

A simple transeptal approach versus the conventional left atrial approach for mitral valve procedures: retrospective cohort study.

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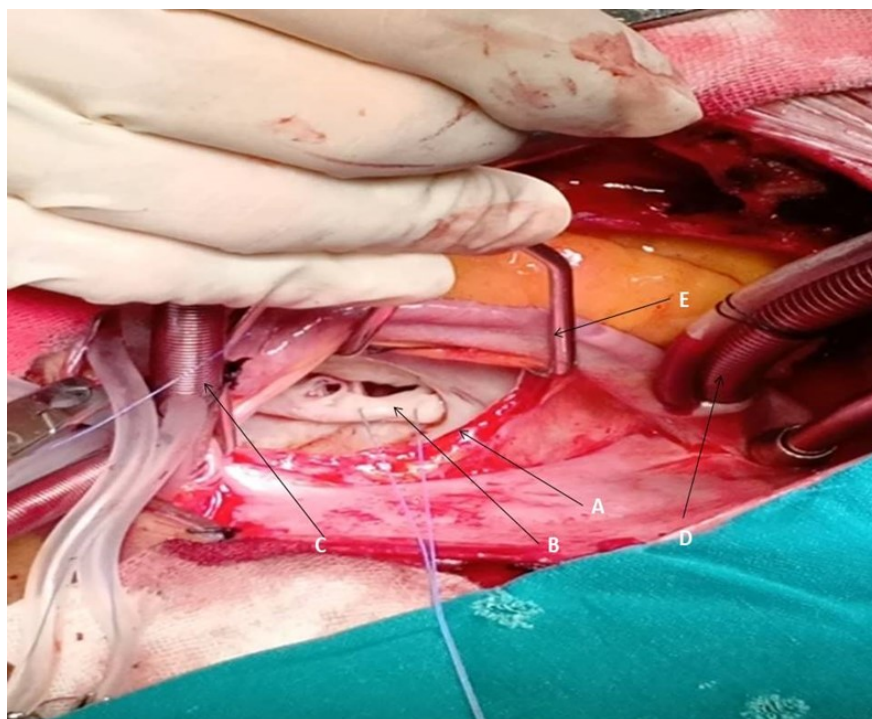
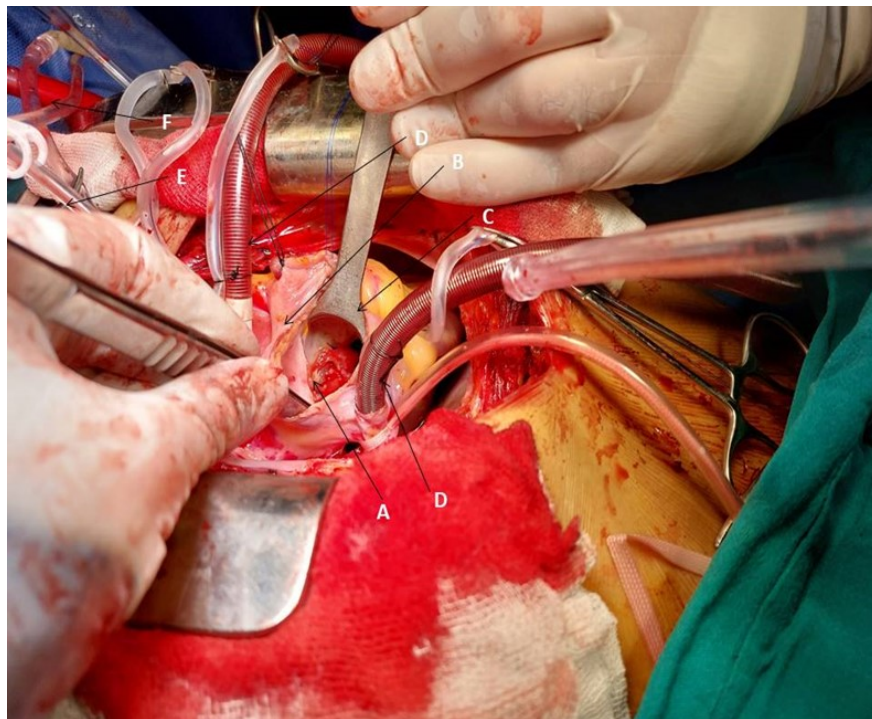
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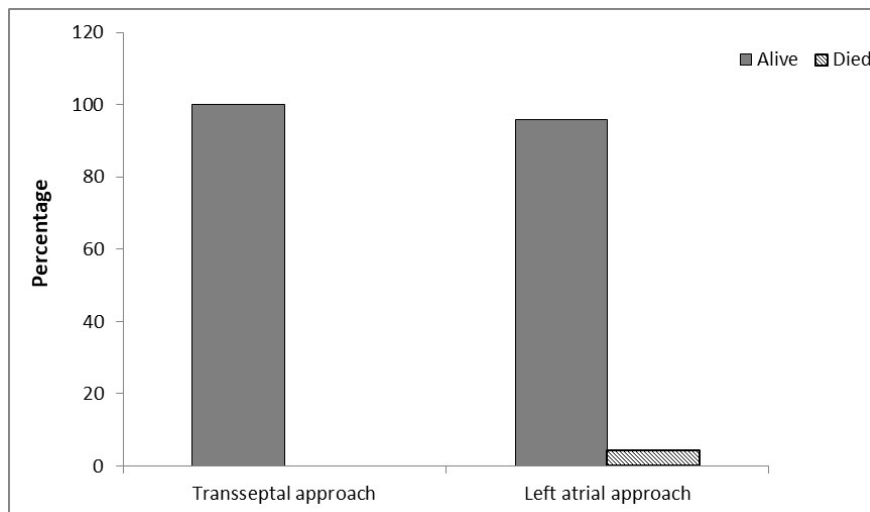
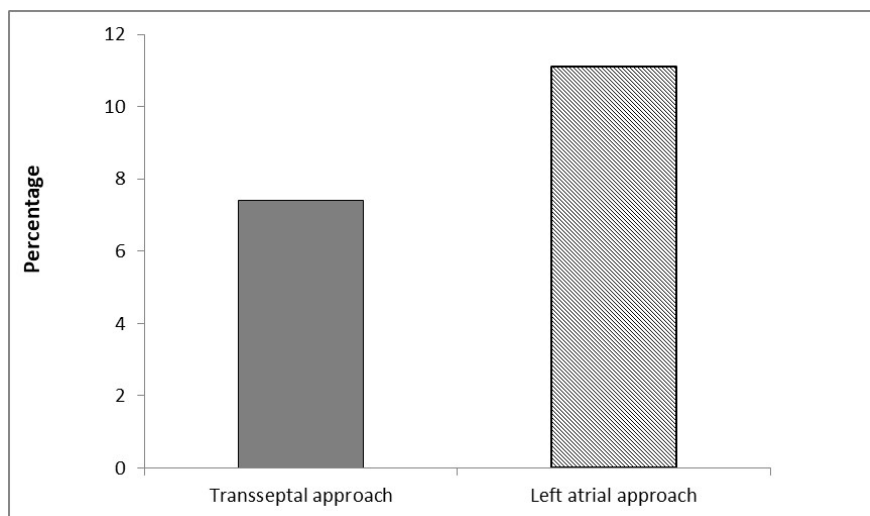
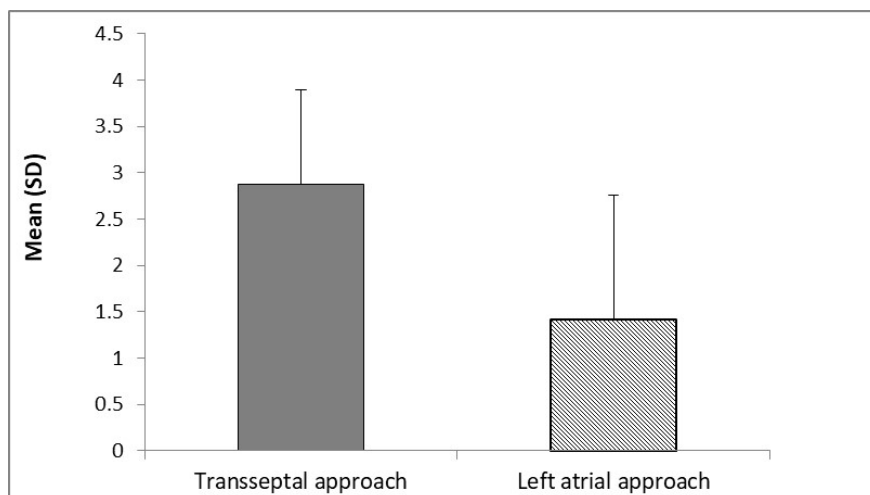
Abstract

Background: Having good exposure to the mitral apparatus during mitral valve replacement is a vital decision every cardiac surgeon must take. This study was conducted to compare the Simple Transseptal approach and the conventional Left Atrial approach for mitral valve procedures, to evaluate the safety and efficacy of the simple transseptal approach during open-heart mitral valve procedures, as the conventional left atrial approach may not provide optimal exposure, especially in unfavorable anatomical and operative situations. **Methods:** This is a retrospective chart review cohort study. It has been conducted on 140 patients who were diagnosed with heart diseases that required mitral valve replacement. Surgeries were performed in Cardiothoracic Surgery Department at Assiut University Hospital over the period from January 2016 to June 2021 by one surgeon. Mitral procedure was done through median sternotomy incision under general anesthesia on cardiopulmonary bypass machine with cold antegrade cardioplegia. Demographic data, preoperative diagnosis, intraoperative findings, hospital stay, complications, and mortality were documented and revised. **Results:** one hundred and forty patients were enrolled in this study with a median age of 39 years, and no significant differences as regards the baseline demographic data as age, sex, and BMI. 68 patients underwent mitral valve replacement through the simple transseptal approach and 72 patients through the conventional left atrial approach. Both studied groups had insignificant differences as regards bypass time, re-operation rate, postoperative complications, hospital stay, and mortality. **Conclusion:** Simple transseptal approach through the midpoint of fossa ovalis could be a safe and even favorable alternative to the traditional left atriotomy approach in certain difficult operative situations during mitral valve replacement surgery.

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