CARDIOVASCULAR FLASHLIGHT

Left to right protrusion of a left atrial myxoma through a patent foramen ovale in a patient with ‘cryptogenic’ pulmonary embolism

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A 66-year-old woman had been well until 6 days earlier, when she experienced dyspnoea. Because of hypoxaemia and inverted T waves in the right precordial leads, pulmonary thrombo-embolus was suspected, although she had no remarkable coagulation factor abnormality, including antiphospholipid antibodies. A contrast-enhanced computed tomography showed that an embolic fragment was occluding the right pulmonary main artery (RPMA) without any lower limb venous thrombus (Panel B). Unexpectedly, a left atrium (LA) mass (3.2 × 2.4 cm) was demonstrated simultaneously (Panel A). A transoesophageal echocardiographic study revealed that the mass was pedunculated and originated from the base of interatrial septum, indicating LA myxoma (Panel C). Further detailed echocardiographic examination revealed that the mass protruded into the right atrium (RA), apparently through a patent foramen ovale (PFO) (see Supplementary material online, Movie S1). In this case, pulmonary embolism could have been associated with the protruded mass. However, this possibility might be difficult to diagnose with certainly pre-operatively, even with magnetic resonance imaging (Panel D). The operation was performed under a standard cardiopulmonary bypass. The excised mass was originated from the interatrial base and traversed the septum into RA, apparently through a PFO (Panel E). An LA myxoma and pulmonary thrombi without tumour were confirmed by histopathological study. There is increasing evidence that cardiac myxomas constitutively secrete a variety of growth factors and cytokines and they could have a role in the thrombosis on the myxoma surface and systemic embolisms, although myxoma per se has been implicated as an embolic source.

Supplementary material
Supplementary material is available at European Heart Journal online.