

Glasgow Coma Scale, Brain Electric Activity Mapping And Glasgow Outcome Scale After Hyperbaric Oxygen Treatment Of Severe Brain Injury

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OBJECTIVE:

To study the effect of hyperbaric oxygen (HBO) treatment of severe brain injury. **METHODS:** Fifty-five patients were divided into a treatment group (n=35 receiving HBO therapy) and a control group (n=20 receiving dehydrating, cortical steroid and antibiotic therapy) to observe the alteration of clinic GCS (Glasgow Coma Scale), brain electric activity mapping (BEAM), prognosis and GOS (Glasgow Outcome Scale) before and after hyperbaric oxygen treatment. **RESULTS:** In the treatment group GCS, BEAM and GOS were improved obviously after 3 courses of treatment, GCS increased from 5.1 to 14.6 ($P<0.01-0.001$), the BEAM abnormal rate reduced from 94.3% to 38% ($P<0.01-0.001$), the GOS good-mild disability rate was 83.7%, and the middle-severe disability rate was 26.3% compared with the control group. There was a statistic significant difference between the two groups ($P<0.01-0.001$).

CONCLUSIONS:

Hyperbaric oxygen treatment could improve obviously GCS, BEAM and GOS of severe brain injury patients, and effectively reduce the mortality and morbidity. It is an effective method to treat severe brain injury.