

## **118. Deferred Stenting in Young Adult With STEMI and High Burden Thrombus: Will It Bring a Big Impact?**

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### **Body**

**Background:** Acute ST Elevation Myocardial Infarction (STEMI) is caused by the disruption of an atherosclerotic plaque, followed by thrombus formation leading to the complete occlusion of a coronary artery. Primary Percutaneous Coronary Intervention (PCI) is the standard management for STEMI but may be challenging in case of high burden thrombus, enhances the chances of thrombus to shift proximally and distally in the microvasculature leads to no-reflow phenomenon. This study aims to report an unusual case of deferred strategy performed in a young adult with STEMI followed by high burden thrombus in RCA.

**Case:** A 28 years old male patient was referred to our hospital with chief complain of recurrent chest pain in 3 weeks and worsened 15 hours before admission. He had risk factors of smoking and obesity (BMI 32,2). Electrocardiogram showed a sign of inferior STEMI evolution, marked by pathological Q wave and T wave inversion in leads II, III, aVF. Cardiac enzyme revealed an elevation of Troponin T 381 ng/ml. Other laboratory data within normal limits. Patient is then diagnosed with Inferior STEMI Killip 1 TIMI SCORE 3/14 and had received initial management of STEMI therapy upon arriving. Patient was planned for Primary PCI, however stenting was deferred due to high thrombus burden in RCA. Eptifibatide was given, followed by infusion for 12 hours in the Intensive Cardiac Care Unit.

**Discussion:** Previous studies showed that the incidence of STEMI has shifted in the younger age population, rises by 0.4-19% of all cases. In STEMI with high burden thrombus, deferred stenting tends to lower thrombus burden and improve TIMI flow during the deferment time with the help of parenteral anticoagulants and Glycoprotein (GP) IIb/IIIa inhibitors. Male sex, younger age and higher thrombus burden ( $p < 0.001$ ) at baseline were proven to be the predictors of greater benefit from deferred stenting.

