



**Service Priorities and Programmes  
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**Parallel assessment by dual assessors effectively shortens the door-to-treatment time in patients receiving intravenous thrombolysis for acute ischemic stroke**

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**Introduction**

Time is brain in the acute management of ischemic stroke. Studies showed that clinical outcome is more favorable if intravenous thrombolysis can be given within 3 hours of symptoms onset.

**Objectives**

To evaluate the changes in time management after implementing the strategy of parallel assessment by stroke nurse and neurologist in the evaluation of eligibility of intravenous thrombolytic treatment for acute ischemic stroke

**Methodology**

From Jan 2012 onwards, a new strategy of parallel assessment by stroke nurse and neurologist was carried out in the evaluation of eligibility for intravenous thrombolysis compared with the sole assessment by neurologist in the past. Upon receiving thrombolytic calls from emergency department or medical wards, patients were first assessed by stroke nurse at the scene. While the eligibility was being evaluated by stroke nurse, neurologist was responsible for reviewing patients' comorbidities and brain scan to exclude contraindications of therapy by using the nearest CMS(Clinical Management System) anywhere in the hospital. When the neurologist arrived, the initial assessment including stroke severity and blood pressure measurement was completed by stroke nurse. Intravenous thrombolysis was commenced immediately for eligible stroke patients. The mean inform-to-assessment time, door-to-assessment time and door-to-treatment time before and after the implementation of new strategy were compared in this study.

**Result**

Intravenous thrombolysis was delivered to 115 patients between Jan 2009 and Dec 2013 (61 patients before and 54 patients after the implementation). The mean inform-to-assessment time was reduced from 15 to 5 minutes, mean door-to-assessment time reduced from 47 to 40 minutes and mean door-to-treatment time reduced from 81 to 69 minutes. This time-saving approach of parallel assessment by two independent assessors can effectively shorten the door-to-treatment time for acute ischemic stroke patients and therefore possibly improve the clinical outcomes in the patients receiving intravenous thrombolysis.