

## 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 disc**” offer similar excellent clinical performance for both MVR and AVR.