TRANSCATHETER CLOSURE THERAPY OF ATRIAL SEPTAL DEFECT WITH PULMONARY HYPERTENSION AND BIDIRECTIONAL SHUNT IN 10 PATIENTS

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Objective
To evaluate the efficacy and safety of transcatheter closure therapy for treatment of atrial septal defect (ASD) with pulmonary hypertension and bidirectional shunt.

Methods
All 10 patients had a single atrial septal defect. Domestic atrial septal defect occluders which produced by Starway Medical Technology Inc were used during surgery. ECG, X-ray of chest and transthoracic echocardiography (TTE) were investigated before and after 3 days of operation and follow-up were performed after 6 months and 1 year.

Results
Dynamic pulmonary hypertension was confirmed by right heart catheterisation and occlusion tests in all patients during operation. The success rate was 100% and no surgical complications were occurred. Clinical symptoms improved, dilated atrium and ventricle, in particular, right ventricular volume, reduced, ejection fraction improved, quality of life improved significantly and no residual leakage occurred during follow-up.

Conclusion
Transcatheter occluder is safe and can still feasible in atrial septal defect with dynamic pulmonary hypertension and bidirectional shunt.