



Impact of early postoperative enteral nutrition on clinical outcomes in patients with gastric cancer

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ABSTRACT. The impact of early enteral nutrition (EEN) on clinical outcomes of gastric cancer patients was investigated. Three hundred patients undergoing gastric cancer surgery from July 2010 to May 2014 were randomly divided into experimental and control groups (n = 150/group). Experimental group patients received enteral nutrition in water during the early postoperative period. Control group patients received conventional perioperative treatment. Patients' clinical outcomes, postoperative immune function, and nutritional statuses were compared, which revealed that the postoperative fever duration (80.2 ± 6.0 vs 88.1 ± 8.1 h, $P < 0.05$), anal exhaust time (78.8 ± 9.3 vs 85.3 ± 8.4 h, $P < 0.05$), and length of hospitalization (7.73 ± 2.13 vs 9.77 ± 1.76 days, $P < 0.01$) differed significantly. Treatment costs in thousands of dollars were 31.24 ± 3.21 for the experimental group and 35.61 ± 2.32 for the control group; this difference was statistically significant ($P < 0.01$). The incidence of postoperative complications did not significantly differ between the experimental and control groups [14.0% (21/150) vs 17.3% (26/150), $P > 0.05$]. At postoperative days 3 and 7, the CD3⁺, CD4⁺, natural killer cell, albumin, and prealbumin levels and CD4⁺/CD8⁺ ra-

tio were significantly higher in the experimental group than the control group (all $P < 0.05$). $CD8^+$ cell counts were significantly lower in the experimental group than the control group ($P < 0.05$). Postsurgical oral EEN can improve nutritional status and immune function and promote early recovery of intestinal function in patients with gastric cancer.

Key words: Gastric cancer; Enteral nutrition; Intestinal function; Immune function; Nutritional status