MINIMALLY INVASIVE AORTIC VALVE REPLACEMENT- OUR EXPERIENCE

INTRODUCTION

- Significant advances in surgical optics, instrumentation and perfusion technology have allowed aortic valve surgery to be performed using smaller incisions - Minithoracotomy and Hemisternotomy.
- We present our experience of aortic valve replacement done via Right anterior mini thoracotomy

AIM

- To minimize surgical access to achieve faster recovery, less postoperative discomfort and better cosmetic results.

INVESTIGATIONS

- Chest Xray
- 2D ECHO
- Doppler study of lower limb
- CT scan of thorax

MATERIALS & METHODS

- Study duration-July 2011 to January 2018
- Total no of cases-84
- Patients with Isolated Aortic valve disease selected.

  Rheumatic - 62

  Degenerative - 14

  Congenital - 8
- Male:Female - 58:26.
- Mean age - 41.4yrs.

RESULT

- No approach-related limitations to surgical intervention.
- TEE no paravalvular leak
- Mean duration of

  Aortic cross-clamp time -(53 ± 16) mins

  Cardiopulmonary bypass time (82 ± 23) mins.
- 2 patients required conversion to median sternotomy in view of pericardial adhesions
- Mean duration of ICU stay-30 ± 4 hours

  postoperative hospital stay-4 ± 1 days
- Minimal blood loss <300ml.
- No hospital deaths.
- No vascular complications.

CONCLUSION

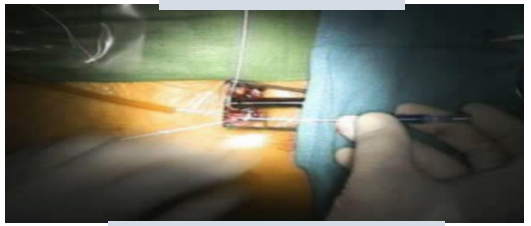
- Although minimally invasive Aortic valve procedures have higher technical difficulties, they are safe and benefit patients through reduced ICU stay,reduced post operative discomfort,better cosmetic results & early discharge.
- Sutureless aortic valve repair has an advantage of reducing longer aortic clamping time & CPB time
- Team approach during post-op management is critical to maximize the benefits of MICS-AVR

By- Dr. Yogesh T, Prof. Durga Prasad B, Dr. Mayuri Srivatsa, Dr. Vikas S R,Dr. Subhash Kadim, Dr. Sathyanarayan

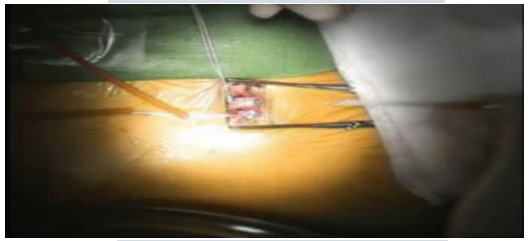
VYDEHI INSTITUTE OF MEDICAL SCIENCES AND RESEARCH CENTRE, BANGALORE



PATIENT POSITION



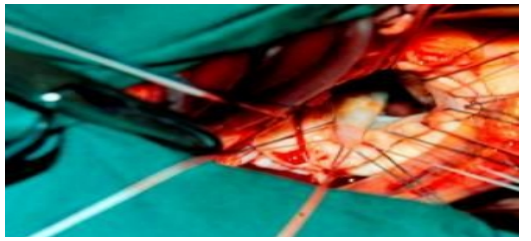
FEMORAL ARTERY CANNULATION



FEMORAL VEIN CANNULATION



AV EXCISION



PLEDGETED SUTURES IN SITU