

Is Right Mini-thoracotomy An Economic And A Safe Approach For Mitral Valve Surgery?

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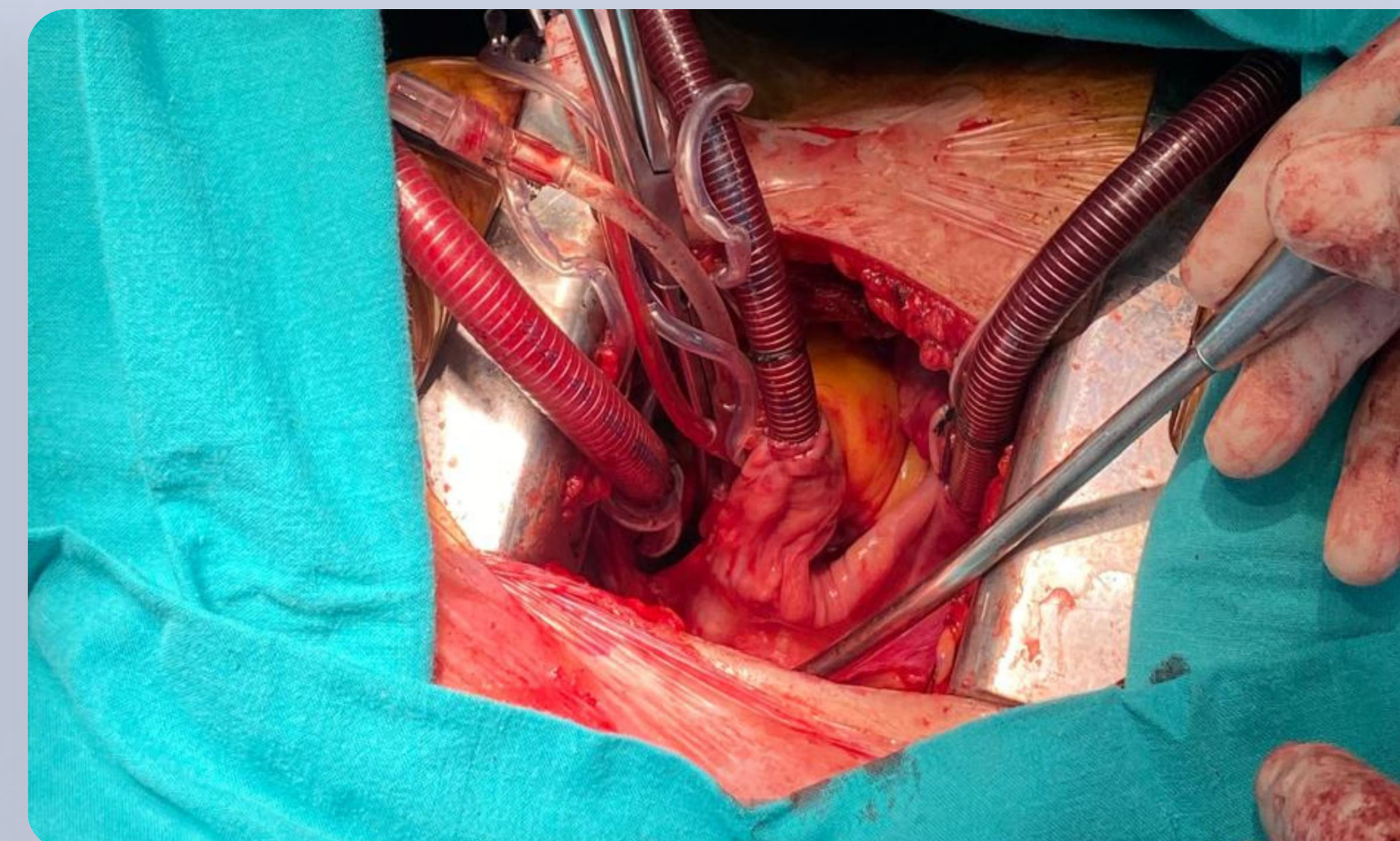
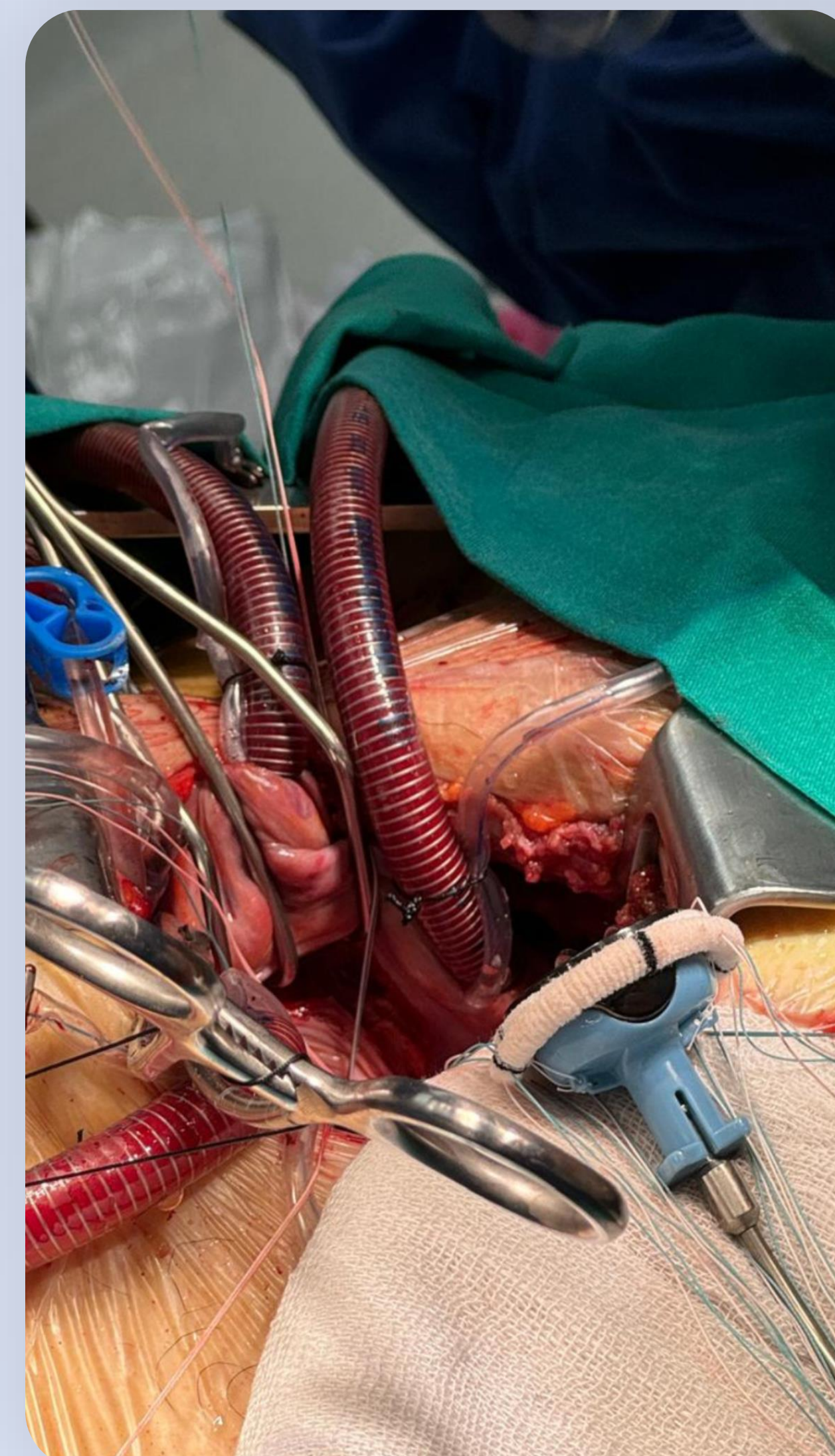
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Introduction

The increasing interest in minimally invasive approaches has induced fast expansion of minimally invasive mitral valve surgery (MIMVS) over the past two decades. It is well established that MIMVS reduce blood loss, ventilation time and postoperative pain as well as shorter ICU and hospital stays in comparison to conventional surgery. MIMVS need special instruments, disposables and setup that may be costly in some of the developing countries. However, **right mini thoracotomy (RMT) approach may have all the advantages of the MIMVS with a slight difference in the length of the wound and less cost.**

Methods

This retrospective cohort multi-centric study has been conducted in 3 cardiac surgery referral centers in Egypt. Eligible were 80 patients who underwent isolated mitral valve surgery using (RMT) approach . Excluded were patients who needed other concomitant cardiac procedures, redo cases and patients who had pulmonary pathology or previous exposure to irradiations.



Results

Our study include **68% female** patients with mean age was **+/- 34 years** old. **All** our patients had a **rheumatic** mitral valve pathology with **65%** of them with **mitral stenosis**. Mean incision length was **6 +/- 0.6 cm**. One case had diaphragmatic eventration. Three patients had pericardial adhesions, and 5 cases had high drainage who were conservatively managed. No conversion to sternotomy, re-exploration for bleeding or mortality were recorded.

Conclusion

RMT approach via central cannulation **is a safe method** with a comparable skin incision to the classical MIMVS. But with a **marked cost difference** especially in a developing country with **no effect regarding major adverse cardiac events**.