

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

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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.

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 4-5mm diameter 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 4-5mm 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

	Closed (%)	Decrease in size(%)	Same (%)	Increase in size(%)
4-5mm	65	25	10	0
6-7mm	22.7	40-9	22.7	13.6
8-10mm	15	30	40	15
More 10mm	2.6	18.4	57.8	21

