Intensive care management of severe traumatic brain injury in India

Traumatic brain injury (TBI) is a major public health problem in India. Lack of reliable and good quality national or regional data has thwarted its recognition. Considering this lacuna in the publication of experience with TBI, an article published in the current issue of Journal of Neuroscience in Rural Practice by Kamal et al. provides a good overview of the causative factors, injury profile, management details, and outcome of moderate and severe TBI after getting treated in Intensive Care Unit (ICU) of a level one trauma center in the capital of India. The authors report a large experience of severe and moderate TBI managed in ICU. Authors have evaluated a number of parameters in 1527 patients admitted in ICU of the trauma center over 26 months duration. However, the rational for combining severe and moderate TBI is not explained. The prognosis of severe TBI is considerably different from moderate TBI. The study could have been restricted to severe TBI as the number of moderate TBI cases were few in their study. However, authors should be congratulated for a detailed analysis of patient-related parameters such as demographics, physiological parameters, and radiological findings at admission and follow-up at 6 months. The authors also had a large number of patients (more than one-third patients with severe TBI) who underwent intracranial pressure monitoring, which is not routinely practiced in India even at large volume neurotrauma centers. The authors reported in hospital mortality of 38.56% and a 6-month mortality of 64% among severe TBI. These figures are significantly higher than that reported for severe TBI from elsewhere, particularly the mortality at follow-up. This result should be taken with caution as the number of patients available for follow-up were only 70%. In a similar study by Tripathi et al., the mortality at follow-up after 3 months was 32%. They had a follow-up rate of 88%. However, they recruited all the consecutive patients whether they were admitted to ICU or not is not mentioned. At best, the study by Kamal et al. provides a database of severe TBI managed in ICU, which can be used for comparison with other centers in India. It still does not provide reliable data on the outcome of severe TBI except for in-hospital mortality.

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