

**primary versus facilitated coronary intervention in acute myocardial infarction**

**Background :** The aim of this study is to compare the clinical outcomes between primary PCI and tenecteplase- facilitated PCI in patients with ST-segment elevated acute myocardial infarction (STEMI).

**Methods:** A total of 225 STEMI patients undergoing PCI were analyzed between January 2006 and December 2012. The patients were divided into two groups such as Primary PCI and Facilitated PCI. (Primary PCI group: n=186, Facilitated PCI group: n=39). Primary PCI had been performed within 90 minutes, and Tenecteplase-Facilitated PCI had been performed within 6 hours.

**Results:** Angiographic characteristics showed that Pre TIMI 0-2 flow lesion (89% vs 68.4%, p=0.001), visible thrombus (77.7% vs 48.7%, p=0.001), and the use of GP IIb/IIIa inhibitor (34.4% vs 15.4%, p=0.022) were higher in Primary PCI group. However, after PCI, post TIMI 3 flow was similar between two groups (85.6% vs. 91.2%, p=0.949), and there were no difference of 12 months clinical outcomes including mortality (12.9% vs 7.7%, p=0.432), TLR (7.0% VS 5.1%, P=0.750), and MACE (14.0% vs 17.9%, p=0.618).

**Conclusion:** In the present study, Primary PCI group had more visible thrombus, and frequently used GP IIb/IIIa inhibitor as compared with Tenecteplase-Facilitated PCI. However, after PCI, post TIMI 3 flow and cumulative incidence of MACE up to 12 months were similar between two groups. Therefore, Tenecteplase-Facilitated PCI can be considered as alternative to Primary PCI.