2025/05/13 08:07 1/1 diffuse brain injury

Data on management and outcomes for 126 patients who were admitted with traumatic diffuse brain injury (GCS 3-8) were studied prospectively over an 18-month period. These patients were treated by one of the two specific protocols: ICP monitoring-based or non-ICP monitoring-based. The primary outcome was measured based on 2 weeks mortality and GOS-E at 1, 3, and 6 months. Secondary outcome was measured based on need for brain-specific treatment, length of ICU stay, and radiation exposure.

Mortality in a subset of patients who underwent surgical intervention later due to increased ICP values, drop in GCS, or radiological deterioration was noted to be significantly lower in the ICP monitoring group (p=0.03), in spite of statistically insignificant difference in overall mortality rates between groups. GOS-E scores at 1 month were significantly better (p=0.033) in ICP monitoring group, even though they equalized at 3 and 6 months. The need for brain-specific treatment (p<0.001), radiation exposure (p<0.001), and length of ICU stay (p=0.013) was significantly lower in the ICP monitoring group.

ICP monitoring-based treatment protocol helps in achieving faster recovery; lowers mortality rates in operated patients; and reduces ICU stay, radiation exposure, and the need for brain-specific treatment ¹⁾.

Though the authors have attempted to evaluate an important topic, i.e., the need for ICP monitoring in diffuse brain injury, there are a few methodological errors and authors have evaluated limited aspects of the problem ²⁾.

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