A 23-year-old woman was admitted to the hospital because of progressive shortness of breath since 2 weeks. She had a history of Blackfan-Diamond anaemia, and sagittal sinus thrombosis 3 years ago. Computed tomography pulmonary angiography (CTA) revealed bilateral pulmonary embolisms. Despite 3 weeks of coumarin treatment, symptoms increased and progression of the pulmonary embolism was shown with repeated CTA. Trans thoracic echocardiography depicted a massive mobile structure of $3 \times 3$ cm bouncing between the right atrium (Panel A) and right ventricle (Panel B) and an interventricular septum shift. Differential diagnosis included a cardiac tumour (myxoma) or thrombus. Patient was referred for surgery to a hospital specialized in haemostatic disorders. The intra-cardiac mass was removed by open-heart surgery (Panels C and D). Histologic evaluation of the cardiac mass diagnosed an organized thrombus. Malignancies (as prothrombotic explanation) were excluded by positron emission tomography imaging. Haematologic evaluation revealed a Factor II mutation and elevated Factor VIII activity as the probable cause of the hypercoagulable state.

Cardiac right-sided mobile thrombi are uncommon and are seen in 3–23% of pulmonary embolisms. The best treatment remains uncertain due to the lack of prospective randomized trials and potential publication bias often seen in small case series. We believe that in this case surgery was the indicated treatment due to the size of the thrombus, progression of pulmonary embolism under coumarin treatment, and the unknown composition of the mass. With the known prothrombotic mutations, life-long coumarin treatment is indicated. The patient is doing well now 1 year after this episode.