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ORAL DIAGNOSIS: RADIOLOGY

Panoramic findings in 34-year-old subjects with facial pain and pain-free controls

Huumonen S, Sipilä K *et al.* *J Oral Rehabil* 2007; **34**: 456-462

Panoramic tomography had little diagnostic use in these conditions.

Facial pain may relate to a wide range of disorders. Radiographic examination may be used to exclude or confirm some of these. Following initial screening and selection from two samples of 34-year-olds, one reporting a constant type of facial pain and the other a random control sample with no pain, 48 of the former were compared with 47 of the latter by means of panoramic tomograms.

Periapical, endodontic, periodontal, maxillary sinus and condylar conditions were evaluated. Similar proportions of all pathological conditions were found in the two samples. About 20% of each sample was male, and the authors comment that this gender distribution was significantly different from the original population cohorts from which the samples came.

DOI: 10.1038/bdj.2007.839

IMPLANT DENTISTRY

How do smoking, diabetes and periodontitis affect outcomes of implant treatment?

Klokkevold PR, Han TJ *Int J Oral Maxillofac Implants* 2007; **22** (suppl): 173-202

In this systematic review, the main effect on implant outcome appeared to come from smoking.

A number of factors are known to affect dental implant success, and this review considers the 3 main health matters which have been identified. Initial screening of over 2,500 papers resulted in a list of 1814 for initial reviewing. Next, 47 smoking, 19 diabetes and 56 periodontitis papers were considered potentially relevant, and detailed review was finally made of 19, 4 and 13 high quality papers respectively.

From available data, implant survival was 11% better for nonsmokers ($P = 0.005$). Success rates (which include complications) in non-smokers were also better in several subgroups. Respective survival rates for diabetics and non-diabetics were 92% and 93% for separate pooled estimates. Four studies comparing implants in healthy patients and patients with periodontitis showed 11% better survival in the former ($P = 0.02$). However, periodontitis did not significantly affect implant success, particularly in longer studies.

DOI: 10.1038/bdj.2007.841

TRAUMA; BEHAVIOURAL SCIENCE

Psychological complications of maxillofacial trauma: preliminary findings from a Nigerian university teaching hospital

Ukpong DI, Ugboko VI *et al.* *J Oral Maxillofac Surg* 2007; **65**: 891-894

Post-traumatic stress disorder (PTSD) was likely in 10%.

Facial injuries may cause significant psychological problems. Over a period of 14 months, 51 of 65 consecutive patients with facial trauma were included in a questionnaire-based study, of whom 34 were seen 6-8 weeks later and 23 at 10-12 weeks. Over 2/3 were injured in motor-cycle accidents, and 1/4 of patients had been previously involved in road traffic accidents.

Over 80% of injuries included facial fracture, and over 40% of patients experienced significant depression at the first 2 visits. At the 3rd visit, this figure reduced to around 20%. Fewer patients experienced anxiety, but 5 reached a score predictive of PTSD on the Trauma Screening Questionnaire. The authors discuss whether these results were necessarily related to the accidents experienced by their patients.

DOI: 10.1038/bdj.2007.840

IMPLANT DENTISTRY

For teeth requiring endodontic treatment, what are the differences in outcomes of restored endodontically treated teeth compared to implant restorations?

lqbal MK, Kim S *Int J Oral Maxillofac Implants* 2007; **22** (suppl): 96-116

Both techniques had similar outcomes.

A previous systematic review concluded that the 4 year survival of single tooth implants was 97%. In the present review, 1,797 implant papers and 430 endodontic papers were screened, producing respectively 55 and 13 studies for inclusion. Only 1 study compared both groups.

Respective pooled survival rates for implants and root-filled teeth at 1 year were 97.5% and 96.9%, and at 5 years, 95.4% and 94.1%. There were no significant differences at any follow-up time considered. The authors, both endodontists, note that a randomised controlled trial of these treatments would probably be unethical, and also that the quality of the implant papers was superior to the endodontic papers.

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