Transcatheter closure of atrial septal defects in children using the amplatz septal occluder


Cairo University
Giza, Egypt

Abstract

The atrial septal defect is the 4th most common congenital heart defect with an incidence of 3.78/1000 live births. The presence of a significant atrial septal defect (ASD) with right atrial and right ventricular volume overload is an indication for closure of the defect. Surgical closure of ASD is safe and effective; however, it carries the hazards of experiencing some morbidity and residual shunting in addition to the operative scar. In this study, we are testing the applicability and efficiency of the Amplatz septal occluder in transcatheter closure of ASD. Nineteen children with ASDs sized 5 mm to 20 mm, were chosen during their follow up in the cardiology clinic for trial of transcatheter closure in the cath lab of Cairo University Pediatric Hospital during three successive workshops over 2 years from February 2003 to January 2005; they were divided into 2 groups by transesophageal echocardiography: Group A represents the 14 patients whose defects were suitable for closure by Amplatz septal occluder device and were all successful with single case showing residual small jet. Group B represents the other 5 patients who were not suitable for device closure during the workshop 2 were only suitable for surgery the other 2 needed large devices not suitable for their cardiac sizes at their ages and were postponed, the last one was postponed as his appropriate device size was not available.

Keywords

ASD, atrial septal defect, Amplatz, septal occluder, catheterization,