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ONCOLOGY, ORAL PATHOLOGY

Tobacco smoking history and presentation of oral squamous cell carcinoma

Schmidt BL, Dierks EJ, et al. *J Oral Maxillofac Surg* 2004; 62: 1055–1058

Smoking was associated with squamous cell carcinoma (SCC) of the posterolateral tongue and floor of mouth.

This study was to investigate which oral sites were related to a history of tobacco smoking. Records were reviewed for all 96 patients with oral SCC presenting at an Oregon hospital between 1998 and 2000, and 30 had never smoked, while 66 had a mean tobacco exposure of 47 pack-years.

For SCC sited in the anterior tongue, gingiva, retromolar trigone and palate there were no significant differences between smokers and never smokers; respective numbers for these sites were 5, 9, 10, 1 and 6, 15, 3, 2. There were statistically significant differences for the posterior tongue (16 smokers and 2 never smokers) and the floor of the mouth (25 and 2).

No differences were found in TN staging of the tumours. The authors comment that they had inadequate details of alcohol consumption, which was therefore not included in the evaluation. It is possible that gravitational pooling of carcinogens may relate to the intraoral sites more affected by smoking.

doi:10.1038/sj.bdj.4812040

IMPLANT DENTISTRY

A descriptive 18-year retrospective review of subperiosteal implants for patients with severely atrophied edentulous mandibles

Moore DJ, Hansen PA. *J Prosthet Dent* 2004; 92: 145–150

After a mean 8 yrs, 39 of 40 implants were functioning with no problems

Subperiosteal implants to support prostheses were first developed in the 1940s, with reported failure rates from 2% to 40%. In this study, a tripod design of implant resting on the thick cortical bone of the external oblique ridge and mandibular symphysis was used to support complete dentures. Over an 18 yr period, 40 such implants were placed in patients aged 47–79 yrs (mean 63) with advanced alveolar atrophy (14 patients > 10 yrs follow-up, 12 for 5–10 yrs, 11 for 2–5 yrs).

One patient died during follow-up, but implants were satisfactory in the other 39, who had good gingival health. No implants developed mobility, no bone loss was found below them and one patient who developed diabetes later presented with some inflammation around abutments. On several occasions, dentures were remade because of wear, and because maxillary dentures became loose. All patients appeared satisfied with their implants.

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MAXILLOFACIAL SURGERY

Shoulder complaints after nerve sparing neck dissections

van Wilgen CP, Dijkstra PU et al. *Int J Oral Maxillofac Surg* 2004; 33: 253–257.

The type of dissection was related to subsequent shoulder problems.

Three types of neck dissection may be used in treating head and neck carcinoma: radical (RND), modified radical (MRND) and selective (SND). MRND and SND are more conservative with the intent of sparing non-lymphatic structures, especially nerves (such as the accessory), and there is evidence that RND patients may have a lesser quality of life. In this study, 137 of 220 patients having a dissection procedure (mean age 61 yrs) were compared after a minimum of 1 yr follow-up.

In 51 patients who had MRND, 1/3 had subsequent shoulder complaints; for 65 who had a supra-omohyoid neck dissection (SOHND), and 21 who had posterolateral neck dissection, respective figures were 1/5 and 2/3 ($P < 0.001$). The mean follow-up was 3.2 yrs in subjects with shoulder complaints and 2.9 yrs in those without. Radiation therapy did not appear to have an independent effect on shoulder pain when type of surgery was taken into account. The authors comment that SOHND is adequate in N0 and selected N1 carcinomata of the oral and pharyngeal cavities.

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ONCOLOGY, ORAL MEDICINE

Palifermin for oral mucositis after intensive therapy for hematologic cancers

Spielberger R, Stiff P et al. *N Engl J Med* 2004; 351: 2590–2598

A new drug reduced duration and severity of oral mucositis

Palifermin (recombinant human keratinocyte growth factor) has shown a protective effect on epithelial tissues in animal studies. In this multicentre double-blind trial, 212 patients with lymphoma, leukaemia or multiple myeloma were randomly assigned to intravenous palifermin or placebo starting 3 days before treatment with chemotherapy and radiotherapy.

During the follow-up, 98% in the placebo group developed mucositis of WHO grade 3 or 4, and 63% in the palifermin group. Respective durations were 9 and 3 days. Patient-reported outcomes with palifermin were of 40% less soreness of mouth and throat, and a similar beneficial effect on swallowing limitation. There were also moderate improvements in the Functional Assessment of Cancer Therapy score.

The authors comment that the incidence of WHO grade 4 mucositis, which is very debilitating, was 20% for palifermin and 62% for placebo, and fewer patients on palifermin needed parenteral nutrition as a result.

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