

## **Isolated Aortic Valve Replacement in Octo- and Nonagenarians can be performed with low morbidity and mortality**

### **Objective**

A decade ago, cardiac surgery in octogenarians was a relative rarity. Today, such surgery has ceased to be a novelty. In order to evaluate this changing pattern of practice, we have reviewed 30-day outcome for isolated first-time aortic valve replacement (AVR) in octo- and nonagenarians.

### **Methods**

We performed a retrospective analysis of prospectively collected data for all patients over 80 years old who underwent isolated first-time AVR at our institution between August 2003 and September 2015. Pre-operative, intra-operative and post-operative variables were analyzed. Exclusion criteria included: re-do procedures, emergency procedures, and the of concomitant coronary artery bypass grafting (CABG).

### **Results**

There were 219 patients. Median age was 82 years. & 43% were male. Median Logistic EuroSCORE I was 11.1%. 11.4% were recorded as having impaired left ventricular function.. Surgery was urgent in 13.6%. Mean CPB and cross-clamp times were 72 and 52 minutes.. 30-day all cause mortality was 1.8%. Complications were atrial fibrillation (44%), temporary renal dysfunction (8%), renal dialysis (4%), respiratory dysfunction (25%), stroke (1%), and bleeding (7%). Median hospital stay was 14 days

### **Conclusion**

Isolated first-time AVR can be performed in patients over 80 years of age with excellent early outcomes. However, postoperative morbidity remains relatively high. Age alone should neither be a contraindication for AVR nor should it, in of itself, be an indication for less invasive strategies which may be associated with inferior durability. Patient selection and appropriate multi-disciplinary evaluation of treatment strategies are the essential pre-requisites of good postoperative outcome.