Early and Mid-term Outcome of Surgical Treatment of the Ascending Aortic Replacement in Albania

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Objectives:

Surgical approach of various pathological forms of the ascending aorta is a challenge. We are presenting the initial experience of such a surgery in Albania.

Materials and Methods:

We included 110 patients undergoing ascending aortic replacement by the same surgical team in different hospitals in Tirana, between January 2006 and December 2012. 19 patients presented acute aortic dissection type A and 2 chronic type A aortic dissection and 2 had separated intramural hematoma of the ascending aorta. 7 patients had associated aortic coarctation. Marfan disease was identified in 3 cases.

Results:

The in hospital mortality was 3.1% (2.7 patients). Two of them had associated aortic arch aneurysm. One died due to ventricular arrhythmias. The second died due to intraoperative aortic arch dissection and the third died due to severe and uncontrollable bleeding. 35 patients underwent modified Bentall operation, 4 patients underwent HemiDavid procedure and 2 patient David procedure. 56 patients underwent aortic valve replacement and ascending aortic replacement. One patient underwent total aortic arch replacement and 27 patients Hemiarch procedure. Circulatory arrest was performed in 32 patients associated with anterograde cerebral perfusion in two case and retrograde cerebral perfusion in 30 patients. Simultaneous aortic coarctation repair and ascending aortic aneurysm was performed in 5 patients. The actuarial free reoperation survival at 1, 3 and 5 years resulted to be 98, 88 and 87%, instead the actuarial survival without re-operation resulted to be 89, 82 and 78%. The multivariate analysis revealed age 65 years (P=0.02), associated cardiac operation (P=0.005), NYHA functional class/=3 (P=0.03), LVEF 35% (P=0.01) and arch reconstruction (P=0.005) as strong predictors for poor overall survival in patients undergoing aortic replacement.

Conclusions:

The surgical approach of the ascending aorta now is feasible with excellent outcome in Albania. Our early and mid term outcome are excellent and are very promising.