Spontaneous closure of isolated secundum atrial septal defect in children in Kurdistan

Salih A., Mahmood K., Rashid J.
slemani university, sulaimany/Kurdistan/Iraq

ABSTRACT
Atrial septal defect (ASD) is the second most common congenital heart defect in children in which ostium secundum ASD representing the majority of cases. Atrial septal defect. Isolated secundum ASD accounts for ≈7% of congenital heart defects.

AIM OF THE STUDY: To identify the frequency of spontaneous closure of isolated secundum atrial septal defect in children and to assess the factors that affect spontaneous closure.

PATIENTS AND METHODS: This study is a retrospective revision of patient’s record with ASD secundum diagnosed at echocardiographic unit of Sulaimanya Pediatric Teaching Hospital. They were examined during period of 3 years. They were 100 monitored for >3 months with serial echocardiography. Patients were divided into 4 groups based on ASD diameters (4–5 mm, 6–7 mm, 8–10 mm, or >10 mm).

RESULTS: There was a strong association between ASD diameter at diagnosis and the frequency of spontaneous ASD closure. Highest frequency of spontaneous closure was among those within 4-5 mm diameter at diagnosis. Age at diagnosis was associated with the spontaneous ASD closure.

CONCLUSIONS: In our study, 22% of ASD closed spontaneously while 13% regressed to ≤3 mm. There is high frequency to close spontaneously among those with initial diameter of 4-5 mm of which was 65%. Children ≤ 1 year of age at ASD diagnosis experienced spontaneous ASD closure in 38.5% of cases, whereas children >1 year of age experienced spontaneous ASD closure in 4.2% of cases.

Gender did not affect spontaneous closure of ASD secundum in our study.