

GETTING WITH GUIDELINE TO ACUTE ISCHEMIC STROKE CARE IN TAIWAN

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Introduction:

To report the outcomes of the Taiwan Breakthrough Series – Stroke (TBTS-S) campaign following enforcement of the “Get with The Guideline – Stroke (GWTG-S, American Heart Association)” compliance.

Aims:

The TBTS-S aimed to enhance ischemic stroke care quality by improving ischemic stroke care processes.

Methods:

3 learning sessions, 34 hospitals participated in the TBTS-S campaign hosted by the Taiwan Joint Commission of Hospital Accreditation (TJCHA) from July 2010 to January 2011.

Several major improvement recommended, including: 1. process re-engineering with better triage function. 2. Improve patient and family education with multimedia materials. 3. Improve healthcare information system to facilitate process re-engineering. 4. Establish modules of physician order. 5. Screening for dysphagia before first oral intake. 6. Put rehabilitation and low-density lipoprotein (LDL) test in physician order module. 7. Participants submit indicator data regularly. 8. Regular cross-functional team meeting in participant hospital. 9. Feedback indicator data to all participant hospitals were implemented through learning sessions.

Results:

Data were collected in preintervention period (August-September, 2010), postintervention period (October, 2010-January, 2011) and long-term follow up period (February-July, 2011). The process of care measurements showed significant improvement after TBTS-S intervention, such as door to IV rt-PA in 60 minutes increased from 34.4% to 56.1%, dysphagia screen (increased from 58.4% to 78.6%), cholesterol control medication use (increased from 61.8% to 63.8%), and rehabilitation (increased from 61.7% to 67.0%) rates all showed significant improvement. In the long-term follow up period the measures remain improving compare to postintervention except door to IV rt-PA (decrease from 56.1 to 52.2).

Table: Acute Ischemia Stroke Care Improvement (N=33)

Indicators	preintervention period (%)	postintervention period (%)	long-term follow up period (%)
Percentage of acute ischemic stroke patients received IV rt-PA	3.4	3.8	4.4
Door to IV rt-PA in 60 minutes	34.4	56.1	52.2
Percentage of acute ischemic stroke patients who were screened for dysphagia.	58.4	78.6	82.7
Percentage of acute ischemic stroke patients who were assessed for rehabilitation services	61.7	67.0	70.8
Percent of acute ischemic stroke patients with bleeding complications to IV r-TPA therapy	7.2	7.0	4.3
In-hospital mortality rates within 30 days after admission for acute ischemic stroke	3.0	3.4	3.7

Conclusion:

Through collaborative learning and experience sharing, the TBTS-S campaign participants showed remarkable improvement in their care quality for acute ischemic stroke patients.

The TBTS-S proves to be effective to reduce stroke complication, and to improve patients' quality-of-life.

The data of in-hospital mortality rates within 30 days after admission for acute ischemic stroke need to be risk adjustment and further analysis.