Transcatheter occlusion with an Amplatzer™ Vascular Plug II for incomplete surgical ligation of left atrial appendage

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A 56-year-old female with permanent atrial fibrillation and a history of mitral commissurotomy and left atrial appendage (LAA) ligation presented with spontaneous intracerebral haemorrhage under warfarin treatment and a stroke a few days later. A transoesophageal echocardiogram (TEE) demonstrated residual communication between the left atrium and LAA (Figure 1A, Moving image 1).

After an LAA angiogram (Figure 1A, Moving image 2), a 12 mm AmplatzerTM Vascular Plug II (AVPII; St. Jude Medical, St. Paul, MN, USA) was placed in the leak via a 5 Fr JR4 catheter with no residual final flow (Figure 1B, Moving image 3, Moving image 4).

To our knowledge, this is the first reported case of transcatheter occlusion with an AVPII for incomplete surgical LAA closure. This device was chosen because of the narrow neck of the leak, so that it

would provide device stability without anchoring at the waist to prevent further leak formation. Furthermore, it can be deployed through a small catheter. These characteristics make this device an attractive option.

Conflict of interest statement

I. Cruz-Gonzalez is a proctor for St. Jude Medical. The other authors have no conflicts of interest to declare.

Online data supplement

Moving image 1 & Moving image 2. TEE and LA angiogram showing incomplete ligation.

Moving image 3 & Moving image 4. LA angiogram and TEE showing final result.

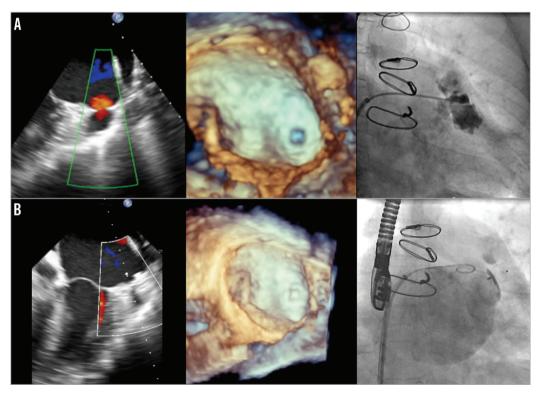


Figure 1. Baseline and post-procedural TEE, 3D-TEE and angiographic images. A) Patent LAA visualised by TEE, 3D-TEE and LAA angiogram. B) TEE, 3D-TEE and LA angiogram showed a well-seated device, with no residual flow.

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