

ABSTRACT

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Title: The effect of chemotherapy on the microflora in the oral cavity and intestinal microflora in cancer patients

Field of study: Specialist in laboratory methods

Objective: The aim of this study is to assess and compare changes of side effects of chemotherapy on the microflora in the oral cavity and large intestine in patients with colorectal cancer and breast cancer and to evaluate bacterial colonization during cancer treatment.

Methods: Microbiological diagnostic testing of culture of swabs from the mouth and rectum.

Results: The investigators found that chemotherapy has a important influence on the composition of microflora in the oral cavity and rectum. The biggest changes in the incidence of micro-organisms were observed in the *Candida albicans*, which is parcipitated for mucositis.

Conclusions: Chemotherapy can damage the mucous membrane as in the oral cavity and in the intestine, resulting in an imbalance in the bacterial colonization of mucous membranes. This leads to an increased representation of conditionally pathogenic bacteria that are normally suppressed by the natural microflora.