Clinical Evaluation of Capsular Ventricular Septal Defect with Multiple Export Underwent Transcatheter Closure

Liao Wei, Xie Dongming, Zhong Yiming The First Affiliated Hospital Of Gannan Medical College, Ganzhou, China

Objective
To evaluate the feasibility, safety and efficacy of capsular ventricular septal defect with multiple export underwent transcatheter closure.

Methods
36 patients of capsular ventricular septal defect with multiple export (11 males and 25 females, range 3–37 years old) were selected by the clinical, ECG, x-ray, Tran thoracic electrocardiogram (TEE) examination and diagnosis of left ventricular angiography. Left ventricular surface inlet diameter 6–22 (10.3±4.8) mm was measured by left ventricular angiography, with two or more than two exit which diameter was 2–11 (4.7±3.1) mm. Small waist and large side of ventricular septal defect occluder with diameter of 5–14 (4.5±2.9) mm were used. Immediate effects were evaluated 20 min after closure by repeated left ventricular angiography and TEE. And reviewing ECG, x-ray and TEE after 1, 3, 6 months.

Results
Thirty three patients were used domestic small waist and large side-type ventricular septal defect closure device successfully, with three case of failure, two cases of aortic valve functional defect after closure, one case of β atrioventricular block.

Conclusions
Capsular ventricular septal defect with multiple export treated by domestic small waist and large side occluder is safe, effective and feasible. The key technology is based on the export of capsular septum of different size, shape, the size of inlet and exit diameter and the distance from the right coronary aortic valve to determine the location and size of occluder selection.