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Pro-coaguable states lead to a sticky situation: coronary saddle embolism in a patient with known hypertrophic cardiomyopathy and atrial fibrillation

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DESCRIPTION

An 81-year-old man presented with symptoms typical of cardiac chest pain. ECG demonstrated atrial fibrillation (AF) with a left bundle branch morphology secondary to ventricular pacing. Troponin I measurement at 12 h was elevated >50 ug/l. The patient's medical history included hypertrophic cardiomyopathy (HCM) and permanent AF. An implantable cardioverter-defibrillator had been implanted 2 years previously as secondary prevention

for syncopal ventricular tachycardia. Angiography at that time revealed minor atheroma only. He was subsequently anticoagulated for a CHADS2 risk score of 2. Warfarin had been withheld for 1 week before the current presentation as a requirement for a forthcoming outpatient neurological investigation resulting in an international normalised ratio of only 1.4 at presentation. His erythrocyte sedimentation rate, C reactive protein and Von-Willebrand factor were elevated at 49 mm/h, 27 mg/l and 116 UI/ml, respectively.

Figure 1 Angiography showing the coronary saddle embolus in the distal dominant circumflex artery.

Figure 2 Angiography 1 week after presentation showing resolution of the saddle embolus from the distal dominant circumflex artery.

Angiography during the present admission revealed a saddle embolus in the distal dominant circumflex artery (figure 1). This was treated by aspiration thrombectomy, subsequent abciximab infusion and anticoagulation with low molecular weight heparin. Repeat angiography 1 week later confirmed mild atheroma only with complete resolution of embolic material (figure 2). HCM is known to be a pro-coagulable state.^{1–3} Studies have demonstrated that the tendency for patients with HCM to have thromboembolic events cannot solely be explained by the high prevalence of AF.^{1–3} This case illustrates the risk of discontinuation of oral anticoagulants in these patients without suitable alternative anticoagulation. We conclude that patients with HCM and AF are at higher risk of embolic events and should be considered for alternative anticoagulation therapies if oral anticoagulation is to be discontinued.

Competing interests None.

Patient consent Obtained.

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Learning points

- ▶ Coronary embolus is an infrequent but important cause of an acute coronary syndrome.
- ▶ HCM is a pro-coagulable state.
- ▶ Patients with HCM and AF are at high risk of embolic events and should be considered for alternative anticoagulation therapies if their oral anticoagulation is to be temporarily discontinued.

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