First Aid, Transportation And Management Of Traumatic Cervical Spine Injury In Vietnam

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Purpose:
Traumatic cervical spinal cord injury (SCI) is one of the most devastating conditions with high rates of morbidity and mortality. First aid, transportation and management play a vital role in treatment and prognosis. This study aims to review of pre-hospital cervical spine injury’s immobilization, transportation and management of traumatic cervical spinal cord injuries.

Materials And Methods:
This prospective case series was implemented from Jan 2012 to Jan 2014 at 6 main neurosurgical centers across Vietnam.

Results:
There were 262 cases were reported 2 years. The SCI was much more common in men (78.6%) than in women. The working-aged patients (72.9%) were affected principally. The main causes were motor vehicle collisions (45.8%) and workplace accident (41.9%). Only 43.5% of patients transported from the scene of the accident to hospital had cervical stabilization. The patients admitted to hospital within 12 hours after accident ‘re still low rate, accounted for 22.9%. Ambulance from the scene of accident to hospital (43.2%) was the most popular mode of transportation. The associated injuries with SCI were bone fractures (6.8%), traumatic brain injury (4.9%), and abdominal trauma (2.6%). Injuries of the subaxial cervical spine (C3-C7, 76.7%) were common. At admission, the complete and incomplete spinal cord injuries rates were 56.1% and 45.3% of patients, respectively. Surgical procedures for SCI management occurred in 25.3% of the patients. Good outcome patients, who received motor and sensory recoveries and had no complications, accounted for 44.6% of cases. underwent surgery.

Conclusion:
In Vietnam traumatic cervical spinal cord injury is still one of the most dangerous conditions with high rates of morbidity and mortality. Safe and rapid transportation of the cervical spinal cord injury patients to the medical facilities for definitive care has been a fundamental concept to improve the treatment outcome and to reduce the complications.