

**OP15 OUTCOME OF  
PREHOSPITAL STROKE  
ACTIVATION IN HOSPITAL  
TUANKU JA'AFAR SEREMBAN  
(HTJS): A CASE SERIES**

MARYAM ABU BAKAR<sup>1</sup>, SARA  
AZREEN AZIZUL RAHMAN<sup>1</sup>, SYED  
HUSSEIN BARAKBAH SYED AZHAR<sup>1</sup>

<sup>1</sup> HOSPITAL TUANKU JA'AFAR,  
SEREMBAN, MALAYSIA

**Introduction & Objectives:**

Thrombolysis has become one of key interventions in the management of acute ischemic stroke. The efficacy of stroke thrombolysis is time dependent, therefore early identification of stroke is crucial. A stroke protocol with early prehospital care notification was developed in Emergency & Trauma Department (ETD) Hospital Tuanku Ja'afar Seremban. The objective of the case series is to describe the prehospital stroke notification activation and the outcomes.

**Methodology:** A detection of stroke via dispatcher call form will be given to the prehospital care (PHC) team. The PHC team will be equipped with a prehospital care stroke tool in the form of questionnaires and checklist that consist of clinical inclusion and exclusion of stroke criteria that determine the suitability for thrombolysis. If a patient fulfils the criteria, stroke notification will be activated, and the acute stroke team will be informed by the Medical Emergency call center (MECC). Pre-registration of patient will be done earlier prior to patient arrival so that imaging process (CT brain) can be expedited once patient arrives at the emergency department.

**Result:** In our case series from May 2019 till May 2020, there were total of 20 cases of stroke thrombolysed in which 8 were

from PHC stroke identification. We found that the age of patients in our stroke series ranges from 49 years old to 70 years old, with an average age of 60 years old. The PHC scoring tool that we used has a sensitivity of 100% in identifying acute stroke cases in our case series. Out of 8 cases from prehospital activation, 5 were decided for thrombolysis and this accounted for 62.5%. Average time from triage to CT scan for prehospital care stroke activation was 6.2min whereas for non-prehospital was 14.6min.

**Conclusion:** A comprehensive pathway of prehospital stroke notification and early activation can facilitate diagnosis of acute stroke. Patients are also more likely to receive brain imaging and have it interpreted by a physician in a timely manner. Hence these will lead to early decisions for thrombolysis which will improve patient outcome.

**Keywords:** Prehospital, stroke activation