

Late Oral Complications Caused by Head and Neck Radiotherapy: Clinical and Laboratory Study

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ABSTRACT

Objectives: The aim of presented cross-sectional and observational study was to determine the prevalence of late oral complications of patients with head and neck cancer who underwent radiotherapy, by clinical and laboratory analyses.

Material and Methods: Fifty-five patients, 43 (78.2%) men and 12 (21.8%) women, mean age 60; range 38 to 87 years, who have completed radiotherapy for head and neck cancer for at least 6 months were enrolled. The presence of xerostomia, hyposalivation, oral candidiasis, and type of oral yeasts were correlated with post-radiotherapy period. A control group, age and gender matched, was used for comparisons. The Pearson's Chi-square or Fischer's exact test was used at a significance level of 5%.

Results: The mean post-radiotherapy period was 32 months. The oral complications found were xerostomia (45/55, [81.8%]), hyposalivation (44/55 [80%]) and oral candidiasis (15/55 [27.2%]). Xerostomia and hyposalivation was statistically higher in the study group when compared to the control group ($P < 0.05$). The presence of yeast occurred in 39 (70.9%) of the patients in the study group, and *Candida albicans* was the most prevalent etiological agent in 25 (64.1%) of those patients ($P < 0.05$).

Conclusions: Xerostomia and hyposalivation were the more prevalent late oral complications related to radiotherapy. Oral candidiasis was also observed, although its prevalence was lower. The need for long-term dental follow-up of patients who underwent radiotherapy of the head and neck cancer is mandatory.

Keywords: candida albicans; postoperative complications; radiotherapy; xerostomia.

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