

First year of 24/7 Acute Stroke Unit. Part 1: eligibility and utilisation of intravenous thrombolysis

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Introduction: Intravenous recombinant tissue plasminogen activator (IV-rtPA) is the standard therapy for acute ischaemic stroke. Because of its narrow therapeutic time window, eligibility and utilisation rates of this treatment remained low. Our IV-rtPA programme was enhanced to a 24/7 protocol since September 2011.

Methods: Records of patients admitted to Acute Stroke Unit (ASU) over the first 12 months were reviewed for the utilisation pattern of IV-rtPA.

Results: A total of 447 patients were admitted to the ASU during the study period, in whom 384 (86%) were diagnosed to have stroke or transient ischaemic attack (TIA) upon discharge. Of these, 188 (49%) presented within 3 hours of symptom onset, in whom 122, 34, or 32 (65%, 18%, or 17%) had ischaemic stroke, TIA or intracranial haemorrhage, respectively. For the 122 ischaemic stroke patients, assessment for the suitability of IV-rtPA could be completed in 113 (93%) of them before the 3 hours therapeutic time-window expired. Sixty-six (58%) of them were considered not suitable candidates for intravenous thrombolysis because of presence of contra-indications. In the remaining 47 patients, IV-rtPA was given in 44 cases (94%, one additional case was treated with an extended therapeutic time-window of 4.5 hours).

Conclusion: The 24/7 ASU protocol enabled the timely assessment of acute stroke patients, with 93% having their essential workup completed within 3 hours of stroke onset, and a 94% utilisation rate of IV-rtPA in those who were eligible for treatment. With this model, the routine administration of thrombolytic therapy for acute ischaemic stroke can be facilitated.

Variants, clinical characteristics and prognostic factors of Guillain-Barré syndrome in Chinese

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Introduction: The variants, clinical characteristics, and prognostic factors of Guillain-Barré syndrome (GBS) in Hong Kong Chinese has not been widely studied previously.

Methods: We performed a retrospective review of adults with GBS admitted to Queen Mary Hospital, Hong Kong during the period 1997-2011.

Results: Mean age of the patients was 57±17 years and the mean length of hospital stay was 36±69 days. Male-to-female ratio was 1.5:1. Of the 63 patients with GBS during this period, 3 (4.8%) patients had acute motor axonal neuropathy, 11 (17.5%) with Miller Fisher syndrome and 50 (77.8%) had acute inflammatory demyelinating polyneuropathy together with other unspecified subtypes. Of the patients, 31 (49.2%) had preceding upper respiratory tract illness, 3 (4.76%) had preceding gastrointestinal illness, whilst 5 (7.94%) received vaccination during the 6 weeks preceding onset of neurological symptoms; 14 (22.2%) patients were admitted to Intensive Care Unit and 8 patients (12.7%) required mechanical ventilation; 12 (19.0%) patients were treated conservatively, 25 (39.7%) received intravenous immunoglobulin only, 19 (30.2%) received plasmapheresis only and 7 (11.0%) received both intravenous immunoglobulin and plasmapheresis. Of the patients, 36.1% of patients were associated with poor functional recovery (requiring walking with aid at 6 months after admission). Two (3.18%) patients died during hospital stay (one due to nosocomial pneumonia and the other due to cardiac arrhythmia). Multivariate analysis revealed that necessity of mechanical ventilation during hospitalisation (odds ratio=43.3; 95% confidence interval: 1.2-1539.4; P=0.039) was an independent predictor of poor functional recovery at 6 months after admission. Receiver operating characteristics curve analysis also showed that an Erasmus GBS Outcome Score of >4 was associated with good functional recovery with a c statistic of 0.87 (P<0.0001).

Conclusions: The proportion of patients with Miller Fisher syndrome is significantly greater in the Chinese population compared to the West. Necessity of mechanical ventilation during hospitalisation is an independent predictor of poor functional recovery 6 months after admission and the Erasmus GBS Outcome Score is a useful score in predicting functional recovery.