The Impact of Enteral Nutrition on the Short-Term and Survival Outcomes of Lung Cancer and Breast Cancer Patients Undergoing Medical Treatment

OBJECTIVES: To analyze the effects of enteral nutrition on short-term outcome and long-term survival of patients with advanced lung cancer combined with nutritional risk/malnutrition, with the aim of providing more support and reference for clinical drug use.
METHODS: This is a retrospective, observational cohort study.The clinical data was collected from adult patients with unresectable locally advanced or metastatic lung cancer and breast cancer who received medical treatment in Fujian Medical University Union Hospital between January 1, 2016 and December 31, 2024, to retrospectively analyze the effects of enteral nutrition on short-term outcomes and survival in Chinese patients in the real world.
RESULTS: For patients with advanced lung cancer combined with nutritional risk/malnutrition, patients who received EN exhibited a longer OS than those who did not [The median OS in the EN group was 33 months (95%CI: 28.11-39.01) and that in the control group was 22 months (95%CI: 19.38-26.54), $\chi2$=4.212, P=0.027], a higher 2-year survivalrate (difference 0.23, 95%CI 0.05-0.47, $\chi2$=4.192, P=0.031), and a higher 3-year survival rate(difference 0.24, 95%CI 0.02-0.45, $\chi2$=3.983, P=0.042). At the same time, patients treated with EN showed a lowerincidence of ADR [difference -0.17, difference 95%CI -0.11- (-0.25), $\chi2$=9.351, P=0.002], a lower incidence of bone marrow suppression [difference -0.36, difference 95%CI -0.29- (-0.43), $\chi2$=30.008, P < 0.001]. For patients with breast cancer combined with nutritional risk/malnutrition, there was no significant difference between the two groups in recentnutritional indexes, survival rate, incidence of ADR, and incidence of complications (P > 0.05)
CONCLUSIONS: 1. For patients with advanced lung cancer combined with nutritional risk/malnutrition, EN supportive treatment can reduce the incidence of ADR during anti-tumor therapy, prolong OS, reduce mortality, and ultimately improve the prognosis. 2. EN treatment has no positive effect on improving the short-term nutritional index, survival rate, ADR incidence, and complication rate of breast cancer patients.