

## Thrombus Aspiration in Acute Myocardial Infarction in Children with Intra-cardiac Mass

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### Introduction:

Acute ST-segment elevation myocardial infarction (STEMI) is rarely present in children. The primary goal of management is to reperfuse the ischemic myocardium. Primary percutaneous coronary intervention (PCI) has become standard of care. We presented the PCT in management of STEMI in a male adolescent with left atrial (LA) mass.

### Patient and Methods:

A 13 year-old male known protein S deficiency and LA mass after being evaluated for stroke in the young. He received low molecular weight heparin for intracardiac mass located at LA which appeared to adhere to the anterior mitral valve leaflet. Echocardiogram evaluation revealed a hyperechogenic mass, (diameter 3 x 3 cm), located adjacent to the lower part of the LA septum and moved along with anterior mitral valve leaflet. With the result of protein S deficiency, the LA mass was presumed to be the thrombus in origin. After 20 months of medical treatment, he presented with sudden onset of chest pain.

### Result:

The patient was referred to our service due to STEMI within 2 hours of onset. The thrombolytic agent was not given because the patient had been taken warfarin. He was transport to the cath labs. After femoral artery sheath was inserted, the 0.014 Pilot50 wire and the 6FJL3 catheter were advanced into the left main coronary. Selective left coronary angiograms were obtained and revealed the total occlusion of the distal left circumflex artery. Decision was made to perform manual thrombectomy using Thrombuster aspiration catheter. The small thrombus like tissue (3 mm x 5 mm) was obtained. Another left coronary angiogram was obtained which revealed the unobstructed flow to the left circumflex artery.

Cardiac MRI evaluation showed the heterogenic density of the LA mass which was well defined to attach to the LA septum. The primary impression was LA myxoma. Therefore, the patient underwent an elective surgery to remove the mass with the pathological confirm diagnosis of myxoma.

### Conclusion:

This case revealed the role of PCI and thrombus aspiration in a child with LA mass presented with STEMI. Thrombuster has a beneficial role in management of tumor emboli to the coronary artery.

