

Hyperbaric Oxygen (HBO) Therapy For Acute Traumatic Cervical Spinal Cord Injury

S Asamoto¹, H Sugiyama¹, H Doi¹, M Iida⁽¹⁾, T Nagao⁽²⁾ and K Matsumoto⁽³⁾

1 Department of Neurosurgery, Tokyo Metropolitan Ebara Hospital, Tokyo, Japan

2 Department of Neurology, Tokyo Metropolitan Ebara Hospital, Tokyo, Japan

3 Department of Neurosurgery, Showa University, School of Medicine, Tokyo, Japan

ABSTRACT

Study design: A retrospective study of spinal cord injury (SCI) treated with and without hyperbaric oxygen (HBOT) therapy.

OBJECTIVE: To report on the use of HBO in spinal cord injury.

SETTING: Neurosurgical Unit, Tokyo, Japan.

METHODS: Thirty-four cases of hyperextension spinal cord injury without bone damage and previous history of surgical intervention were divided into two groups, with (HBO) or without (non-HBO) therapy. The neurological findings at admission and their outcomes were evaluated by means of Neurological Cervical Spine Scale (NCSS) and the average improvement rates in individual groups were compared.

RESULTS: The improvement rate ranged from 100% to 27.3% with the mean value of 75.2% in the HBO group, while these values were 100%, 25.0% and 65.1% respectively in the non HBO group.

CONCLUSION: In the HBO group, the improvement rate indicated effectiveness in acute traumatic cervical spinal cord injury.

Spinal Cord (2000) 38, 538-540.