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ONCOLOGY

Prognostic significance of perineural invasion in oral and oropharyngeal carcinoma

Rahima B, Shingaki S *et al.* *Oral Surg* 2004; **97**: 423-431

Perineural invasion (PNI) was associated with regional recurrence and distant metastasis.

PNI is associated with poorer outcomes in squamous cell carcinoma (SCC) of the upper aerodigestive tract. This study considered 101 patients attending a Japanese clinic, whose oral cavity ($n = 91$; tongue, 68; floor, 13; buccal mucosa, 10) and oropharyngeal (10) SCCs were previously untreated, and were treated by resection.

In 27 cases, clinical staging was T3 or T4, and 1/3 of related nodes were considered positive, but there was no evidence of distant metastasis. PNI was present in 26, margins were positive in 9, and nodal metastases were present in 26.

Multivariate logistic regression showed significant relationships of PNI with differentiation, nodal metastasis, depth of invasion, regional recurrence, and distant metastasis. Local recurrence, but not PNI, was significantly related to positive margins. Disease-specific survival with PNI after 5 yrs was 57%, and without, 95%. The authors recommend aggressive management for SCC with PNI.

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ORTHODONTICS; SOCIOLOGY

Orthodontic treatment and its impact on oral health-related quality of life in Brazilian adolescents

de Oliveira CM, Sheiham A. *J Orthod* 2004; **31**: 20-27

Quality of life (QoL) was better for those who had completed orthodontic treatment.

Improved QoL is an important patient-based outcome measure, and a strong motive for orthodontic treatment. A random sample of 1675 Brazilians aged between 15 and 16 yrs was identified in 21 schools, interviewed and examined.

Orthodontic treatment had been completed in 16%, and was in progress in another 21%. A significant difference was found between the 3 groups in respect of 'smiling, laughing and showing teeth without embarrassment'. No difference in QoL was found in other listed categories of eating, speaking, cleaning teeth, sleeping, emotional stability, school activities, contact with people and sport.

Overall, the treated group reported fewest effects, but the current treatment group was more likely to report negative effects than those who were untreated. The authors suggest that orthodontic patients in treatment should be encouraged regularly by reminding them of the expected positive outcome.

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MAXILLOFACIAL SURGERY; AESTHETICS

How predictable is orthognathic surgery?

Eckhardt CE, Cunningham SJ. *Eur J Orthod* 2004; **26**: 303-309

Accuracy of prediction varied according to surgical situation and technique of treatment planning.

Severe malocclusion or facial disfigurement may require both orthognathic surgery and orthodontic treatment. Surgical outcome depends on the relationship of hard and soft tissues, but this is not always predictable. Prediction in this study was compared for methods both with and without computer techniques (OPAL).

Lateral skull radiographs before and after treatment were examined for patients who had undergone both surgery and orthodontics, 30 with Class II malocclusion receiving bilateral sagittal split (BSS), and 40 with Class III receiving bimaxillary osteotomy with both anteroposterior and vertical movements (BO).

In the BSS group, linear values predicted without OPAL agreed with actual outcome, but upper lip angle was consistently overestimated and lower lip angle consistently underestimated; with OPAL, 2 linear measurements were overestimated, and lower lip angle underestimated. In the BO group, there was greater variation both with and without OPAL. The authors considered planning in BO to be better without OPAL, the main problems of which were in the lip region.

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PERIODONTICS; DIAGNOSIS

The effect of aspirin intake on bleeding on probing in patients with gingivitis

Royzman D, Recio L *et al.* *J Periodontol* 2004; **75**: 679-684

Bleeding on probing (BOP) was increased by regular aspirin intake.

Regular aspirin medication is used for numerous conditions. Its effect on platelet aggregation may affect BOP. Healthy non-smoking subjects were randomly allocated to placebo (17 completed the study), 81 mg/day (17) or 325 mg/day (20) of aspirin for 1 week, after a week of placebo. A 0.25N controlled force probe was used to record BOP and probing depth before the first week and after the second.

At baseline the 3 groups all had similar mean PD and BOP scores of 1.8-1.9 mm and 25% respectively, and after treatment, the respective mean BOP increases were 1.9%, 5.3% and 4.1%. These differences were significant when plaque, gender and age were controlled in linear regression analysis. While the effect appears small, the authors note it may affect not only treatment, but also the outcome of research studies when BOP is included as a variable.

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