

The clinical significance and rational evaluation of early nutritional support in severe head-injured patients

Jian-Jun Zhang, Wei-Feng Dong, Zheng-Yu Zhu

Jian-Jun Zhang, Wei-Feng Dong, Zheng-Yu Zhu, Department of Neurosurgery, Xiaoshan First People's Hospital, Xiaoshan 311201, Zhejiang Province, China

Author contributions: All authors contributed equally to the work.

Correspondence to: Jian-Jun Zhang, Department of Neurosurgery, Xiaoshan First People's Hospital, 145 Shixing Road, Xiaoshan 311201, Zhejiang Province, China
Telephone: +86-571-2621086-2036/2078

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Abstract

AIM: To evaluate the clinical significance of early nutrition support in severe head injured patients.

METHODS: One hundred and forty cases (GCS \leq 8) were randomly divided into 5 groups: each one had 28 cases with similar data in age, sex, GCS or prognosis ($P > 0.05$, $\chi^2 = 0.43$). Group A were given early parenteral nutrition (PN) and enteral nutrition (EN); group B were given early PN and EN after 1 wk; group C were given PN only for more than 2 wk; group D were given early PN only and group E were given traditional delayed EN. The clinical nutritional data, the rate of complication and the

prognosis were observed and statistical comparison (t test and Chi square test) was made.

RESULTS: The severe head-injured patients could get nourishment from different ways at early stage. Groups A and B had better outcomes and their clinical data such as blood glucose, blood total globin, blood albumin, lymphocyte amount were superior to that of groups D and E ($P < 0.05$, $t = 2.12$) and were the same as that of group C ($P > 0.05$, $t = 0.98$), the rate of complication and the prognosis of patients were better than that of the other groups. Group C had similar nutritional data in early stage, but had higher rate of complication and infection after 2 wk than group A or B ($P < 0.01$, $\chi^2 = 7.38$). Group A had lower rate of gastric hemorrhage.

CONCLUSION: Early rational nutritional support had significant effect in the severe head-injured patients. The nutritional support of early PN and EN could afford nourishment, protect and improve the gastroenteric function, reduce the rate of complication. So it is a rational nutritional support.

Key words: Brain injuries; Enteral nutrition; Parenteral nutrition, total

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