Abstract

COMPARATIVE STUDY BETWEEN BILEAFLET AND TILTING DISC MECHANICAL VALVE PROSTHESIS - A RETROSPECTIVE ANALYSIS

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Background

When a patient needs a valve replacement today, there are several options for the valve substitute. The most often used mechanical valve prosthesis is "bileaflet" or "tilting disc". Considering high volume valve replacements being done in our centre, it is imperative to conduct a study to find an ideal mechanical valve prosthesis between "bileaflet" and "tilting disc".

KEYWORDS; mitral valve replacement, aortic valve replacement, tilting disc, bileaflet, mechanical valve prosthesis.

Materials and methods

This retrospective analysis was under taken as an observational evaluation on "bileaflet" and "tilting disc" mechanical valve performance and outcome for isolated mitral(333) and aortic valve replacement(60) in Department of Cardio Thoracic Surgery at Government General Hospital, Chennai, using a descriptive method of analysis over a period of 24 months from September 2009 to September 2011.

Results

Statistical difference found only in mitral valve group in terms of ease of procedure bileaflet superior than tilting disc, where as in respect to post operative hemodynamic, tilting disc superior than bileaflet. Other variables in mitral group, all parameters in aortic group did not show the differences.

Conclusion

Comparing the results between "bileaflet" and "tilting disk" offer similar excellent clinical performance for both MVR and AVR.