

## Triple valve surgery a 25-year experience

### *Üç kapak cerrahisi: 25 yıllık deneyim*

To the Editor:

I have read the article "Triple Valve Surgery: A 25-Year Experience" published on September 2004 issue of the journal by Mustafa Yılmaz and colleagues (1) with interest. The authors, during their 25 years of practice, have used more than 10 different valve types: namely 5 different tricuspid, 7 different aortic and 9 different mitral valves were implanted. It is well known that each valve has its own statistical early and late fatal and non-fatal complication rates. In order to define morbidity and mortality rates related to patient and valve type used during surgery, in 1988 The Society of Thoracic Surgeons (STS) and The American Association for Thoracic Surgery (AATS) have adopted a guideline for reporting valve operations. The potential risk factors for morbidity and mortality are analyzed with multivariate analysis according to STS/AATS guidelines and leading risk factors for multiple valve replacements are listed in this guideline as emergency operation, NYHA functional classification, stenotic valve and small aortic annulus. Risk factors for bioprosthetic valves are listed as jaundice, hepatomegaly, NYHA functional classification, type of tricuspid valve prosthesis, cardiopulmonary bypass time, elevated pulmonary artery pressure, emergency operation, and cardiomegaly. The preoperative data of patients reported by Yılmaz and colleagues shows moderate elevations in pulmonary artery pressures, near normal ejection fraction and no cardiomegaly.

Surgical literature (2, 3) reports wide differences among bioprosthetic and mechanical valves for structural valve degene-

ration and hemorrhage related to anticoagulation but similar results for valve related complications (reoperation mortality, severe hemorrhage or thrombosis, valve related late mortality, valve related reoperation)

I believe that studies about valve replacement should be performed under these scientific findings and guidelines. In that respect reporting the early mortality as 11.8% and late mortality as eight patients for the whole cohort as a homogeneous group may not be perfectly correct. Similarly reporting that 10 patients out of 30 had cerebral complication and eight of these patients had cage-ball or tilting disc, does not necessarily translate into that St. Jude valve is superior. To report survival and morbidity rates for each valve type may be a much better analysis.

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#### References

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2. Fradet GS, Jamieson WR, Abel JG et al. Clinical performance of biological and mechanical prosthesis. *Ann Thorac Surg* 1995; (Supp II): S443-8.
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#### Author's Reply

Dear Editor,

We would like to appreciate the interest and the comment of our colleagues, on our manuscript "Triple valve surgery: A 25-year experience" which was published in the September 2004 issue of the *Anadolu Kardiyoloji Dergisi* (1).

It was already emphasized in our paper that the series related to triple valve surgery consisted of small number of cases in international literature. The number of cases was not enough to make statistically reliable comparison of different kinds of prosthetic valves. In our series, as it is mentioned in international literature, there are a number of patients who had undergone 1 or 2 valve replacements previously and had reoperation for the second and/or third valve. It would not be surprising to have different kinds of prosthetic valves in the same patient.

The objective of the study was to revise the overall result of

triple valve surgery retrospectively not to compare valve types and their effects on mortality and morbidity.

As a result we observed that bileaflet prosthetic valves yielded better results when compared to monoleaflet mechanical prosthesis or xenografts. Similar comments have been reported in literature.

Sincerely

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#### References

1. Yılmaz M, Özkan M, Böke E. Triple valve surgery: A 25-Year experience. *Anadolu Kardiyol Derg* 2004; 4:205-8.