

IMAGES IN INTERVENTION

Left Main Coronary Embolization After Direct Current Cardioversion for Persistent Atrial Flutter in the Absence of Detectable Intracardiac Thrombi



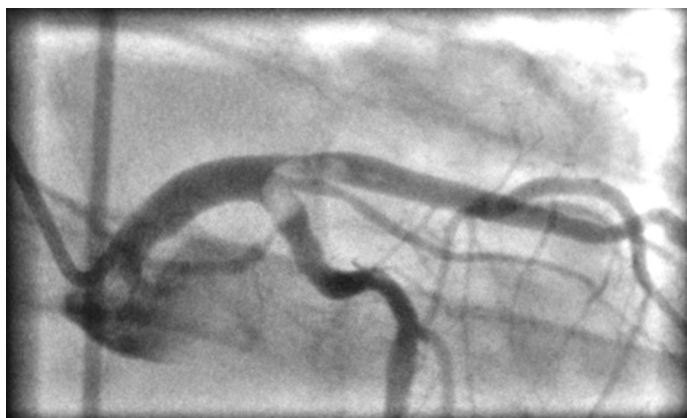
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We report a case of left main coronary embolization after direct current cardioversion in the absence of detectable intracardiac thrombi by pre-procedure comprehensive transesophageal echocardiographic assessment (1). Although it is considered a rare event, in patients with post-cardioversion acute coronary syndrome,

one must consider the possibility of coronary thromboembolism (2).

A 57-year-old man with a history of active smoking and persistent atrial flutter was admitted to the hospital due to atrial flutter with rapid ventricular response, progressive dyspnea on exertion, paroxysmal nocturnal dyspnea, orthopnea, and bilateral ankle edema. A transthoracic echocardiogram showed normal left ventricular dimensions, mild left atrial enlargement, severe left ventricular systolic dysfunction with an ejection fraction of 10%, severe left ventricular global hypokinesis, and no evidence of left ventricular thrombus. The patient was optimally anticoagulated with intravenous unfractionated heparin and then referred for transesophageal echocardiography and direct current cardioversion. After ruling out the presence of thrombi within cardiac chambers, he was successfully cardioverted with normalization of his heart rhythm. Post-procedure anticoagulation was continued without any changes. Two hours after the procedure, severe retrosternal chest pain developed with new inverted T waves diffusely distributed in the anterior and lateral leads. He underwent emergent coronary angiography, which revealed the presence of a riding left main bifurcation thrombus (Figure 1). His anticoagulation level was rechecked and found to be within the therapeutic range. Shortly after and while the interventional team got ready for coronary thrombectomy, the thrombus migrated downstream

FIGURE 1 Large Riding Thrombus on the Left Main Coronary Bifurcation

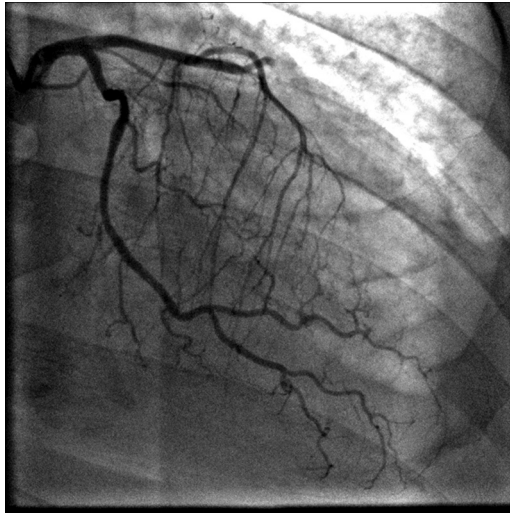


Left coronary angiogram shows a large riding thrombus on the left main coronary bifurcation and slightly extending into the proximal portion of the left anterior descending and circumflex artery.

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FIGURE 2 Post-Angiography Migration of the Left Main Thrombus



Left coronary angiogram shows post-angiography migration of the left main thrombus into the left anterior descending artery, causing a total obstruction in its midsegment.

FIGURE 3 Prompt Manual Coronary Thrombectomy Restored Normal Coronary Flow in the Left Anterior Descending Artery



Prompt manual coronary thrombectomy restored normal coronary flow in the left anterior descending artery.

into the left anterior descending coronary artery, causing a total occlusion of the vessel in its midsegment (**Figure 2**). His chest pain worsened, and his electrocardiographic tracing revealed ST-segment elevation in the monitored leads. Percutaneous coronary intervention of the left anterior descending coronary artery was performed with successful manual

thrombectomy. Post-procedural angiography showed excellent results with reestablishment of a normal coronary blood flow (**Figure 3**).

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