

Maciej Matuszewski

Early and mid-term clinical and echocardiography outcomes in patients undergoing aortic valve repair / replacement for isolated aortic regurgitation from AVIATOR database

Background

The patients who undergo aortic valve repair for isolated aortic regurgitation are usually fewer in numbers than those who undergo concomitant aortic surgery, and their data are usually published alongside the latter. The objective of this study is to determine the early and mid-term outcomes in these patients, and to examine if they are improved by the use of various repair techniques.

Research questions

- What is the early and mid-term mortality of patients who undergo aortic valve repair for isolated aortic regurgitation?
- What is the reoperation rate in patients who undergo aortic valve repair for isolated aortic regurgitation?
- What are the early and mid-term ECHO outcomes of patients who undergo aortic valve repair for isolated aortic regurgitation?
- Are there any determinants that predict good mid-term outcomes after aortic valve repair for isolated aortic regurgitation?
- What are the clinical and ECHO outcomes and the reoperation rate of patients who underwent aortic valve replacement during the initial surgery because valve repair was not possible?

Methods

Using the AVIATOR registry, retrospective analysis of all patients with a diagnosis of isolated aortic regurgitation will be performed. Operative mortality, mid-term actuarial survival, freedom from reoperation and freedom from 2+ or greater aortic regurgitation will be assessed. We will seek to determine predictors of reoperation and recurrent aortic regurgitation.



Data selection

We would like to select all patients with isolated aortic regurgitation. More in detail, we would like to select the following data variables from the AVIATOR registry: subject ID, center ID (anonymised), gender, DOB, reason for referral, endocarditis, height, weight, HR, LVEF, COPD, IDDM, dialysis, poor mobility, extracardiac arteriopathy, recent myocardial infarction, critical state, creatinine value, pulmonary hypertension, CTD, urgency of operation, intention to repair before and after cusp analysis, operation date, age, hegar, AV morphology, cusp analysis, operation type, repair type, annuloplasty and its type, STJ band, replacement type, clamp duration, additional clamp session needed, operation type during additional clamp session, all pre-op and intra-op ECHO variables, operation type during follow-up.

Planning

November/December: receive data set

January-April: data analysis

May writing (draft) manuscript