

Minimally Invasive Repair of Atrial Septal Defects—A Case Series

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Abstract

Introduction: Repair of atrial septal defects in adults has become so safe that emphasis is now placed on improving cosmesis without compromising safety. The results of our series of minimally invasive repair of atrial septal defects done through a lower partial sternotomy are reported. **Materials and Methods:** Eight adult patients underwent minimally invasive repairs of atrial septal defects over a period of 1 year (Group 1). Conventional repairs of atrial septal defects were performed in 26 patients over the same period (Group 2). We describe the technique and compare our results on time taken for surgery, bypass time, cross clamp time, time to extubation and total hospital stay. Early complications and complications at 1 year are also presented. **Results:** No difference in the demographic data was found between the two groups. The time taken for surgery was more, while cross clamp times and bypass times were shorter in Group 1. There was also no difference in the amount of blood loss, early postoperative complications and later complications like cardiac rhythm or wound pain. **Conclusion:** The improved cosmetic appearance, both in males and females, is an important factor to recommend minimally invasive repair of atrial septal defects in an adult population. Surgical closure of atrial septal defects can be performed through a lower partial sternotomy without compromising access or safety with good cosmetic outcome.

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