Assessment of nutritional support in head trauma patients in Neurosurgery Intensive Care Unit

Yousefzadeh Sh (MD) Department of Neurosurgery Guilan University of Medical sciences

Shabbidar S (MSc) Department of Nutrition and Biochemistry Tehran University of Medical Science

Dehnadi Moghaddam A (MD) Department of Anesthesiology Guilan University of Medical sciences

Ahmadi Dafchahi M (MD) General Physician

Corresponding Author: Yousefzadeh Sh (MD)

E-mail: yousefzadeh@gums.ac.ir

Abstract

Background & Objective: Nutritional support is a basic process for survival in trauma patients. The purpose of this study was to evaluate the daily nutritional support practice in head injury patients admitted to Neurosurgery Intensive Care Unit.

Materials & Methods: This descriptive cross-sectional study was done on 115 Head injury adults patients who received enteral nutrition for at least 48h in Rasht Poursina hospital during 2005. Nutritional measurements were included the number of patients who received enteral nutrition, the time to initiate nutritional support, amount of initial feeding and clinical outcome were included the duration of mechanical ventilation, ICU and in-hospital length of stay (loss), in-hospital mortality rates .Data was reported as Mean±SD and percent. T-test analysis was used for comparing of calorie and nutrient intakes and requirements.

Results: Mean±SD of age patient was 41.22 ± 21.9 , 84% of patients received enteral nutrition. The time to feeding and the amount of initial feeding was 4.6 ± 1 day and 52.79 ± 27.83 ml/h respectively. Duration of ventilation was 12 ± 13.4 day and ICU length of stay 18.96 ± 18.3 day, Hospital length of stays 24.47 ± 19.84 day. Mortality rate in six month was 48%. Mean of energy, carbohydrate, fat and protein (P<0.05) intakes had significant differences compared with requirements.

Conclusion: The recording process has revealed undesirable feeding practice in head injury patients. Nutritional outcomes would be improved with implementation of standard protocol in neurosurgery intensive care unit.

Key Words: Enteral nutrition, Head trauma, Neurosurgery intensive care unit