

10. Factors Associated with Long Term Survival after EVAR in Octogenarians: Single Institution Experience

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OBJECTIVES: EVAR has become the preferred approach in octogenarians with large abdominal aortic aneurysms, but the anticipated risk of aneurysm rupture should be weighted against the expected survival of older patients.

METHODS: The clinical data on 519 consecutive patients who underwent EVAR between 1999 and 2007 was entered in the prospective database. Clinical outcomes in octogenarians were compared with those of younger patients. Cardiovascular, clinical and postoperative variables were analyzed using multivariate regression model to determine factors associated with long-term survival.

RESULTS: There were 428 men and 91 women with a mean age of 73.7 (range, 51-93). 121 patients were octogenarians (23%). Incidence of coronary disease, hypertension, diabetes and renal insufficiency was similar in both groups, but there were more ($p>0.05$) COPD and larger aneurysms among octogenarians (5.5 ± 0.7 vs. 5.8 ± 0.9). The incidence of early deaths (2.5% versus 0.25%) and major complications (5.8% versus 1.8%) was higher among octogenarians ($P<0.05$). Mean follow up was 26.4 months. Overall 2-year survival was decreased in octogenarians as compared to younger patients (76.7% and 90%). The need for secondary interventions was similar in both groups. Factors associated with decreased survival among octogenarians included advanced age (Hazard Ratio [HR] 2.6), diabetes (HR 2.4), COPD (HR 2.0) and elevated serum creatinine (HR 1.9).

CONCLUSIONS: EVAR in octogenarians can be achieved with low mortality, morbidity and re-intervention rate. Long-term survival is adversely affected by age, diabetes, COPD, and renal dysfunction. These factors should be considered when offering EVAR to older patients.