Abstract

Introduction: Significant malnutrition exists in a high percentage of patients with head and neck cancer. Malnutrition is associated with defects in immune function that may impair the host response to malignancy. Malnutrition and immunosuppression make patients highly susceptible to postoperative infections and complications. Objectives: Some studies of patients receiving immunonutrition in the perioperative period in head and neck cancer have shown beneficial effects on clinical outcome and immune status. The authors carried out a systematic review of randomised control trials to determine whether perioperative immunonutrition has a role in the treatment of head and neck cancer. Methods: 14 trials of polymeric nutritional supplementation with immunonutrition were identified. Two studies compared two types of immunonutrition. Results: A reduction in the length of postoperative hospital stay was seen in some trials, but the reason for this reduction is not clear. Some studies showed statistical differences with less complications in arginine-enhanced group and also showed a significant decrease of fistula complications in patients treated with a high arginine dose enhanced formula, if compared with a medium dose of arginine. Conclusion: Those planning future studies face challenges. A suitable powered clinical trial is required before firm recommendations can be made on the use of immunonutrition in head and neck cancer patients postoperatively.

Keywords