Clinical vignette
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Spontaneous intramural gastric haematoma as a complication of oral anticoagulant therapy mimicking acute myocardial infarction

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A 73-year-old patient was admitted for acute pain in the low retrosternal area and nausea. He was a smoker and had a history of myocardial infarction and paroxystic atrial fibrillation treated with fluindione, amiodarone, and aspirin. At time of admission, the patient had a sinus tachycardia, and blood pressure was 100/45 mmHg. Initial ECG showed Q-waves and persistent ST-elevation in opposite leads (Panel A). Diagnosis of recurrent myocardial infarction was considered and patient was transferred to the catheterization laboratory. Coronary angiography was performed, which revealed a chronic total occlusion of the left anterior descending coronary artery (Panel B) with a very good collateral flow (Rentrop grade 3) (Panel C), excluding an ischaemic cause of the current symptomatology. Patient became shocked, and meanwhile, haematology laboratory alerted us that haemoglobin was 8.6 g/dL and INR was 12.1. A gastroscopy was rapidly performed, which showed no sign of active bleeding. The abdominal multi-slice computed tomography (MSCT) revealed a spontaneous and voluminous intramural haematoma localized in the greater curvature of the stomach (Panel D), associated with a small haematic peritoneal effusion, and intraperitoneal fat infiltration. The patient recovered rapidly after blood transfusion, volumic expansion, IV vitamin K, and IV PPSB-concentrate. One year later, the abdominal CT showed only a small remnant haematoma (Panel E).

Even if it has been formerly reported that a significant number of patients treated with anticoagulant had jejunal and duodenal submucosal haemorrhages at autopsy, clinically relevant anticoagulant-induced intramural haematoma of gastrointestinal tract is very rare and only one case of gastric localization is already related in the literature. The treatment of choice is conservative with correction of coagulation disorders. Surgery should be reserved to patients exhibiting clinical signs of gastric necrosis or peritonitis. Moreover, this case underlines the importance of not using thrombolytic or aggressive antiplatelet therapies before coronary angiography (to confirm the diagnosis) in patient with acute myocardial infarction previously treated with oral anti-coagulant.

Panel A. ECG showing peaked T-waves, ST-elevation, and Q-waves in antero-septal leads (V1, V2, V3, V4).
Panel B and C. Coronary angiogram depicted proximal occlusion of the left anterior descending coronary artery (Panel B, arrow) with a Rentrop 3 collateral flow (Panel C, black arrow) coming from the right coronary artery (Panel C, white arrow).
Panel D and E. Abdominal MSCT showing large intramural haematoma in the greater curvature of the stomach (Panel D, long arrow), with small haematic peritoneal effusion (small arrow), and intraperitoneal fat infiltration (arrowhead). Small remnant haematoma at 1 year (Panel E, arrow).