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Authors

Puri, AR

Chowdhry, M

Cheung, P

et al.

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THE INCIDENCE OF MIGRAINES IN PATIENTS WITH CONGENITAL HEART DISEASE. A.R. Puri, M. Chowdhry, P. Cheung, A. Tanious, L. Slavin, J.M. Tobis, Department of Medicine, Division of Cardiology, David Geffen School of Medicine at UCLA, Los Angeles, CA.

Objectives: To examine the incidence of migraine headaches (MHAs) in patients with congenital heart disease (CHD). **Background:** MHA affect 12% of adults (18% of women and 6% of men). The presence of right-to-left communication provides a potential conduit for chemical substances to bypass the pulmonary filter, enter the cerebral circulation, and induce MHA. MHA were evaluated in patients with CHD before and after surgical correction of their defect to establish an association between CHD and MHA. **Methods:** 2,401 patients were seen at the Ahmanson Adult Congenital Heart Disease Center at UCLA; 517 (22%) were successfully contacted, and 238 (46%) participated in the study. Patients were stratified based on the presence and direction of intracardiac shunting as determined by echocardiography and angiography. **Results:** The incidence of MHA (36.3%) was three times higher in patients with CHD compared with historical controls (12%). Of 81 people who reported MHA, 67 (82.6%) experienced migraines with aura and 14 (17.4%) experienced migraines without aura. MHA were present in 31 (39.3%) patients with no shunt, 25 (31.6%) patients with right-to-left shunts, and 25 (38.5%) patients with left-to-right shunts. **Conclusions:** There was a threefold increase in the incidence of MHA in patients with CHD compared with historical controls. There was no significant difference in the incidence of MHA between patients with right-to-left, left-to-right, or no shunts. The higher incidence of MHA in CHD patients, especially MHA with aura, suggests that genes that control the embryology of CHD may also predispose patients to develop MHA.