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ENDODONTICS

Periapical changes following root-canal treatment observed 20-27 years post-operatively

Molven O, Halse A et al. *Int Endod J* 2002; **35**: 784-790

This may be the longest follow-up in the endodontic literature, and it showed some late healings and failures after 20 years.

Approximately 1/4 of a group of patients treated in a Norwegian undergraduate clinic 20-27 years earlier were traced and examined. Half of the initial group had been evaluated at 10-17 years. Two observers evaluated radiographs of 275 roots in 131 patients.

At the time of root filling, findings were normal in 40% of teeth examined, increased periodontal ligament space was present in 10% and there was periapical radiolucency in 50%. Respective figures for 10-17 years were 77%, 6% and 17%, and for 20-27 years, 89%, 5% and 6%.

Further assessment by additional observers led to the conclusion that between the 10-17 year and 20-27 year follow-ups, there had been 6.4% late successes and 1.5% late failures, with 3.4% unchanged failures, while 89% had no periapical radiolucency on either occasion. The authors consider that small radiolucencies round surplus material are not failures.

EPIDEMIOLOGY; SPECIAL CARE DENTISTRY

Long-term physical inactivity and oral health in Finnish adults with intellectual disability

Karjalainen S, Vanhamäki M et al. *Acta Odontol Scand* 2002; **60**: 50-55

Physical inactivity was related to less caries and more periodontal disease.

At a Finnish mental institute, dental data were examined for 214 institutionalized dentate subjects and related to other aspects of health. Intellectual disability was severe in 60% of subjects, and physical activity was severely reduced or absent in 45%. Walking patients weighed a mean of 64 kg compared with 44 kg for inactive patients ($P < 0.001$), and had significantly fewer secondary diagnoses (1.4 v. 2.2) and daily medications (4.0 v. 4.8), but more dental treatment visits (2.7 v. 2.0) and higher DMFT scores (18.5 v. 14.8). There was no difference in the mean number of retained permanent teeth (21.5 v. 21.6).

Treatment for caries only was given to more physically active than inactive patients (42% v. 12%), and periodontal treatment only, to fewer (34% v. 50%). Other patients received extractions or treatment for both caries and periodontal disease, or no treatment. The authors consider that these findings support the hypothesis that the two main dental diseases are related to physical activity in

intellectually disabled patients, though any explanation can only be tentative at present.

ORAL MEDICINE

Burning mouth syndrome (BMS): double blind controlled study of alpha-lipoic acid (thioctic acid) therapy

Femiano F, Scully C. *J Oral Pathol Med* 2002; **31**: 267-269

Nearly 90% of subjects on the medication showed significant improvement and most maintained this for 1 year.

BMS is believed to be of either psychogenic or neuropathic origin. Evidence for the latter origin is that LA may reduce pain, and the free radical scavenger alpha-lipoic acid may also do so. A group of 60 patients with BMS and no clinical or laboratory evidence of related disease was randomized to lipoic acid or placebo for 2 months, and patients reporting improvement in symptoms by 4 months were given a further course of the same treatment for 1 month and reassessed at 1 yr.

At 4 months, 12 control subjects and 29 on the test drug reported improvement ($P < 0.0001$), and after the further treatment, 0 and 21 respectively maintained this improvement at 1 yr ($P < 0.0001$). There were no significant adverse effects. The authors consider their results are further evidence that BMS can be a neuropathy and that alpha-lipoic acid may be of benefit in these patients.

ONCOLOGY

Importance of tumour thickness measurement in prognosis of tongue cancer

Gonzalez-Moles MA, Esteban F et al. *Oral Oncol* 2002; **38**: 394-397

A thin tumour enhanced survival.

In a Spanish university, data from 81 patients with squamous cell carcinoma of the tongue treated before 1996 were examined 5 years later for predictors of prognosis, including tumour thickness, and 59 were found to have a reliable estimate of this parameter.

Recurrence occurred in 17 patients at the primary site, and in 10 in the cervical nodes, in a mean 16 months; 46 had no recurrence and 8 were lost to follow-up. At 5 yrs, survival was 69%, and those who died from oral cancer survived a mean 2.5 yrs. Tumour thickness was 3 mm in 10 patients, 4-7 mm in 15, and > 7 mm in 34, with respective 5 yr survival rates of 86%, 58% and 57%.

Other factors affecting survival were clinical and pathological grading of tumours and nodes, extracapsular spread, and recurrence, but multivariate analysis showed that thickness had the greatest influence, with survival reducing significantly above 3 mm.