

Atrial septal defect occluder dislocation engaged through the tricuspid valve: surgical removal via right thoracotomy

Przemieszczenie zapinki Amplatza zamykającej ubytek przegrody międzyprzedsionkowej poprzez zastawkę trójdzielną: chirurgiczne usunięcie za pomocą prawostronnej torakotomii

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The increasingly widespread use of atrial septal defect (ASD) transcatheter occlusion devices is associated with the identification of new and uncommon complications. We present the case of a 29-year-old female admitted for percutaneous closure of ASD. During device implantation, the transoesophageal echocardiogram revealed dislocation of the Amplatzer into the right atrium and straddling the tricuspid valve (Fig. 1A, B, [Supplementary Movie Clip 1 — see journal website](#)). The ASD occluder device engaged through the tricuspid valve, producing severe tricuspid regurgitation (Fig. 1C, D). The patient was referred for surgery to remove the device and to repair tricuspid regurgitation (Fig. 2). The percutaneous inter-atrial communication occluder is an internationally certificated device that is being increasingly used. The most common periprocedural complications are cerebro-ischæmic event (transitory ischaemic attack, stroke, etc.), residual shunting, and device dislocation. We reported a case of original device dislocation: it had been lacerating the ASD borders, then migrating through the right atrium to the tricuspid valve, engaging into the tricuspid valve orifice, and finally causing severe tricuspid regurgitation. In scientific literature, reports of ASD occluder dislocation are presented, but device dislocation into the tricuspid valve is extremely rare and uncommon.

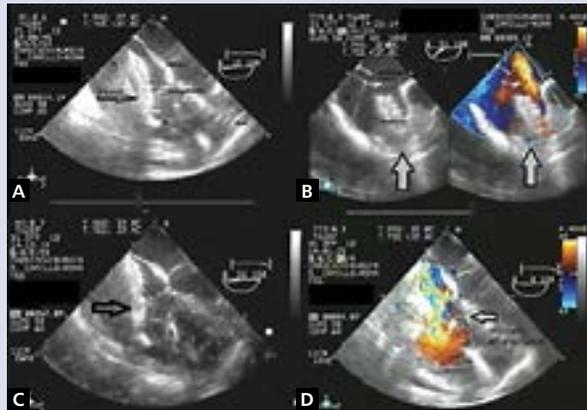


Figure 1. **A.** Transoesophageal echocardiogram (TEE) medioesophageal four-chamber view: atrial septal defect occluder dislocated into the right atrium and right ventricle through the tricuspid valve; **B.** TEE medioesophageal 50-degree view: inter-atrial defect and the dislocated Amplatzer; **C.** TEE view of the engaging of Amplatzer occluder through the tricuspid valve; **D.** TEE view of tricuspid valve regurgitation due to iatrogenic damage of posterior leaflet

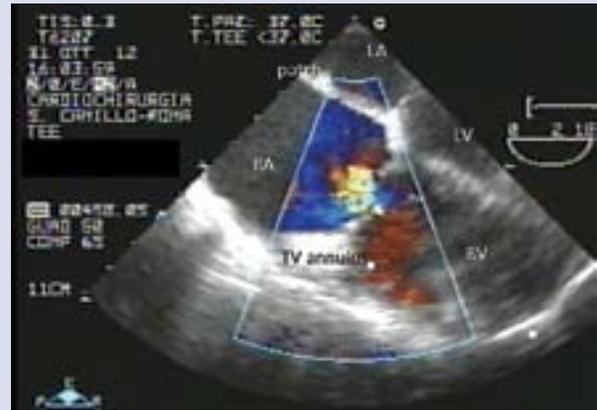


Figure 2. Transoesophageal echocardiogram medioesophageal four-chamber view: successful removal of dislocated device, closure of atrial septal defect with a pericardial patch and repair of posterior tricuspid leaflet with right thoracotomy approach; LA — left atrium; LV — left ventricle; RA — right atrium; RV — right ventricle; TV — tricuspid valve

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Conflict of interest: none declared

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