Closure of a coronary artery: coronary sinus fistula

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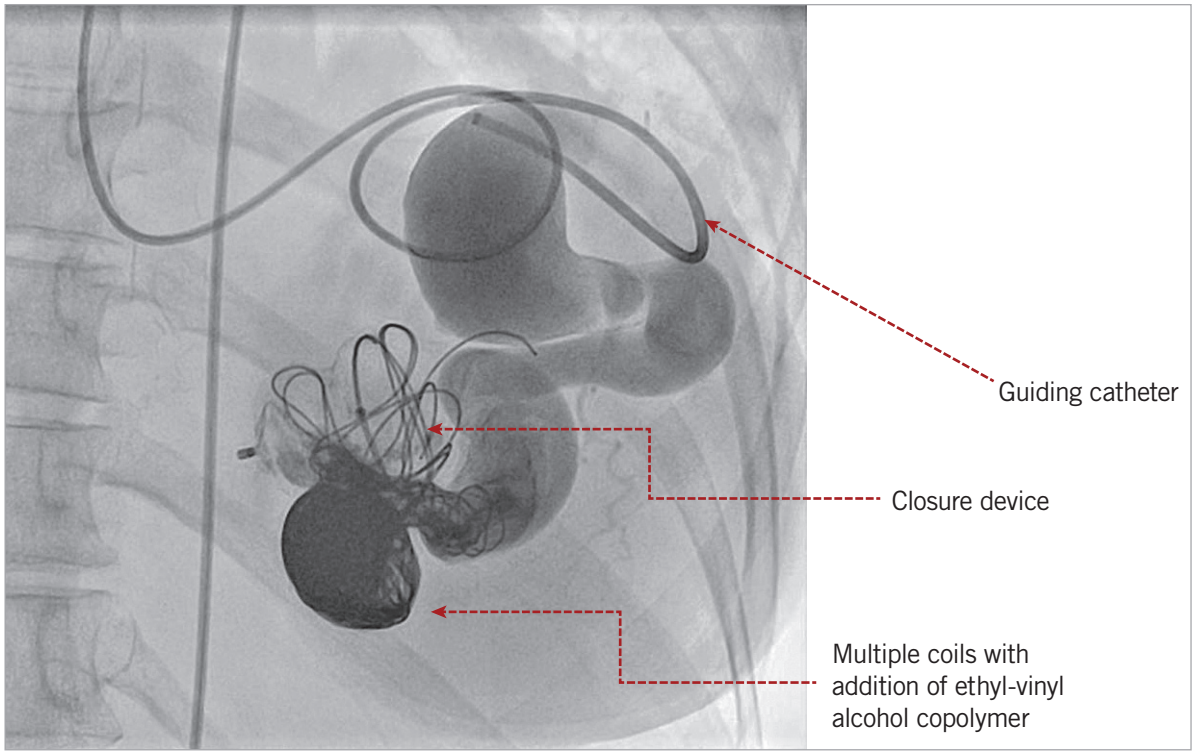

A 61-year-old woman presented with angina and breathlessness. Coronary angiography showed a huge fistula connecting the left coronary artery to the coronary sinus and draining into the right atrium. We first attempted to close the fistula in 2014 with an 18 mm AMPLATZER™ Muscular Ventricular Septal Defect Occluder (St. Jude Medical, St. Paul, MN, USA). This reduced flow through the fistula but was not successful in closing it. The patient's symptoms persisted and imaging demonstrated inducible myocardial ischaemia (coronary steal) anteriorly. We initially attempted to close the fistula using 13×60 cm coils. Despite deploying 780 cm of coils, a residual shunt remained. This was successfully closed by injecting ethyl-vinyl alcohol copolymer (a liquid agent that solidifies on contact with blood) into the nest of coils. At clinic review her symptoms were improved **(Moving image 1-Moving image 4)**.

Conflict of interest statement

The authors have no conflicts of interest to declare.

Supplementary data

Moving image 1. Left coronary artery to coronary sinus fistula.
Moving image 2. Fistula with AMPLATZER closure device.
Moving image 3. Fistula with AMPLATZER device and coils.
Moving image 4. Closure of fistula with ethyl-vinyl alcohol copolymer.

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