## IMAGE FOCUS

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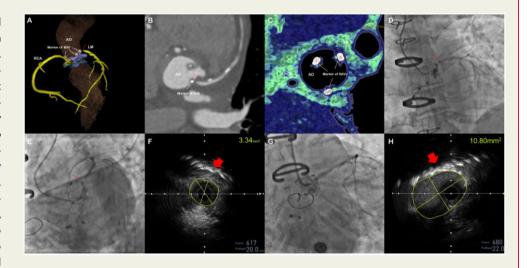
## Iatrogenic coronary ostial obstruction and stenosis following aortic valve replacement: visualization with cardiac computed tomography and intravascular ultrasound

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In April 2019, a 66-year-old female patient presented with recurrent shortness of breath. An echocardiography examination revealed severe aortic stenosis with severe calcifications. Preoperative coronary angiography demonstrated no significant stenosis of the coronary arteries (Supplementary data online, Videos S1–S3). A 21-mm porcine bioprosthetic aortic valve (Mosaic, Medtronic) was used to replace the native valve. Two months later she experienced atypical chest pain. On 23



October 2019, admission electrocardiogram revealed ST-segment elevation in lead aVR lead and ST depression in leads II, III, aVF, and V4–V6, and a troponin I level of 1.370 ng/mL. Urgent multidetector computed tomography (MDCT) revealed significant left main (LM) stenosis with a circular high-density structure (*Panels A–C* and Supplementary data online, *Video S4*). The heart team reviewed the images and recommended percutaneous coronary intervention (PCI) for the treatment of the patients. Urgent coronary angiography revealed the presence of critical ostial stenosis (99%) of the LM (*Panels D* and *E* and Supplementary data online, *Video S5–S7*) and no atheroma in other coronary vessels. Based on MDCT findings, intravascular ultrasound (IVUS) was performed to identify the lesion. IVUS demonstrated localized severe LM stem stenosis with a massive fibrous plaque and LM ostial obstruction with the metal strut (*Panel F* and Supplementary data online, *Video S8*). A drug-eluting stent (3.5 mm × 18 mm, LePu) was successfully implanted. Post-PCI angiography and IVUS confirmed well-apposed stent struts in the LM without obstruction (*Panels G* and *H* and Supplementary data online, *Videos S9 and S10*). The patient remains asymptomatic and angina-free at the 6-month follow-up.

Supplementary data are available at European Heart Journal - Cardiovascular Imaging online.

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