

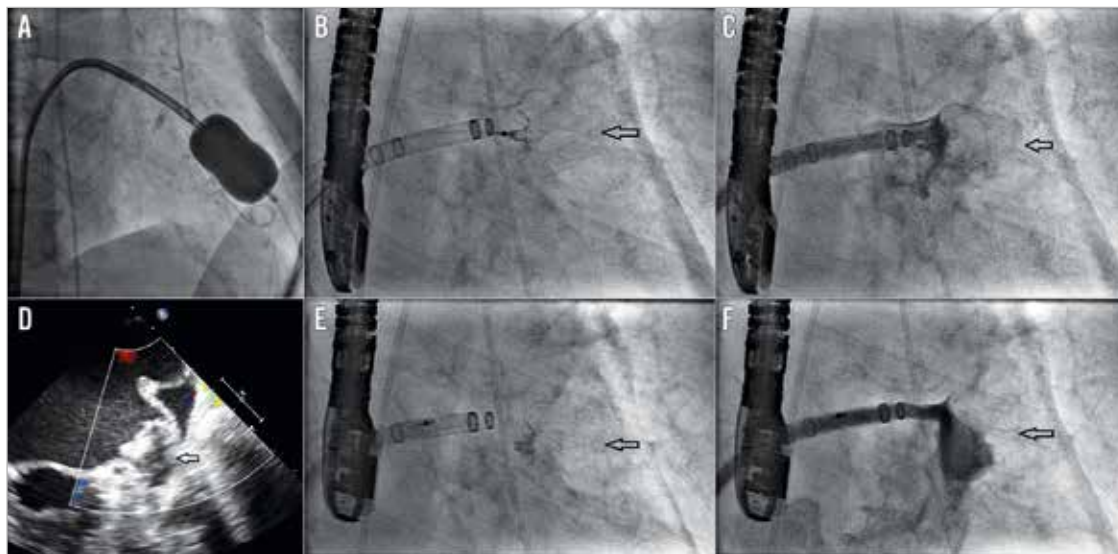
# Combined percutaneous transvenous mitral commissurotomy and left atrial appendage closure as an alternative to anticoagulation for rheumatic atrial fibrillation



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A 75-year-old female who had recently been diagnosed with a haemorrhagic rectal tumour was planned for long-term capecitabine, which has the potential to interact with warfarin, after surgical excision of her tumour. Thus, anticoagulation was deemed unsuitable for her. Combined percutaneous transvenous mitral commissurotomy (PTMC) and left atrial appendage (LAA) closure was carried out to reduce the risk of cardioembolic stroke as well as for cardiac optimisation prior to surgery. PTMC was performed using a 26 mm Inoue-Balloon catheter (Toray Medical Company Ltd., Chiba, Japan) with sequential dilatation up to 24 mm (Panel 1A, Moving image 1, Moving image 2). The post-PTMC mean transmitral gradient improved to 3-4 mmHg with mild mitral regurgitation. An Amplatz Extra Stiff wire (Cook Medical, Bloomington, IN, USA) was kept in the left upper pulmonary vein while the Inoue-Balloon was removed. The LAA ostial diameter was then sized to be between 18 and 22 mm (Moving image 3). The WATCHMAN™ delivery sheath (Boston Scientific, Marlborough, MA, USA) was placed distally in the appendage, following which a 24 mm WATCHMAN device was deployed (Panel B, Panel C, Moving image 4-Moving image 8).

The final position of the WATCHMAN device was confirmed by transoesophageal echocardiography (TEE) (Panel 1D) and fluoroscopy (Panel E, Panel F). The patient has remained stable with no related adverse events to date.

## Conflict of interest statement

The authors have no conflicts of interest to declare.

## Supplementary data

**Moving image 1.** Transseptal puncture.

**Moving image 2.** Final inflation of stenosed mitral valve with an Inoue-Balloon, size 24 mm.

**Moving image 3.** Imaging of the left atrial appendage.

**Moving image 4.** WATCHMAN device being deployed.

**Moving image 5.** WATCHMAN device redeployed after recapture for optimal placement.

**Moving image 6.** WATCHMAN device released after optimal placement.

**Moving image 7.** WATCHMAN device after release.

**Moving image 8.** Withdrawal of WATCHMAN delivery sheath.

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