

Minimally Invasive Congenital Cardiac Surgery Through Right Anterior Minithoracotomy
Approach: Single – Center analysis of 480 patients.

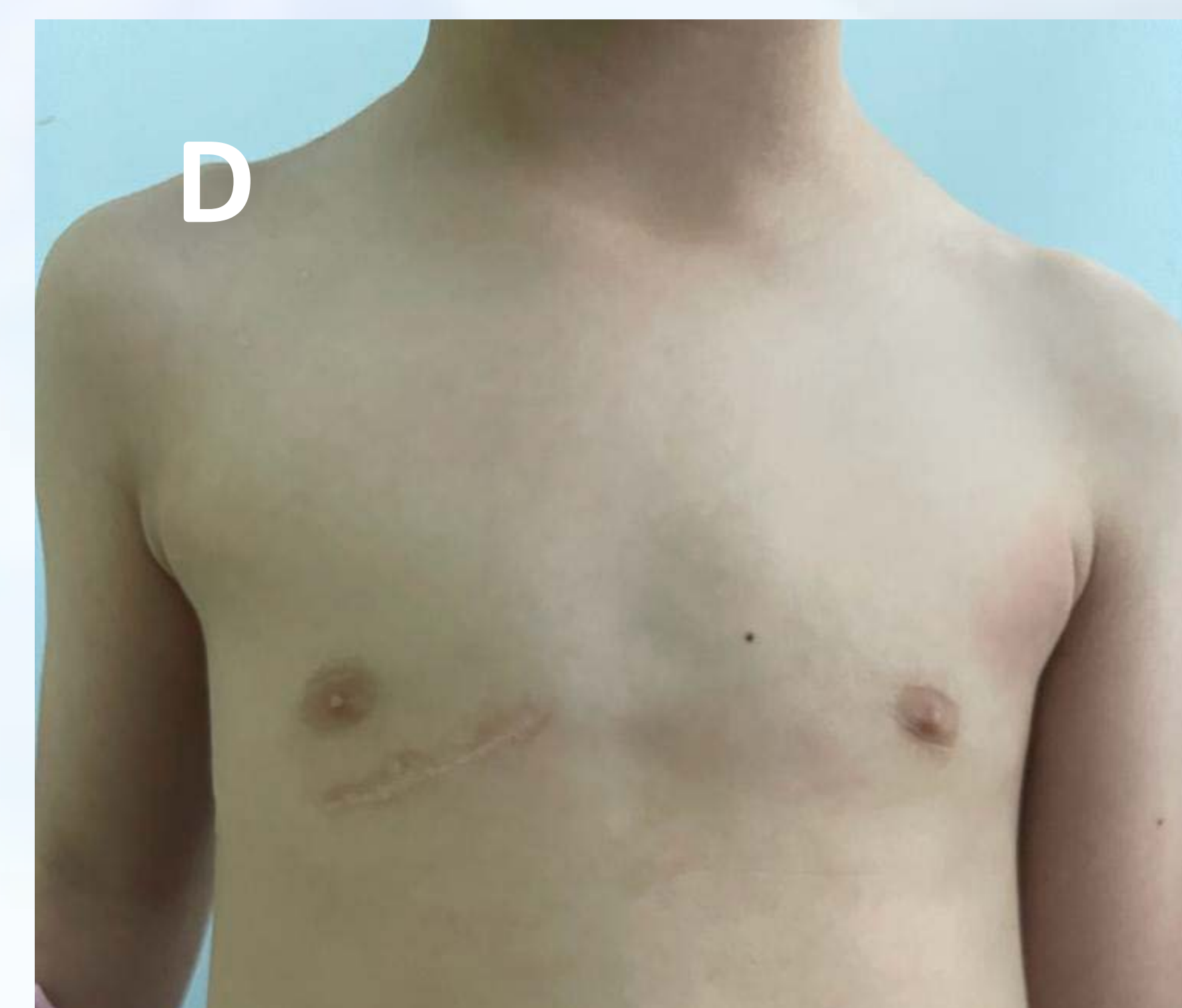
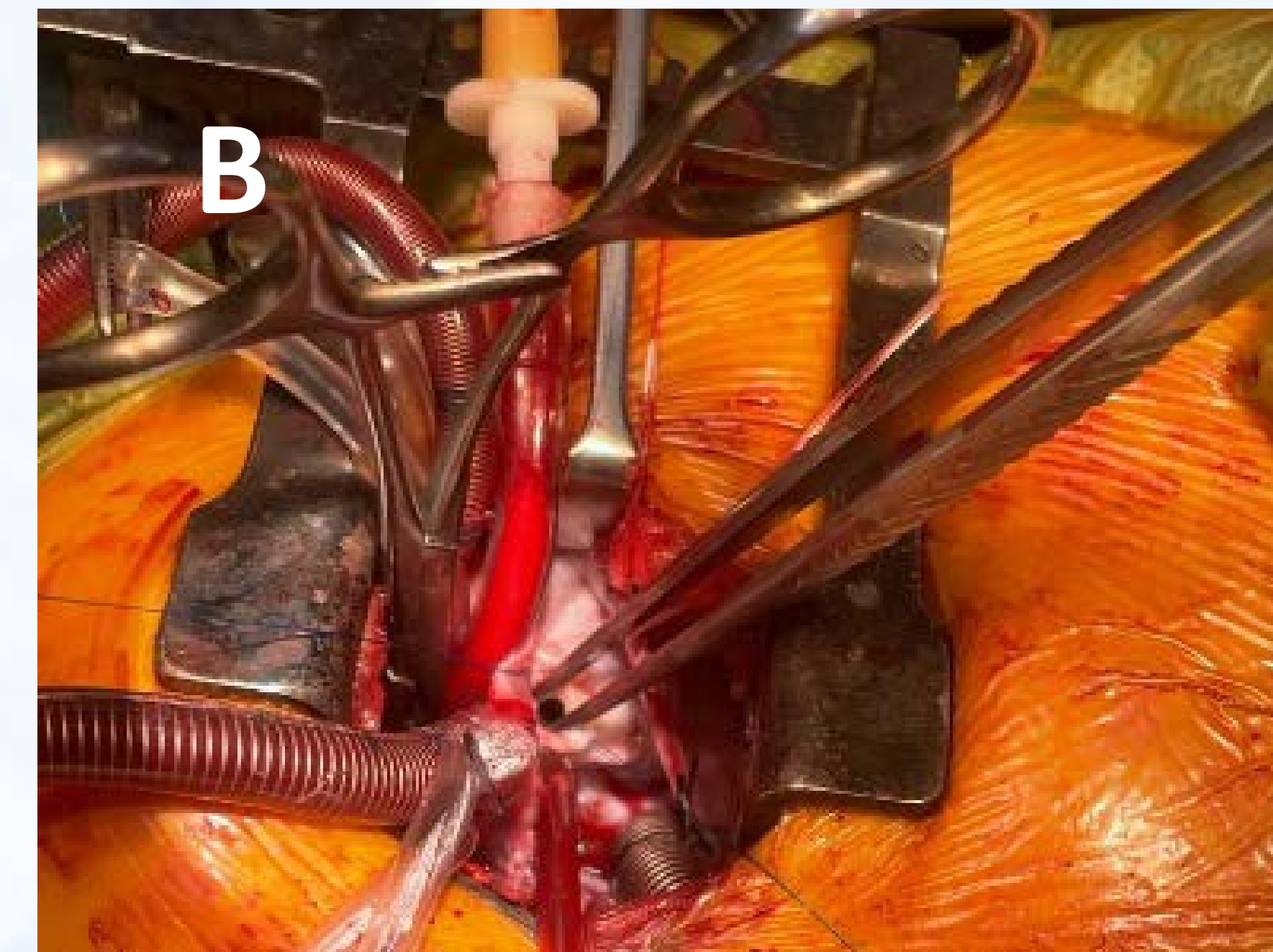
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BACKGROUND

Comparison of the results of closure of the ventricular septal defect using thoracoscopic and median approaches.

METHODS

From January 2012 to December 2022, 460 patients underwent surgical correction of septal heart defects through right anterior minithoracotomy with central cannulation of cardiopulmonary bypass. The mean age was 7.2 ± 3.42 years and the average weight was 13.5 ± 4.5 kg. Atrial septal defects (ASD) amounted to 270 and ventricular septal defects (VSD) - 178, partial defects of the atrioventricular septum – 12.



A-ASD exposition
B-VSD exposition
C-postoperative photo
D-skin incision 1 year after surgery

RESULTS

There were no hospital mortality or serious complications. Correction of an ASD was performed on a beating heart, the mean CPB time for ASD repair was 42 ± 22 minutes, the mean CPB time for VSD was 54 ± 18 minutes, and the mean time aortic cross clamp time was 32 ± 12 minutes. Average incision length - 4.5 cm. The cosmetic outcome was excellent in all patients. There were two conversions to transverse sternotomy. No neurological events were reported. Follow-up transthoracic echocardiography before discharge revealed a residual shunt in 4 patients with VSD.

CONCLUSIONS

We believe that right anterior minithoracotomy without peripheral cannulation for the correction of septal defects of the heart is a safe and feasible procedure that provides a high level of satisfaction with the cosmetic effect.