

Customizing Guidelines for Management of Traumatic Brain Injury

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At the onset, I would like to congratulate the authors for development of guideline for management of traumatic brain injury (TBI) in a developing country. The Colombian guidelines presented in this article are applicable for most of the low- and low-middle-income countries worldwide.¹ One cannot generalize the American Brain Trauma Foundation/Scandinavian/The National Institute for Health and Care Excellence (NICE) guidelines for use in developing countries. There is a need of such guidelines which this article fulfills.

There are some differences between Colombian guidelines and other international guidelines. One of them is transfer of patients with moderate-to-severe TBI. Such patients should be transferred immediately to a neurosurgical center for better outcome rather shifting to a nearest hospital without any facility. However, such patients are often transferred to a nearest hospital in many countries, as there is lack of trauma system. The transferring team is often unaware of the facilities available at the hospital where the patient is being transferred to. Even if the patient needs to be transferred to a neurosurgical center, it may not be feasible because of the distance and cost of transfer. Many patients with severe TBI do not reach in time to a definitive hospital, as they waste a lot of time by transporting from one hospital to another. In the nearest hospital, at least resuscitation and wound suturing can be done to prevent hypoxia, hypotension, and anemia due to hemorrhage before the patient reaches to the definite hospital.

The Colombian guidelines have also defined algorithm for management of patient in a setup with or without intensive care (ICU). This is an important aspect of patient management. In most of the centers of developing countries, patients are often operated in smaller hospitals for head injury. They may then be transferred to an ICU depending on the requirement of postoperative care, as minimal setup is required for craniotomy but advanced setup is required for ICU patients.

The development of guidelines is easy but its implementation and adherence is poor. This has been found even with the BTF guidelines, particularly for intracranial pressure (ICP) monitoring and decompressive craniectomy (DC). The adherence to ICP monitoring as per the guidelines in the countries where these guidelines were developed ranges from 10.5 to

55%.² Same is true about DC. The usual indications for DC in craniotomy are not congruent with the practice.³

The Colombian guidelines also provide appendices as handouts for use in hospitals. This will result in easy implementation in management of TBI in hospitals. More and more developing countries should develop guidelines for management of TBI in their set up, as most of the guidelines are not generalizable. One such initiative is multiorganizational consensus recommendations from India for management of TBI by Neurotrauma Society of India and other organizations.⁴ However, the guidelines should not be used as manuals. The management of patient with TBI should be individualized based on the experience of the treating team and resources available. All guidelines should be validated in different centers within the country before universal acceptance.

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Conflict of interest

None declared.

References

- 1 Rubiano AM, Vera DS, Montenegro JH, et al. Recommendations of the Colombian consensus committee for the management of traumatic brain injury in prehospital, emergency department, surgery, and intensive care (beyond one option for treatment of traumatic brain injury, a stratified protocol [BOOTStrAP]). J Neurosci Rural Pract 2020;11(1):7-22
- 2 Shukla DP, Agrawal A. Whats new in emergencies, trauma and shock? Is intracranial pressure monitoring essential in the management of traumatic brain injury.? J Emerg Trauma Shock 2019;12(1):1-2
- 3 Kramer AH, Deis N, Ruddell S, et al. Decompressive craniectomy in patients with traumatic brain injury: are the usual indications congruent with those evaluated in clinical trials? Neurocrit Care 2016;25(1):10-19
- 4 Traumatic brain injury: multi organizational consensus recommendations for India. Available at: <http://ntsi.co.in/wp-content/uploads/2017/11/Version.pdf>. Accessed December 28, 2019

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