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DENTAL RADIOLOGY; CARDIOVASCULAR MEDICINE

Panoramic radiographic atheromas portend adverse vascular events

Friedlander AH, Cohen SN *Oral Surg* 2007; **103**: 830-835

Dental radiographic findings may predict adverse cardiovascular events.

Calcified atheroma plaques may be found on some dental panoramic tomographs (DPTs), and can be reasonably distinguished from other radiopacities. Over a 12 yr period, 1,409 of a random sample of 1,500 DPTs collected in a Los Angeles clinic were of good quality and showed the area of interest. Carotid calcifications were identified on 46 DPTs. Closely matched controls who had not been radiographed were selected from the clinic database of 300,000+ records.

In the study group, 12 patients had 20 non fatal vascular events, including myocardial infarcts. In the control group, 5 patients had 6 events including angina pectoris. Mean time to adverse events in the study group was 2.9 yrs, and in the control group, 3.9 yrs. Analysis of pre-existing risk factors did not discriminate between those sustaining and not sustaining events in either group. The authors recommend future studies comparing subjects with and without atheroma plaques on DPTs.

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ORAL SURGERY

Peripheral alcohol injections in the management of trigeminal neuralgia

McLeod NMH, Patton DW *Oral Surg* 2007; **104**: 12-17

These injections may have a definite place in management of trigeminal neuralgia (TN).

Peripheral alcohol injections (PAIs) may produce relief in TN, but this is short-term and the treatment carries risks. Some believe that PAIs may also interact with neurosurgical treatment of TN, and that repeated PAIs are less effective. In a UK hospital, a cohort of 67 patients had commenced surgical procedures for TN over a 5 yr period, and 49 had received 278 PAIs, of which 90% were successful.

Mean duration of the 251 successful PAIs was 11 months, but 9 months in patients with MS ($P < 0.05$). There was no significant reduction in efficacy up to 14 PAIs, with few receiving more. Complications were noted in 4% of PAIs. There was no effect of PAIs on complications of subsequent microvascular decompression surgery. The authors consider PAIs useful in patients refractory to medical management and those unable or unwilling to have neurosurgery.

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REMOVABLE PROSTHODONTICS

Prognosis for abutment teeth of removable dentures: a retrospective study

Piowarczyk A, Köhler K-C et al. *J Prosthodont* 2007; **16**: 377-382

The prognosis appears satisfactory for removable partial dentures (RPDs) retained on conical crowns.

Abutment prognosis is of considerable significance in RPD outcomes. In a German clinic, out of an original cohort of 173 patients, 97 patients (40 ♂) were re-examined, who each received 1 RPD with a mean follow-up of 5 yrs, and 445 abutments were used.

During the follow-up period, 30 abutment teeth had been extracted, 18 in the maxilla. Teeth extracted tended to have increased mobility, probing depths or bone loss, but none of these variables had significant effects on the time to extraction. In teeth which were not extracted, there were significant increases with time in tooth mobility and radiological bone loss. Respective annual increases in these parameters were 0.15 and 0.02 units. The authors consider that the number of teeth extracted was too small to identify risk factors.

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DENTAL RADIOLOGY; OSTEOPOROSIS

Identification of post-menopausal women at risk of osteoporosis by trained general dental practitioners using panoramic radiographs

Taguchi A, Ohtsuka M et al. *Dentomaxillofac Radiol* 2007; **36**: 149-154

Dental panoramic tomographs (DPTs) may be used to identify women with a risk of osteoporotic fractures.

An eroded inferior mandibular cortex may identify low bone mineral density (BMD). In this Japanese study, 22 GDPs were trained in assessment, and in their practices assessed DPTs of 455 post-menopausal women aged 50+ yrs over a 6 month period.

The GDPs identified 168 women with low BMD, and 41 agreed to have further examination for osteoporosis. Since 2 already had a diagnosis of the condition, 39 were given the examination. Two were found to be normal, 21 had osteopenia, 16 had skeletal osteoporosis, and 8 women had spinal fractures.

The authors consider the approach to be useful in identifying women at risk, and suggest that GDPs may be trained to identify them.

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