

Saddle Pulmonary Embolism after Coronary Artery Bypass Graft

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Abstract

A 56-year-old-gentleman successfully underwent coronary artery bypass for triple vessel disease. Upon review in clinic after a month, he was tachypneic for 3 days. Patient had urgent CT pulmonary angiogram revealing saddle pulmonary embolism (Figure 1) and required anticoagulation.

Keywords: Pulmonary embolism, Coronary bypass graft

Case

A 56-year-old-gentleman had triple coronary artery by-pass graft done for severe coronary artery disease. Patient was seen in clinic after one month of surgery with complaint of shortness of breath for 3 days. His blood pressure was 115/55 mm of Hg, Heart rate 50, respiratory rate 25 and oxygen saturation 90% on room air. Considering risk of pulmonary embolism after surgery, patient was sent to radiology for CT pulmonary angiogram which showed large “saddle pulmonary embolism” explaining patient’s symptoms. Patient was immediately started on unfractionated heparin and later started on rivaroxaban therapy after clinical improvement.

Saddle pulmonary embolism means a large embolism of main pulmonary artery often extending into both right and left pulmonary arteries. If large enough, it can cause right heart failure. About 3 to 6 per cent of patients with pulmonary embolism present with a saddle embolus and only 22 per cent are hemodynamically unstable with a mortality rate of 5 per cent.¹ Most patients with saddle pulmonary embolism are hemodynamically stable on presentation and do not require thrombolytic therapy or other interventions and respond to usual treatment with anticoagulation. In 5 randomized controlled trials it was seen that patients with massive PE, fibrinolysis reduced the risk of death or recurrent PE by 55%.²

References

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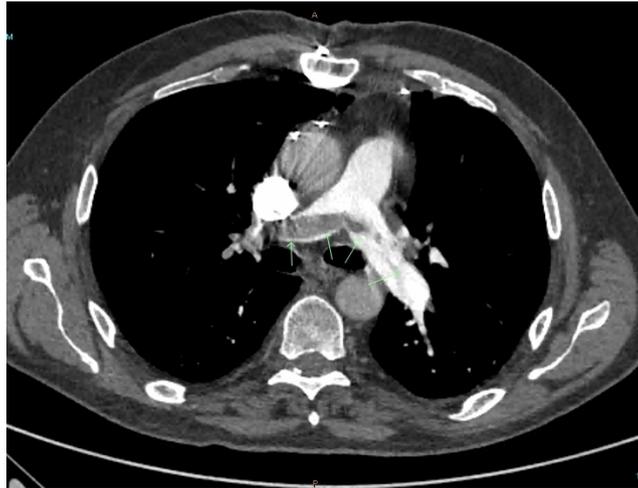


Figure 1: Saddle pulmonary embolism.