

EXPERIENCE IN PERFORMING THORACOSCOPIC HEART SURGERY

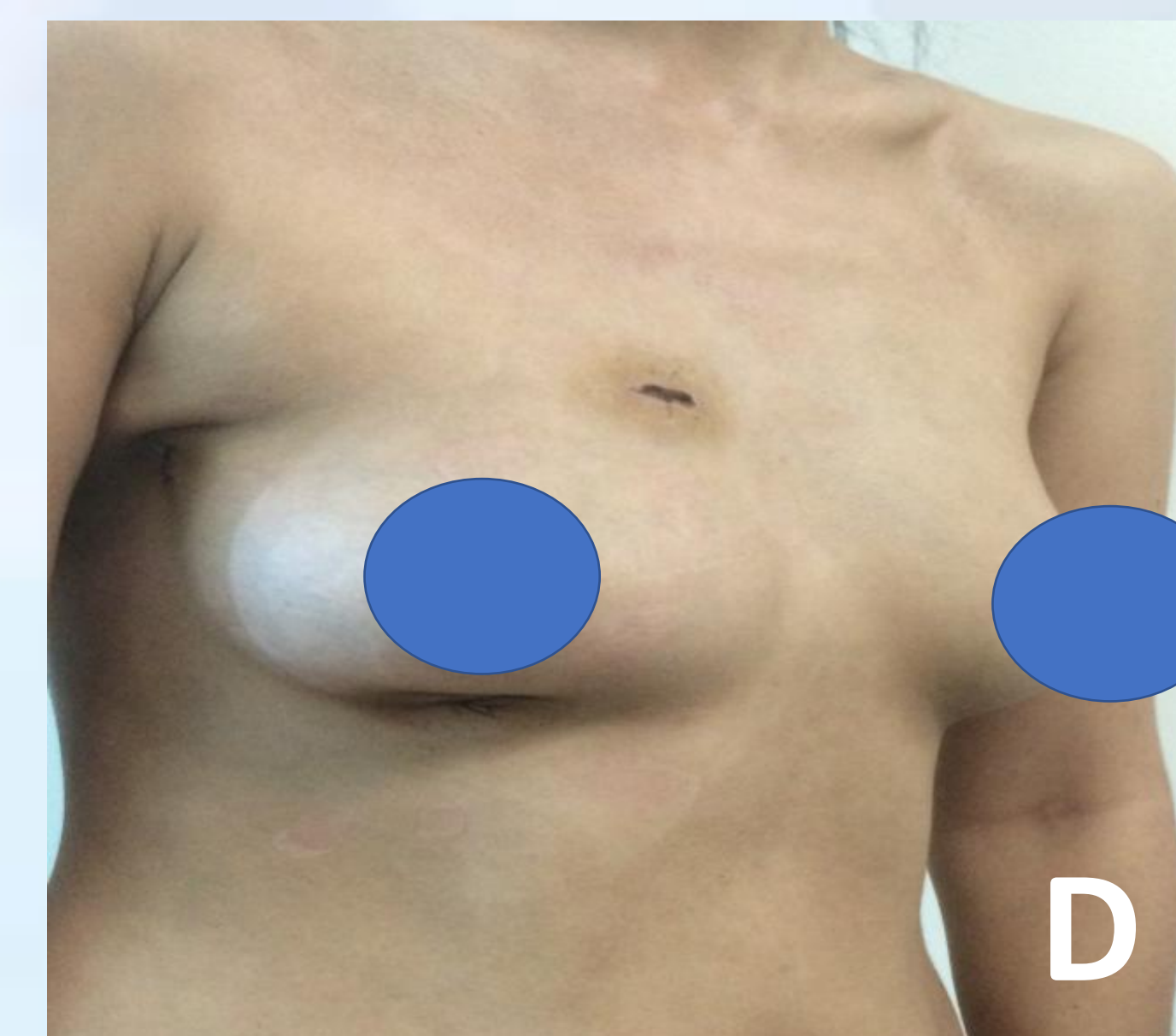
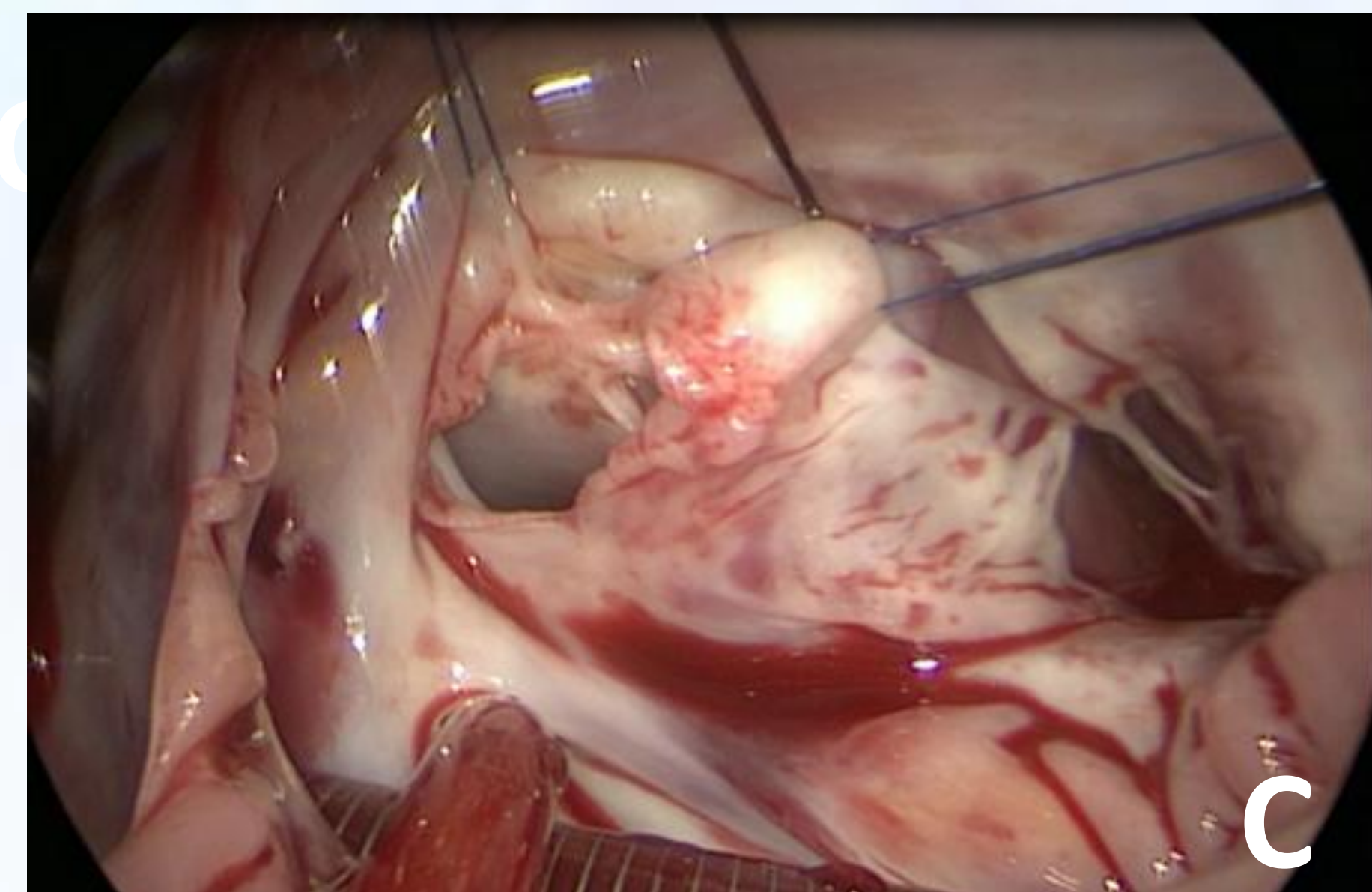
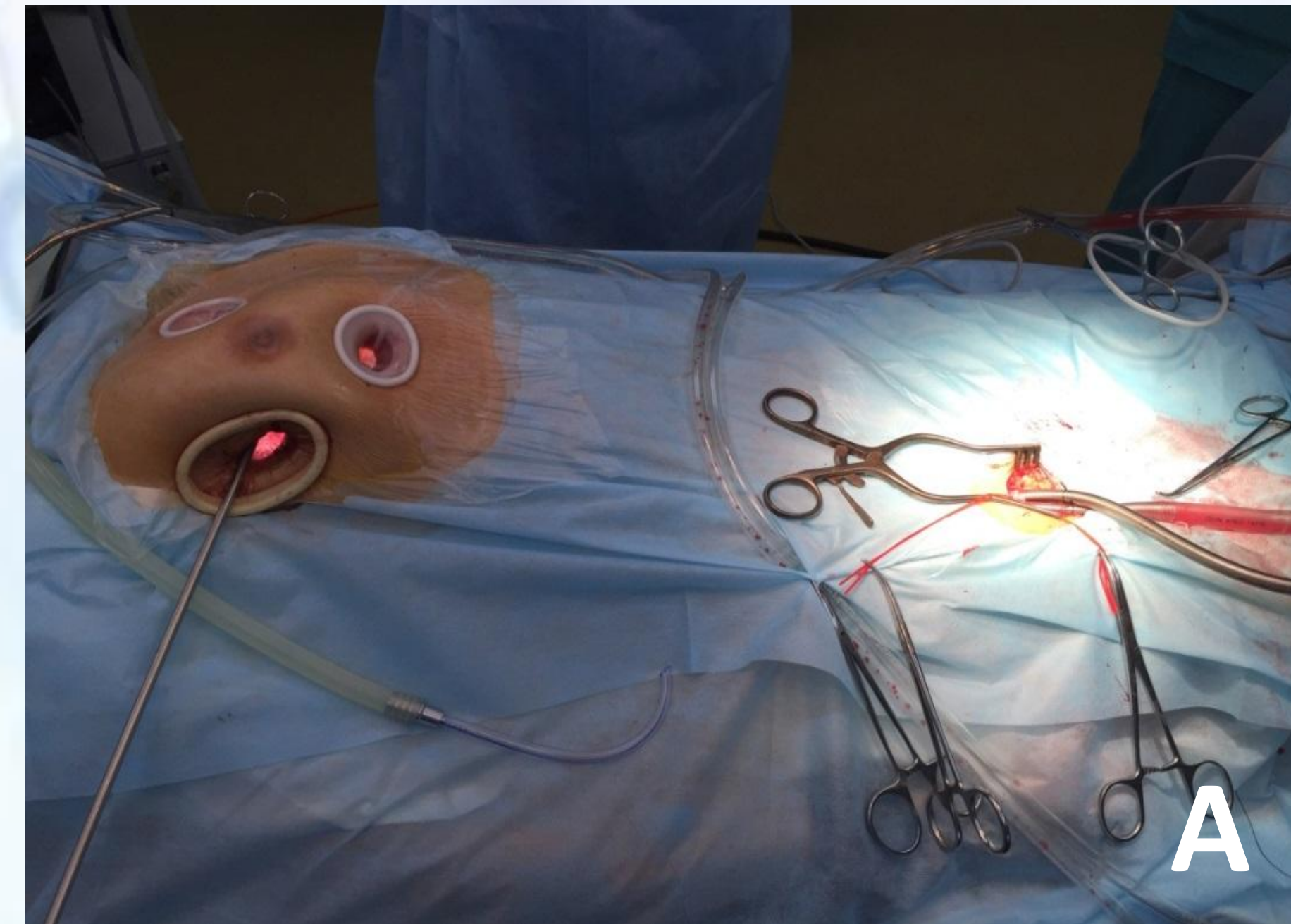
Ikromzhon Mukhamedov, Sr., Seitkhan Joshibayev, Julia Ukolova, Azamat Kenbaev, Alexandra Zelentsova
Research-Clinical Center for Cardiac Surgery and Transplantology, Taraz, Kazakhstan

BACKGROUND

To demonstrate the experience of performing thoracoscopic cardiac surgeries and evaluate safety and effectiveness.

METHODS

In the period from 2015 to 2023, 120 patients were studied, of which atrial septal defect (ASD) closure was performed in 93 cases, and ventricular septal defect (VSD) closure was performed in 27 patients. Adults 82 (68%), children 38 (31.7%). Female patients accounted for 66.7%, male patients 33.3%. The average age of patients was 29 ± 13 years, and the average weight was 48 ± 21 kg. ASD closure was performed on a beating heart under artificial circulation, VSD correction was performed using blood cardioplegia. A Chitfood clamp was used to clamp the aorta. Artificial circulation (AC) was provided by peripheral cannulation: femoral artery and vein + jugular vein. TEE was used in all patients before and after correction.



A-Three chest ports and femoral cannulation

B-Thoracoscopic closure of ASD

C-Thoracoscopic closure of VSD

D-Skin incision after thoracoscopy

RESULTS

All surgeries were successful, there were no in-hospital mortality or serious complications. The average duration of operation was 252 ± 51 minutes and 249 ± 26 minutes for ASD and VSD, respectively, while the CPB for ASD and VSD was 59 ± 18 and 88 ± 20 minutes, respectively. The aortic cross-clamping time for VSD correction was 70 ± 14 minutes. In addition, the length of stay in the intensive care unit was 9 ± 3 hours, and the time of mechanical ventilation and postoperative hospital stay were 172 ± 130 minutes and 6.4 ± 2.1 days, respectively. Subsequent transthoracic echocardiography before discharge revealed no residual shunts in any patients.

CONCLUSIONS

Thus, thoracoscopic surgery in the correction of septal cardiac defects is a safe and feasible procedure that provides a high degree of satisfaction with the cosmetic effect.