Complicated infarction of the saphenous vein graft

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Introduction: Saphenous vein graft (SVG) occlusion usually occurs in degenerated vein grafts.[1-4] In this case report, we present the case of a patient who presented with total occlusion of an Aorta-Posterior descending SVG during inferior myocardial infarction (MI), complicated with ventricular septal rupture (VSR) over a fifteen-day period after failed percutaneous coronary intervention (PCI).

Case report: 63-year-old man with a history of coronary artery bypass graft surgery (CABG) eleven years ago, including hypertension, diabetes mellitus, peripheral artery disease, dyslipidemia, and smoking habits, was admitted to Cardiology Department with atypical chest pain and fatigue. Fifteen days before admission, the patient had been hospitalized for subacute inferior myocardial infarction. Angiogram showed complete thrombotic occlusion of the SVG to tile posterior descending artery (**Figure 1**). Primary PCI to the SVG was unsuccessful. Fifteen days after the initial hospitalization, the

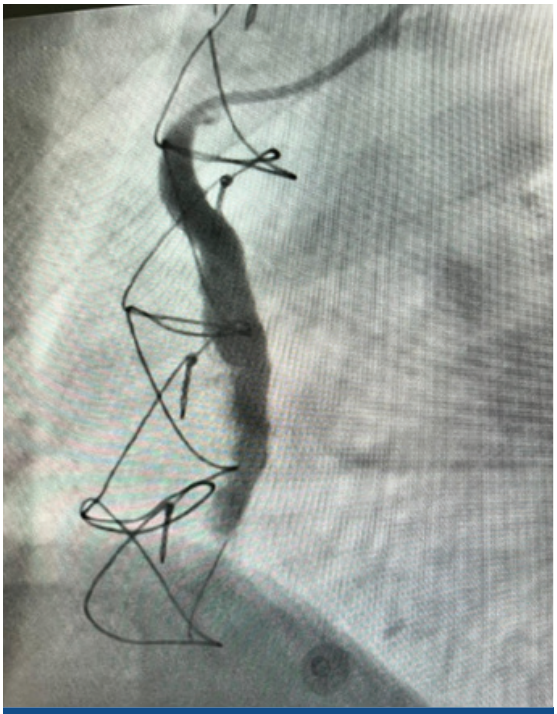

FIGURE 1. Angiogram showing complete thrombotic occlusion of the saphenous vein graft to tile posterior descending artery.

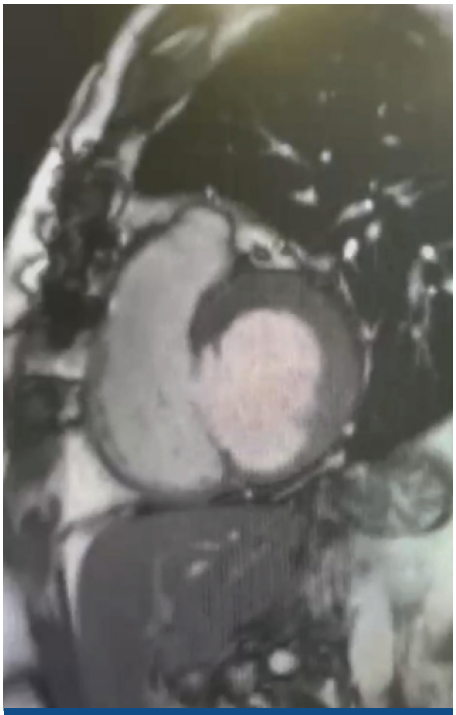

FIGURE 2. Magnetic resonance imaging showing ventricular septal defect and blood shunting.

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control coronary angiogram was unchanged. Transthoracic echocardiography showed VSR of the mid inferoposterior septal segment. Color Doppler evaluation showed a turbulent flow jet at the basal septum between the left and right ventricles. The patient was hemodynamically stable, so surgery was performed after one week. Magnetic resonance imaging was performed before surgery to identify the dissected area and to determine the surgical strategy (**Figure 2**). The VSR was closed by a modified double patch repair. The patient was discharged from the hospital 10 days after surgery without complications. At six-month follow-up, the patient is stable.

Conclusion: Patients with prior CABG represent a high-risk population for future cardiovascular events. Acute MI with SVG involvement is difficult to treat and associated with higher long-term event rates such as procedural complications and no-reflow. This case highlights the role of the interprofessional team in the successful management of patients with VSR after myocardial infarction with prior CABG.

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