Clinical Analysis on Interventional Treatment for Patients with Ostium Secundum Defect

Xie Dongming¹, Liu Zhongliang², Liao Yongling³, Yang Yihong⁴, Chen Weihua⁵, Liao Xiangzhong⁶
¹Department of Cardiology, First Affiliated Hospital of Gannan Medical College, China; ²Anatomy Teaching of Gannan Medical College, Ganzhaou, China
10.1136/heartjnl-2011-300867.472

Objective To evaluate the clinical efficacy of interventional therapy for patients with ostium secundum atrial septal defect (ASD).

Methods One hundred and fifty patients (male-90, female-60), age at 2–71 (12±5) years old. Diagnosis as ostium secundum defect by transthoracic echocardiography (TTE), measuring different facets of ASD, the maximal diameters were 4–36 (20±6) mm. Single-hole-type-ASD were 145 cases, porous-type were five cases. Meanwhile, combined with PDA were two cases, with PS was one case. Guiding by transthoracic ultrasound, we implanted a domestic Amplatzer occluder (Beijing Huayi shengjie). After operation, patients were regularly follow-up by cardiac ultrasound and clinical examination.

Results One hundred and fifty cases were all successfully blocked, the occluder diameters were at 6–40 (23±2) mm. Intraoperative, the systolic pressure of pulmonary artery were at 25–65 (30±4) mm Hg. Three cases of porous-type ASD, we used a single occluder; another two cases we each used two occlusion devices to block two defect holes. Two cases with PDA and one case with PS all completed the intervention therapy. Intraoperative, there was no residual shunt. Following-up from 1 month to 5 years, there were no occluder shedding, no complications of thrombosis and endocarditis. Atrio-ventricular sises were reduced to different degrees.

Conclusion The interventional treatment for patients with ostium secundum defect was convenient, minimally invasive, safe and high success rate, affirmative curative effect, and could be the first treatment measures for secundum ostium secundum atrial septal defect (ASD).