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ENDODONTICS; CARDIOLOGY

Lesions of endodontic origin and risk of coronary heart disease

Caplan DJ, Chasen JB *et al.* *J Dent Res* 2006; **85**: 996-1000

Endodontic lesions were associated with a shorter time to subsequent coronary heart disease (CHD) diagnosis in younger men.

There is little evidence on the relationship of endodontic problems and CHD. In this study, records of 708 men followed for up to 32 years in an American epidemiological programme were examined. Lesions of endodontic origin (LEOs) were identified from radiographs taken at 3-yearly intervals, and related to CHD diagnoses.

Mean age of subjects at baseline was 47 yrs, and median follow-up was 24 yrs. LEOs were present in 250 subjects, and 166 experienced CHD during follow-up. Subjects were divided into 2 groups above and below age 45 yrs at baseline. In subjects up to 45 yrs old, multivariate regression analysis adjusted for a number of confounding factors showed a significant relationship between the LEOs and the speed of subsequent development of CHD. In older subjects, no relationship was found. The authors note that there may be unidentified factors confounding the analysis.

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ENDODONTICS

A comparison between in vivo radiographic working length determination and measurement after extraction

Williams CB, Joyce AP *et al.* *J Endod* 2006; **32**: 624-627

Files placed in root canals tended to end more apically than was apparent on radiographs.

Root fillings ideally should end at the cementodentinal junction or minor constriction of the canal. Apex locators assist, but do not replace radiographs in identifying this landmark. In this study, 26 canals of 15 teeth with complete apices and planned for extraction were opened.

In each canal, after initial preparation, a file was inserted to a point determined with an apex locator, and cemented in place before taking a radiograph. Teeth were extracted for direct measurement of the distance between file and apex, and radiographic distance was assessed by 6 examiners to the nearest ½ mm.

When the file was beyond the landmark, 24% were correct estimations, 61% were underestimates, and 15% overestimates. When it was short of the landmark, respective scores were 21%, 15% and 63%. The authors conclude that radiographically long files are actually about 1.2 mm longer, and short files are about 0.5 mm longer.

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ORAL PATHOLOGY; ORAL SURGERY

Prognostic predictors of squamous cell carcinoma of the buccal mucosa with negative surgical margins

Jing J, Longjiang L *et al.* *J Oral Maxillofac Surg* 2006; **64**: 896-901

Tumour classification and thickness were significantly related to survival.

Prognosis of oral carcinoma is difficult to assess. In this study, 45 consecutive cases (age range 45-81, 34 male) in a Chinese hospital were considered, after excluding those who had received treatment prior to surgery, and those who had distant metastases. Resection aimed at a minimum of 1 cm clearance, and all subjects with clinically negative regional nodes were given neck dissections, functional in all T1 and T2 cases, but radical in some T3 and T4 cases as well as in those with positive nodes. Radiotherapy was given postoperatively except in 14 cases with T1N0 or T2N0 grading.

Significant factors in relation to recurrence were T3 or T4 grade, histological differentiation, pathological clinical stage, degree of lymphocytic infiltration and tumour thickness, but not nodal metastasis or number of mitoses. Logistic regression analysis identified T stage and recurrence as prime factors affecting survival. The authors recommend routine neck dissection for T3 and T4 lesions, and for T1 and T2 lesions thicker than 5.17 mm.

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ORAL SURGERY

Ameloblastoma: a surgeon's dilemma

Ghandhi D, Ayoub AF *et al.* *J Oral Maxillofac Surg* 2006; **64**: 1010-1014

Local enucleation and curettage had a high recurrence rate in unicystic, unilocular and multilocular cases.

Ameloblastomas are locally invasive and may recur. A variety of surgical approaches have been advocated. This retrospective study reviewed 50 cases in San Francisco and Glasgow treated over a 20 year period, including 9 unicystic lesions which were only diagnosed on the basis of subsequent histopathological examination.

In both centres, no radically-treated lesions recurred. One unicystic lesion was radically excised and was the only one not to recur, as the others were all conservatively treated at first. Treatment for the 41 solid or multicystic tumours was conservative in 21 cases and radical for 20. Recurrence occurred in 18 of these conservatively treated tumours.

The authors discuss the treatment of the unicystic lesions which had no diagnosis prior to histopathological examination, and recommend biopsy for cystic lesions over 3 cm in size. The recurrence rate for other forms was 80% and dependent on conservative treatment, so the authors advise more aggressive treatment than previously recommended.

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