

Acute myocardial infarction in a young male

An 18-year-old male presented with history of road traffic accident leading to multiple facial and skull bone fractures. There was no intracranial haemorrhage or active blood loss from any site. There was no evidence of chest injury. On examination he had tachycardia and persistent hypotension. An ECG revealed ST elevation in leads I, aVL, V1 and V2 with q right bundle branch block (qRBBB) pattern suggestive of acute anterior wall myocardial infarction. Echocardiogram showed severe left ventricular dysfunction with regional wall motion abnormalities in left anterior descending artery (LAD) and left circumflex artery (LCX) territories. An urgent angiogram showed thrombus in the proximal left main coronary artery (figure 1A) and thrombotic distal LAD occlusion. A diagnosis of road traffic accident with acute anterior wall myocardial infarction was established. He was put on intra-aortic balloon pump (IABP) support and mechanical ventilation and managed conservatively initially in view of risk of bleeding. Repeat angiogram showed resolution of thrombus with persistent dissection flap in the left main coronary artery (figure 1B). In view of persistent dissection flap, the left main was stented with drug eluting stent (figure 2A,B). Postprocedure, the patient was successfully weaned of IABP and mechanical ventilation. Subsequently, he was discharged and was doing well at last follow-up. Although his follow-up echocardiograms

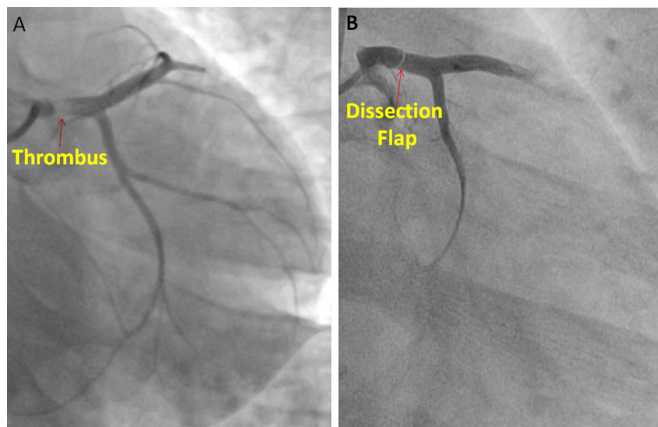


Figure 1 Coronary angiogram of the left coronary artery showing thrombus in the left main coronary artery (A) and repeat coronary angiogram showing thrombus resolution with dissection flap in left main (B).

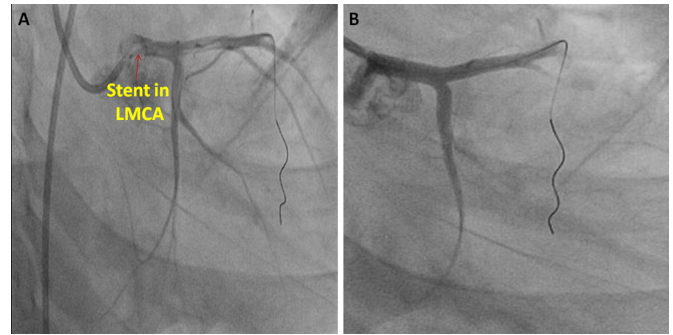


Figure 2 Coronary angiograms showing stent positioned in left main (A) and deployed stent in the left main coronary artery (B). LMCA, left main coronary artery.

at 6 months and 1 year show persistent severe left ventricular dysfunction, he remains in New York Heart Association (NYHA) functional class 1.

Left main coronary dissections have been rarely reported with blunt chest traumas.^{1 2} Our patient although had no obvious chest trauma. Management should be tailored for individual patients keeping in mind the bleeding risk.

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