

Effects of zinc supplementation on the survival of patients who received concomitant chemotherapy and radiotherapy for advanced nasopharyngeal carcinoma: Follow-up of a double-blind randomized study with subgroup analysis.

林永松

Lin YS;Lin LC;Lin SW

摘要

Abstract

OBJECTIVES/HYPOTHESIS: Dietary zinc has been reported to have positive effects on treating carcinoma. This study examined the effects of zinc supplementation on the improved survival of patients with advanced nasopharyngeal carcinoma receiving concomitant chemotherapy and radiotherapy (CCRT). STUDY DESIGN: A double-blind, placebo-controlled clinical study with subgroup analysis. METHODS: Thirty-four patients with stages III and IV nasopharyngeal carcinoma were selected from a double-blind, placebo-controlled clinical study. All the patients were randomized to receive a standard dose (75 mg/day for 2 months) of zinc supplements or placebo, in conjunction with CCRT. The overall local recurrence, metastasis, and disease-free survivals were defined as the period between the time of first treatment to the time of death, local recurrence, or distant metastases occurred. RESULTS: Patients in the experimental group exhibited a higher 5-year overall local-free and disease-free survival rate than the patients in the placebo group ($P = .044$, $P = .007$, and $P = .033$, respectively). However, no significant differences were found between both patient groups for the 5-year metastases-free survival rate ($P = .149$). CONCLUSIONS: Zinc supplementation prescribed in conjunction with CCRT effects attenuating local tumor recurrence and improves the overall survival of patients with advanced nasopharyngeal carcinoma. The failure to reduce distant metastasis survival might have been related in part to the more advanced disease stages in our patients.