

403 Sutureless Sorin Perceval Versus Rapidly Deployed Edwards Intuity Elite: Short- And Medium-Term Outcomes Comparison in A Single Centre Experience

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Aim: Rapid deployment aortic valves (RDAV) are an alternative to conventional aortic valve replacement. This single-centre study compares surgical outcomes, and hemodynamic performance between the rapid deployment valves.

Method: A total of 120 consecutive patients receiving either a Sorin Perceval S (N=61) or an Edwards INTUITY valve (N=59) between January 2016 and September 2019 were included. Retrospective analysis of prospectively collected data from all patients undergoing isolated Aortic valve replacement or with any concomitant procedure were included. This study compared Preoperative characteristics, valve-related adverse events, post-operative complications, trans-valvular gradients and survival rates.

Results: Mean age, EuroSCORE II 2.78, body mass index and gender distribution were similar between the two studied groups. More Octogenarians received a Perceval valve than an Intuity valve (31 vs 9 $P > 0.05$). Thirty-day mortality and valve-related complications including need for insertion of permanent pacemaker were comparable. At follow up echocardiography, peak or mean pressure gradients were comparable between groups. However, higher peak gradient was recorded when Perceval size S is compared to Intuity 21 ($P < 0.05$) and Perceval size L is compared to Intuity 25 ($P, 0.05$)

Conclusions: Both Perceval and Intuity rapid deployment valves had good early and medium-term surgical outcomes and valve hemodynamics, with relatively low valve-related complication rates. More Perceval valves were deployed through Mini-sternotomy incision but Intuity valves were used more often with double valve procedures. Intuity valves were associated with lower pressure gradients when compared with size matched Perceval valves.