The Effect of Systemic Radiation Therapy on Bacteriologic Status of Root Canals

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ABSTRACT

This investigation was directed to study if there were any changes in the root canals flora in cancer patients who underwent radiation therapy. 20 patients with cancer of the head and neck region were involved in this study. They were divided into two groups. Group A had not been exposed to radiation therapy. Group B had received radiation therapy. Intra-root canals cultures were obtained from these patients for anaerobic and aerobic types of microorganisms.

From the anaerobic group of bacteria gram negative bacteroids had disappeared from obtained cultures after radiation therapy. On the other hand, after radiation other forms of aerobic microorganisms had been appeared such as gram negative fusiform, gram positive bacillus subtilis in spore form and candida albicans fungus. These latter types might play a role in destruction of teeth post-operative radio-therapy and researches could be directed to clarify these findings.