

Median Sternotomy for Surgical Closure of Secundum ASD, Is It Still an Option?

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Background:

Ostium secundum ASD used to be surgically closed using the standard median sternotomy, Improvement in surgical techniques encouraged many surgeons to use minimally invasive approaches as an alternative to the conventional one.

Aim of the work:

To evaluate the outcome and effectiveness of the right mini thoracotomy approach as an alternative for the median sternotomy for surgical repair of secundum ASD.

Methods:

This is a prospective observational study done on 50 adult patients diagnosed with ASD of ostium secundum type, indicated for surgery and not amenable to device closure. They were divided into two equal groups: group I, represented 25 patients who underwent ASD repair through conventional median sternotomy (CMS), and group II represented 25 patients underwent right mini thoracotomy (RMT).

Comparison between groups was done regarding clamp time, bypass time, ventilation time and ICU and hospital stay.

Results:

Our study showed that RMT patients had significantly smaller incision, less time of mechanical ventilation, less ICU and hospital stay, though having more bypass time when compared with the conventional median sternotomy. No operative or in hospital mortality with excellent patient satisfaction.

Conclusions:

RMT used for surgical closure of secundum ASD is a safe and effective procedure showing many advantages over sternotomy, and can be used as a routine approach for such cases.

Keywords:

ostium secundum, atrial septal defect, right mini thoracotomy, cardiac surgery, minimally invasive.