

Medical Expertise

"Development of the European Network in Orphan Cardiovascular Diseases"
„Rozszerzenie Europejskiej Sieci Współpracy ds Sierocych Chorób Kardiologicznych”

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CASE SUMMARY

This 22-year-old man after pulmonary valve valvulotomy with ASD sinus venosus type. The surgery was performed in 1991. In 1995 was diagnosed to endocarditis of mitral valve and hepatitis B chronicus. The patient had surgery due to abscessus of the brain in 1999 and episode of TIA in 2009. In his age of 17 years old epilepsy was diagnosed.

Now the patient presents the symptoms of easy fatigue, dyspnea, decrease in exercise tolerance. Transesophageal echocardiography showed 12 mm ASD with left – right shunt, 3 pulmonary veins draining to the left atrium and enlarged coronary sinus. Also persistent left superior vena cava to the coronary sinus was identified.

In angio CT patent left vena cava superior draining to the right atrium, 4 pulmonary veins draining correctly to the left atrium and ASD with maximal diameter of 14 mm can be observed. MR showed moderate regurgitation through pulmonary valve. Heart catheterisation confirmed left to right shunt on the atrium level.

LITERATURE REVIEW

Surgical repair has low mortality and good long – term outcome when performed in early childhood or adolescence and in the absence of pulmonary hypertension. Outcome is best with repair at age under 25 years. According to the ESC guidelines indications for intervention in atrial septal defect are: Patients with significant shunt and $PVR < 5$ WU should undergo ASD closure regardless of symptoms [class I B]. Device closure is the method of choice for secundum ASD closure when applicable [class I C]. All ASDs regardless of size in patients with suspicion of paradoxical embolism should be considered for intervention [class II a C]. Patients with $PVR > 5$ WU but $< 2/3$ SVR or PAP $< 2/3$ systemic pressure and evidence of net left- right shunt ($Q_p:Q_s > 1.5$) may be consider for intervention [class II b C]. ASD closure must be avoided in patients with Eisenmenger physiology [class III C].

EXPERT'S OPINION

Due to the history of ischemic cerebral stroke, TIA and enlargement of right ventricle there are indications for surgical ASD closure (probably paradoxical emboli). Careful neurological evaluation and close cooperation with a neurologist periprocedural is required.

CONCLUSION

Surgical closure of ASD preceded by evaluation of heart anatomy in CT.

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