Abstract

The study is designed as a prospective clinical trial. Patients with histologically proven head and neck cancer treated by curative radiotherapy were included. The aim of this study was to investigate the relationship between pretreatment or posttreatment nutritional status and overall surival or locoregional / distant control.

Pretreatment and posttreatment nutritional status was evaluated by body weight, body mass index, total serum protein, albumin, prealbumin, transferin and cholinesterase. Univariete and multivariete regression analyses were applied for prognostic factors associated with survival or tumor control.

In this study we demonstrated, that poorer nutritional status prior curative radiotherapy, has a negative impact on subsequent control of cancer. The most sensitive parameter was serum cholinesterase. Serum cholinesterase < $108 \,\mu kat/l$ was the independent negative prognostic factor for both locoregional and distant tumor control. Results of this study indicate the need for intensive nutritional support before starting of curative treatment.