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PROSTHODONTICS

Within-subject comparisons of maxillary fixed and removable prostheses. Patient satisfaction and choice of prosthesis

Heydecke G, Boudrias P *et al.* *Clin Oral Impl Res* 2003; **14**: 125-130

In patients who had experienced both types of prosthesis, the majority preferred the removable appliance.

This cross-over trial compared fixed and removable (long palatal bar) maxillary implant-supported complete prostheses in 13 French-speaking Canadian subjects (after 3 dropped out) who already had satisfactory mandibular implant-supported complete overdentures.

Each maxillary prosthesis was supported by 4-6 implants in a 2 stage procedure. Five subjects wore the removable prosthesis first. Each prosthesis in turn was worn for 2 months, and subjects compared both at the final visit, when they answered questionnaires and chose a prosthesis: 9 preferred the removable appliance.

Subjects considered overall satisfaction, satisfaction compared with natural teeth, speaking ability and cleaning ease significantly better with the overdenture. There were no differences in comfort, stability, aesthetics and occlusion. There was a significant treatment period effect which the researchers took into account.

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PERIODONTOLOGY; TOBACCO SMOKING

Bias induced by self-reported smoking on periodontitis-systemic disease associations

Spiekerman CF, Hujoel PP *et al.* *J Dent Res* 2003; **82**: 345-349

This study shows up a significant flaw in previous studies suggesting systemic effects of periodontitis.

One current problem in numerous studies purporting to give evidence of systemic effects arising from chronic periodontal diseases is that tobacco may be a causal factor common to both. Merely including smoking in the analysis is insufficient, since the quality of this datum may be inadequate for identifying causality.

This study used serum cotinine, an objective measure of current tobacco exposure, to evaluate self-reported current smoking in relation to periodontal attachment loss in a cohort of 1507 participants in the large US Third National Health and Nutrition Examination Survey.

Unadjusted correlations of cotinine with log cigarettes smoked and mean attachment loss were 0.5 and 0.17 respectively. However, a regression model adjusted for self-reported current smoking still indicated a significant correlation between serum cotinine and mean attachment loss. The authors consider that this bias may contribute to the reported associations between periodontitis and smoking related systemic diseases.

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ONCOLOGY; EPIDEMIOLOGY

Oropharyngeal cancer incidence and mortality in Scotland: are rates still increasing?

Robinson KL, Macfarlane GJ *et al.* *Oral Oncol* 2003; **39**: 31-36

Incidence rose after 1989, but age-standardized mortality rates did not.

A rise in oral and pharyngeal cancer has been documented in all parts of the UK over the past 30 years. The present study considered incidence of these tumours in Scotland for 1965-1997 and mortality data from 1950-1998.

From 1989 to 1996, incidence in the 35-64 yr age group increased by 31% in males and 16% in females. For all ages, respective increases were 21% and 26%. However, mortality rates in these 4 groups changed little from 1989 to 1997: respectively per 100,000 they changed from 7.7-8.1, 2.3-2.3, 4.2-4.3 and 1.4-1.6.

The main known risk factors are tobacco and alcohol use, with a strong synergistic effect between them. However, for younger people with less exposure to these environmental factors, the authors consider that genetic predisposition may also be important. Their data suggest that survival rates may also be improving.

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ORAL SURGERY; RADIOLOGY

Panoramic radiographic risk factors for inferior alveolar nerve injury after third molar extraction

Blaeser BF, August M *et al.* *J Oral Maxillofac Surg* 2003; **61**: 417-421

Radiographic markers were associated with subsequent injury.

In a case-control study, dental panoramic tomograms were compared for 8 patients who had experienced inferior alveolar nerve injury after mandibular third molar extraction, and 17 who had extraction but no injury. Injury or its absence was confirmed by neurosensory examination in all cases. Five surgeons evaluated radiographs for all 50 teeth.

In relation to subsequent nerve injury, diversion of the canal had a sensitivity of 50% and specificity of 82%; darkening of the root, 65% and 73%; interruption of cortical line, 80% and 54%; and any of these findings, 100% and 33%.

The authors compare their findings with other studies, and conclude that the absence of any predictive signs mean the risk of nerve injury is negligible, but in the presence of any sign, additional assessment may be indicated.

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