References

Pierfrancesco Agostoni
Antwerp Cardiovascular Institute Middelheim
AZ Middelheim
Lindendreef 1
2020 Antwerp
Belgium
Tel: +32 484 086933
Fax: +32 3 2306511
Email: agostonipf@gmail.com

Luca Testa
Institute of Cardiology
John Radcliffe Hospital
Oxford
UK

Giuseppe G.L. Biondi-Zoccai
Division of Cardiology
University of Turin
Turin
Italy
Meta-analysis and Evidence-based Medicine
Training in Cardiology (METCARDIO) members
(www.metcardio.org)

doi:10.1093/eurheartj/ehn443
Online publish-ahead-of-print 2 October 2008

Aortic valve stenosis management: old strategies and future directions

We read with great interest the article by Descoutures et al.1 We would like to congratulate the authors for this well-designed study but we would also add some brief comments. The aim of this prospective study was to detail the clinical characteristics and management of patients referred for severe aortic valve stenosis in a centre with on-site capabilities for either cardiac surgery or percutaneous valve implantation. Thirty-one patients underwent aortic valve surgery, 12 percutaneous valve implantation, and the remaining patients were medically treated. Mean Logistic-EuroScore for patients undergoing percutaneous treatment was 31 ± 14%. Out of 12 implants, 10 were successful. Besides all the complications, due to a learning curve, the authors conclude that this technique is a viable alternative in selected high-risk patients and should be considered within the scenario of aortic valve stenosis management.

With the aim to reduce the surgical invasive-ness, we are currently using epidural anaesthesia maintaining an autonomic ventilation.2 We selected 30 consecutive patients who underwent epidural-awake aortic valve replacement (47% females, mean age 78.1 ± 8, 20% multi-vessel coronary disease, mean Logistic-EuroScore 28.3). Associated surgical procedures included coronary artery bypass grafting (17%), ascending aorta replacement (10%), and mitral valve surgery (10%). Unless emergency, no other exclusion criteria were considered. One patient died for an operative mortality of 3% and two patients during the follow-up (natural death). Concerning all other complications (stroke, no case; bowel ischaemia, no case; prolonged mechanical ventilation, two cases; and myocardial infarction, one case), these occurred rarely. Median ward stay and ICU stay were 4.5 and 1 day, respectively. Seven patients have been transferred to the ward within 3 h after surgery, and 19 patients within <12 h.

Descoutures et al.1 suggest four different opportunities to treat a high-risk patient suffering aortic stenosis, stating that the final therapeutic decision should rely on clinical judgement based on a team approach. The main reason why percutaneous interventions are more acceptable by the patients is the simplicity. Unfortunately, interventional cardiologists and cardiac surgeons (team approach) are going to re-think the high-risk aortic stenosis management3,4 without a well-founded clinical programme and forgetting the patients’ and economic-community interests. By using epidural anaesthesia we do not adjust any cost while we greatly reduce the need of ICU management, and on the other hand we have to consider that the percutaneous prostheses are sold at a cost 10-fold higher than a standard bioprostheses. We maintain that percutaneous approaches should focus on coming up to the side of surgery, to support it in its current limitations such as by replacing deteriorated bioprostheses, avoiding the complications related to repeat heart dissection, or for patients suffering of porcine aorta.

Therefore, we would like to add to the four strategies suggested by the authors of the current paper5 the opportunity to treat these high-risk patients even with the awake surgery strategy, extending the team approach for the final decision to the anaesthetist.

References

Tomaso Bottio
Department of Cardiovascular Surgery
University of Padua Medical School
Via Giustianni, 2
36100 Padova
Italy
Tel: +39 049 821 2408
Fax: +39 049 821 2409
Email: tbottio@gmail.com

Vincenzo Tarzia
Department of Cardiovascular Surgery
University of Padua Medical School
Via Giustianni, 2
36100 Padova
Italy

Giulio Rizzoli
Department of Cardiovascular Surgery
University of Padua Medical School
Via Giustianni, 2
36100 Padova
Italy

Gino Gerossi
Department of Cardiovascular Surgery
University of Padua Medical School
Via Giustianni, 2
36100 Padova
Italy