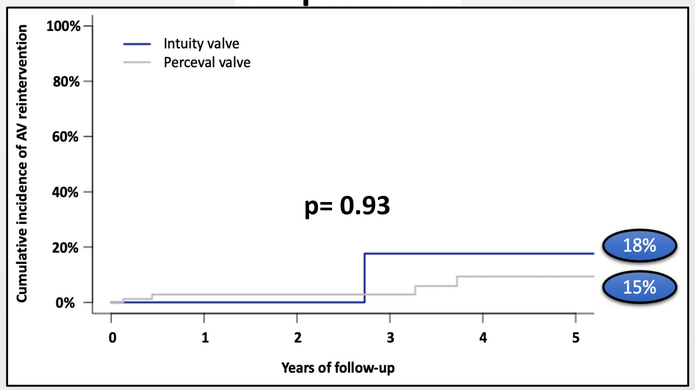
Methods

- Between 2012 and 2019:
  - 165 patients received a Perceval size S or Intuity ≤21mm
  - 39 Intuity valves (Group I) and 126 Perceval valves (Group P)
- Clinical and hemodynamic outcomes were assessed

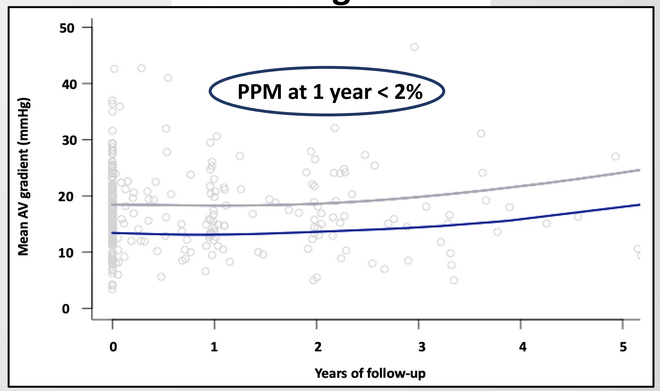
Results

Characteristics	Group I	Group P	*p* value
Age (years)	69±7	77±6	*<0.01*
Sex (F)	27 (69%)	120 (95%)	*<0.01*
Concomitant procedure	21 (54%)	64 (51%)	0.74
Redo	2 (5%)	26 (21%)	*0.03*
Bicuspid valve	14 (36%)	5 (4%)	*<0.01*
Aortic stenosis	36 (92%)	118 (94%)	0.68
Annulus size (mm)	22±2	20±2	*<0.01*

Reoperations



Mean AV gradients



Conclusions

- Rapid deployment valves offer low rates of PPM at 1 year in patients with small annulus.
- Nevertheless, there is a significant increase in AV gradients over time.
- Further research is required to confirm these results.