PP44 PRE-HOSPITAL THROMBOLYSIS IN ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION: A REMOTE BORNEO ISLAND EXPERIENCE

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INTRODUCTION

ST-Elevation Myocardial Infarction (STEMI) is a major cause of death-rate in Malaysia. Rapid identification of STEMI and immediate administration of reperfusion therapy such as Primary Percutaneous Coronary Intervention (PCI) and Fibrinolytic Therapy is fundamental as the time lost is equal to myocardium loss. Pre-Hospital Thrombolysis (PHT) is a rapid treatment option that may save time for STEMI patients and associated with excellent morbidity and mortality outcomes. We are sharing our first case of STEMI patient receiving PHT in Labuan.

CASE

A 45-years-old gentleman was presented with dizziness and vomiting while working at 11am. He went to the clinic and was detected with inferior STEMI (KILLIP 1) hence ambulance service was contacted. Upon ambulance arrival, he's still symptomatic, and vital signs were stable. He was administered with Aspirin and the 12-lead ECG was transmitted to the Emergency Department (ED) for Emergency Physician validation.

IV Tenecteplase 6000 unit/30 mg was administered 9 minutes from ambulance arrival at the clinic, during transportation to ED. On arrival to the ED, the symptoms resolved with complete resolution of ECG changes. He made a full recovery to hospital discharge five days later with no adverse events.

DISCUSSION

STEMI is a fatal and time-critical condition that requires prompt recognition and assessment. Late presentation, misdiagnosis, and delay of perfusion lead to high mortality in Malaysia. Pre-hospital care can be of immense significance in reducing these. Direct PCI and thrombolysis are important treatments to immediately restore coronary blood flow. The antiplatelet agent such as aspirin act as adjunctive therapy should be given in the pre-hospital setting when STEMI is suspected. PHT reduces time to thrombolytic treatment and in-hospital mortality by 2% per hour of earlier treatment if safely and appropriately delivered by trained paramedics/doctors. Furthermore, PHT for STEMI has potential to lower morbidity, especially in patients has restricted access to PCI facilities. The further a STEMI patient is from a hospital, the greater the potential benefit of PHT.

CONCLUSION

PHT for STEMI is both feasible and safe when administered by well-equipped and well-trained Pre Hospital Care staff and significantly reduces reperfusion times and mortality.

KEYWORDS

Pre-hospital thrombolysis, STEMI