6-year follow-up of TAVI patients

Very few studies exist that describe the long-term outcomes of transcatheter aortic valve implantation (TAVI) in patients with aortic stenosis. Therefore, Bouleti and colleagues aimed to assess late outcomes up to 6 years after TAVI, with a particular focus on functional status.

Investigators in this prospective, single-centre study analysed long-term outcomes in 123 patients with aortic stenosis who were discharged from hospital after TAVI between October 2006 and December 2009. The mean age of the patients was 81.5 ± 8.4 years, 69% of patients were male, and 88% were in NYHA class III or IV.

Follow-up was completed 99% of patients, with a 6-year survival rate of 31 ± 5 %. Of the 77 patients who died during the 6-year follow-up, only 33% died from cardiac-related causes, mostly attributable to congestive heart failure. A multivariate analysis identified three main predictive factors of late mortality after TAVI: the presence of lower limb arteritis (*P*=0.009), a high Charlson comorbidity index (P = 0.03), and paraprosthetic aortic regurgitation $\ge 2/4$ (P = 0.01). Among the 45 patients who were alive at the 6-year follow-up, 33 were in NYHA functional class I or II. The rate of favourable late functional results, defined as survival in NYHA class I or II at last follow-up, was $32 \pm 5\%$ at 5 years. Quality-of-life measures in these surviving patients, assessed using a questionnaire and a visual analogical scale, were also favourable.

The findings from this single-centre series, with the longest follow-up of patients after TAVI "provides encouraging information on survival in patients discharged alive after TAVI", conclude the investigators of this study. They go on to comment that "follow-up has to be pursued in existing TAVI cohorts in order to further improve patient selection". *Karina Huynh*

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