

Barlow syndrome and postoperative cavotricuspid isthmus-dependent atrial flutter – therapeutic modality

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Case report: Severe mitral regurgitation due to rupture of the chordae tendineae and mitral valve prolapse (Barlow's disease), with a left atrial volume of 37.6 mL/m² was verified in 43-year old patient. He was admitted for an examination due to frequent palpitations and fast and irregular heartbeats. In the anamnestic data, thrombosis of the veins of the right leg was verified (thrombosis of popliteal, posterior tibial and great saphenous vein during previous years). He carries mutations: heterozygote of factor V Leiden, with MTHFR C677T heterozygote (CT), PAI-1 heterozygote (4G/5G) and MTHFR A1298C heterozygote. The surgical treatment was done, and mechanical valve was implanted. In the following months, the patient complained on frequent dizziness, with crises of consciousness, and a shortness of breath. He was not suitable for beta-blocker therapy, as well as propafenone and amiodarone, which had been prescribed in therapy in the meantime. The 24-hour ECG Holter monitoring described various arrhythmias, most of the time AV block of the first degree with PQ interval up to 320 msec, occasionally second-degree atrioventricular block Mobitz II, polymorphic ventricular extrasystoles and one attack of non-sustained ventricular tachycardia (6 ventricular extrasystoles in row), with intermittent nodal rhythm, junctional tachycardia and atrial flutter with AV ratio 2:1. An electrophysiological study was performed, and the cavotricuspid isthmus (CTI) dependent atrial flutter was verified, and radiofrequent ablation was done. After the procedure patient was in sinus rhythm. During the next follow up visits, the patient was in sinus rhythm, on therapy with a low dose of nebivolol (inability to tolerate beta blockers) and ivabradine, along with vitamin K antagonists.

Conclusion: Although it is associated with surgical treatment, electrophysiological examination can be option in the therapeutic modality of post-incisional arrhythmias.¹

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LITERATURE 

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