Sažetak sa skupa / Meeting abstract

Tranzitorna ishemijska ataka uzrokovana tromboembolizmom s ishodištem u aneurizmi membranoznog ventrikularnog septuma

Transient ischemic attack due to thromboembolism from membranous ventricular septum aneurysm

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23-godišnji muškarac, bez ranije kardiološke bolesti, upućen je na ehokardiografski pregled nakon ponovljene tranzitorne ishemijske atake (TIA). Ehokardiografski je zabilježena vrećasta aneurizma membranoznog ventrikularnog septuma (AMS), veličine oko 15x9 mm, utisnuta u desnu klijetku. Obojanim dopplerom je zabilježen protok usmjeren iz lijeve klijetke u AMS, kroz uzak ventrikularni septalni defekt (VSD). Nije zabilježena opstrukcija izlaznog trakta desne klijetke, infekcija ili tromboza aneurizme. Magnetna rezonancija srca (MRS) je potvrdila ehokardiografski nalaz. Iako ehokardiografija i MRS nisu zabilježile tromb u AMS, ova je tvorba prihvaćena kao najvjerojatniji izvor embolizama odgovornih za ponovljenu TIA. Izvršena je resekcija AMS i zatvaranje VSD. Osamnaest mjeseci nakon kirurškog zahvata neurološki se ispadi nisu ponavljali.

AMS je posljedica djelomičnog ili potpunog, spontanog, zatvaranja VSD. Veći membranozni VSD prisutan u dojenačkoj dobi, u djetinjstvu regredira u manji defekt uz istodobno nastajanje aneuarizme. U odraslih se AMS najčešće nalazi slučajno tijekom ehokardiografije, koja je u većini slučajeva dostatna za definitivnu dijagnozu ove anomalije.

A 23-year-old man, without history of cardiac disease, was referred to the echocardiography after transient ischemic attack (TIA). Echocardiography showed a sack-like aneurysm of the membranous ventricular septum (AMS), approximately 15x9 mm in size, protruding into the right ventricle. Color Doppler revealed blood flow directly from the left ventricular cavity into the AMS through narrow ventricular septal defect (VSD). There were no signs of right ventricular outflow tract obstruction, infection or thrombosis. Cardiac magnetic resonance (CMR) confirmed echocardiography findings. Although echocardiography and CMR did not detect thrombus in AMS, it was accepted as a most likely cause of embolic events responsible for recurrent TIA. Complete resection of AMS and closure of VSD was done by a pericardial patch. Eighteen months after surgical repair no other neurological event has occurred.

AMS develops as a consequence of partial or complete spontaneous closure of a VSD. A large membranous VSD in infancy progresses to a smaller defect with aneurysm formation later in childhood. In adult patients, AMS is the most frequently detected accidentally, during echocardiography

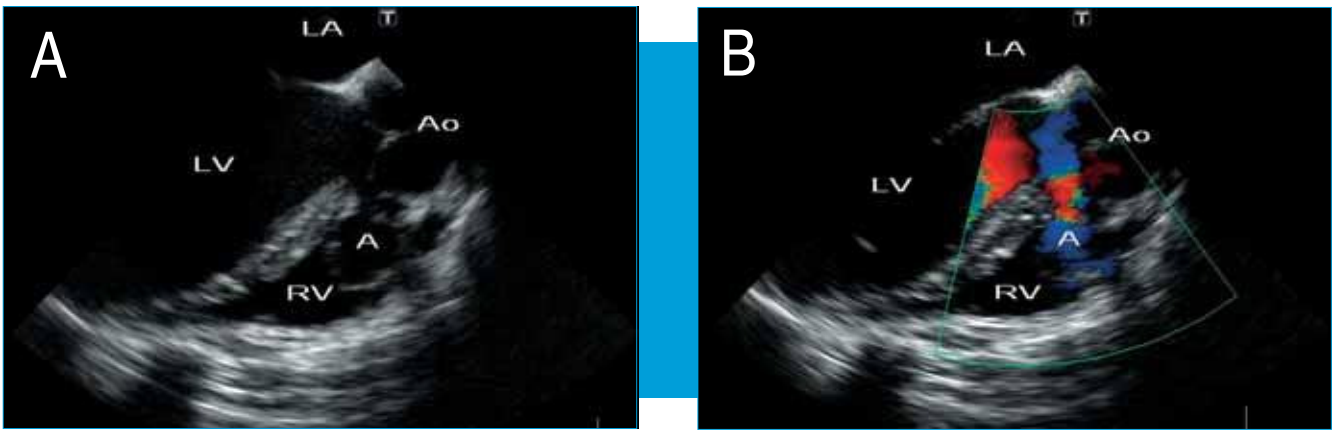

Figure 1. *Transesophageal echocardiography demonstrated membranous ventricular septum aneurysm bulging toward the right ventricle (A). Doppler echocardiography revealed blood flow directly from the left ventricular cavity into the aneurysm through small ventricular septal defect (B).*

LA — left atrium; LV — left ventricle; RV — right ventricle; A — aneurysm of the membranous ventricular septum, Ao — aorta.

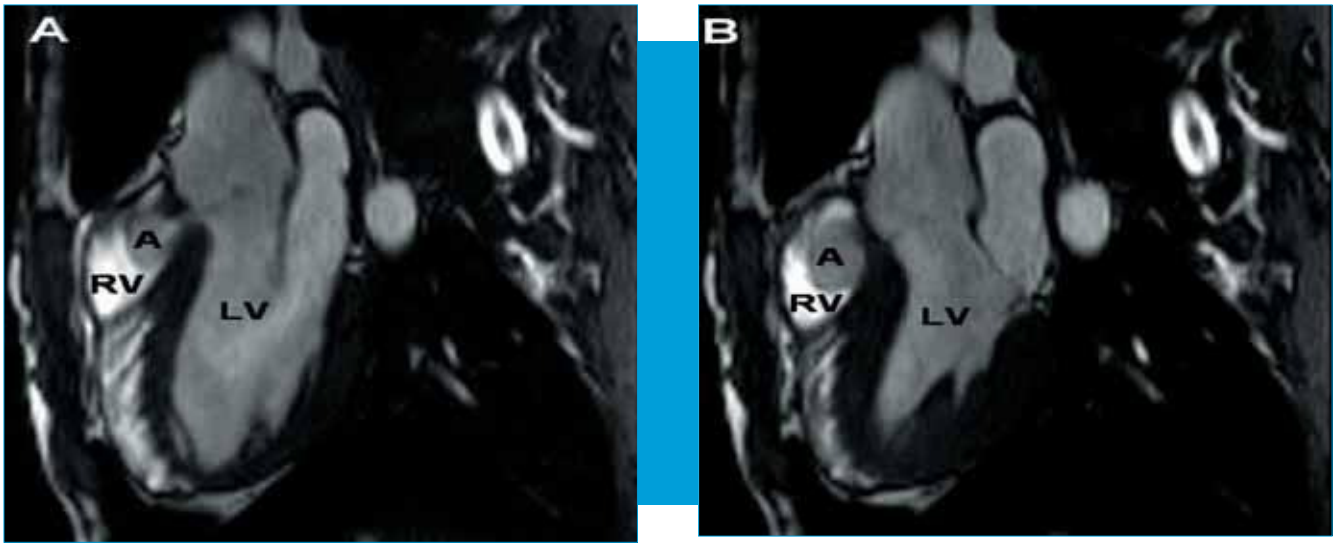

Figure 2. *Cardiac magnetic resonance (Cine MRI 3-chamber view) revealed small membranous ventricular septal defect (A) and sack-like aneurysm protruding into the right ventricle without signs of outflow tract obstruction (B).*

LV — left ventricle; RV — right ventricle; A — aneurysm of the membranous ventricular septum.

Kompjutorizirana tomografija ili MRS mogu pomoći u jasnijem prikazu veličine i oblika AMS, njezinog odnosa s okolnim strukturama srca, otkrivanju tromboze ili upale.

Kliničko značenje AMS proizlazi iz možebitnih, potencijalno smrtonosnih, komplikacija (primjerice, rupture aneurizme, tromboembolijskih incidenata, infekcijskog endokarditisa). Stoga je potpuna resekcija AMS i zatvaranje VSD indicirano i u asimptomatskih bolesnika, odmah po otkrivanju ove anomalije.

Ključne riječi: aneurizma, ventrikularni septum; tromboembolizam; tranzitorna ishemijska ataka.

which is, in the most cases, the only method needed for definite diagnosis. Computed tomography or CMR can help delineate the extent of the AMS, its relationships to surrounding cardiac structures, and AMS thrombosis or inflammation.

Clinical importance of AMS stems from potentially severe or fatal complications (e.g. rupture, thromboembolism, infectious endocarditis). Therefore, complete AMS resection and VSD patch closure, should be done forthwith after diagnosis, even in asymptomatic patients.

Keywords: aneurysm, ventricular septum; thromboemolism; transient ischemic attack.

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