

POSTER PRESENTATION

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Retrospective trial of influence of atrial septal defect closure on manifestation and prognosis of migraine attacks in pediatric patients

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Introduction

Previous studies found a presence of atrial septal defect (ASD) in some cases of patients with migraine and respective efficacy of ASD closure as a treatment of migraine.

Purpose

To study an influence of atrial septal defect (ASD) closure on clinical course of migraine in children.

Methods

Interviewing was conducted in 75 pediatric patients (age 10 to 18 years) operated for ASD (surgical or occluder implantation) in Children's National Cardiology Center «RNPC Cardiology» (n = 75, male 31, female 44, mean age = 15.2 ± 3.4 years) to identify their migraine attacks, migraine specific clinical pictures (evaluation of intensity, location of pain, aura), differentiate migraine pain from other types of headache.

Results

Before ASD closure migraine was presented in 8 patients (10.67%): 2 males (25%), 6 females (75%). Noncomplete disappearance of migraine after operation was remarked in 2 patients (25%). Reduction of migraine symptoms was found in other 6 patients (75%). Reduction/disappearance of migraine within 1-7 days after ASD closure was observed in 7 patients (87.5%) and within 7 to 14 days in 1 patient (12.5%). Noteworthy, in 6 patients (6.67%) migraine debut was observed in the early postoperative period (after ASD closure). In all 5 patients migraine starts early in postoperative period (1 to 3 days). Migraine was

transient in all 5 patients (100%) persisting for 7-14 days to 3.5 years.

Conclusions

The study indicate that closure of ASD in children effectively reduced migraine in most patients (77.8%), and completely eliminated migraine attacks in other 22.2% of cases, most often in early postoperative period (88.9%). Most often migraine decreased / disappeared in the period 1-14 days after ASD closure. Probability of migraine reduction /disappearance > 14 days after ASD closure is minimal. In some patients (6.8%) debut of migraine was observed early (within first 3 days) in post-operative period but migraine symptom were transient in all patients (100%).

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