

Abstracts on this page have been chosen and edited by Dr Trevor Watts

**Dental public health**

## The dental needs, demands and attitudes of a group of homeless people with mental health problems

**Waplington J, Morris J et al.**  
**Community Dent Health 2000; 17: 134-137**

A high level of normative dental need was found, but health care delivery was considered problematic.

It is difficult to study the health needs of homeless people, but previous research suggests that mental health problems are very frequent, appearance may be a frequently perceived dental need, and fear may not often be a barrier to seeking dental care. In a Birmingham hostel, 70 of 79 homeless residents (56 aged 35-74, 56% males) agreed to have a dental examination.

One third of subjects were edentulous, and only 1/3 of these wore dentures. Mean DMFT was 19.7 for the whole group, and 15.9 for dentate subjects only. Half the subjects had root caries (mean 2.04 teeth), 3/4 had coronal caries (3.35) and caries involved the pulp in half (2.05). Significant hypermobility and recession affected more than 1/3 of subjects.

Five subjects participated in semi-structured interviews which identified a low level of perceived need, and concerns over cost and infection control. The authors consider that the perceived needs of the group were well below the normative needs, and a community dental clinic near the hostel had encountered difficulties if, for instance, patients were not offered immediate appointments, when they tended to change their mind about the visit. There were also problems in obtaining full medical histories.

**Oral surgery**

## Spontaneous bone regeneration after enucleation of large mandibular cysts: a radiographic computed analysis of 27 consecutive cases

**Chiapasco M, Rossi A et al.**  
**J Oral Maxillofac Surg 2000; 58: 942-948**

Bone regenerated in all cases.

Though small mandibular cysts are normally treated by simple enucleation, opinions differ as to whether large cysts should be filled with grafts or other materials to encourage bone regeneration. This study initially included all 29 patients presenting over a 4-year period at a Milan hospital with a cyst exceeding 40 mm in diameter; 2 were lost to full 2-yr follow-up. Histological cyst diagnoses were: radicular (15 cases), dentigerous (6), residual (3), and keratocyst (3).

After cyst enucleation, with care to preserve as much bone as possible, flaps were primarily closed in all except one case where severe infection was present before surgery. The mean residual cavity reduced 12% by 6 months, 43% by 1 yr, and 81% by 2 yrs. Corresponding increases in bone density of these cavities were 37%, 48%

and 91%. In 2 cases a post-operative paraesthesia occurred but resolved by 6 months. The authors recommend primary closure without grafting, and an accompanying discussion by another surgeon agrees with this, but notes the relevance of the subsequent treatment plan for dental rehabilitation.

**Endodontics**

## Pulp capping of carious exposures: treatment outcome after 5 and 10 years: a retrospective study

**Barthel CR, Rosenkranz B et al.**  
**J Endodon 2000; 26: 525-528**

Following carious exposure, capping showed a definite success in 37% of teeth at 5 yrs, and only 13% at 10 yrs.

An attempt in 1997 at a Berlin teaching hospital to recall 353 patients, treated on a student clinic in 2 cohorts 5 and 10 yrs earlier, resulted in 97 subjects returning, with respectively 54 and 69 pulp capped teeth. Following exposure, teeth with a history of pain or exposure >1 mm<sup>2</sup> had been root filled, leaving small symptomless exposures for capping. After caries removal and cavity cleansing with 3% H<sub>2</sub>O<sub>2</sub>, a setting Ca(OH)<sub>2</sub> paste was placed and covered with zinc phosphate or glass ionomer cement base, prior to conventional restoration.

For success, capped teeth had to be symptom-free, respond to vitality testing and show radiographic health. Definite failure was recorded in 45% of teeth at 5 yrs and 80% at 10 yrs, with another 19% and 7% respectively of questionable status. Success rates were higher in teeth where the definitive restoration was placed within 2 days of capping. The authors consider their success rate low: one factor may be the use of a setting Ca(OH)<sub>2</sub> paste, and another, the delay caused by student supervision. They note that all successfully treated teeth showed calcific changes in the pulp, and consider this a potential hindrance to root canal treatment.

**Oral surgery**

## A prospective, quantitative study on the clinical outcome of lingual nerve repair

**Robinson PP, Loescher AR et al.**  
**Br J Oral Maxillofac Surg 2000; 38: 255-263**

Surgical repair was beneficial in most patients with persistent sensory disturbances after third molar removal.

Of 60 patients who had surgical lingual nerve repair following sensory testing, 53 were followed up for a minimum of 1 yr. At operation, the nerve was identified, always in dense scar tissue and sometimes with a neuroma. The damaged segment of nerve was conservatively excised, and the stumps joined by epineurial sutures without grafting. Post-operative assessment was at 1, 4 and 12 months.

Following operation, subjects with complete numbness reduced from 34 to 6, and tongue-biting was reported by 26 of 39 who had previously experienced it. Tests of light touch, pin-prick stimuli, and two-point discrimination all showed significant improvements, as did the response to gustatory stimuli. Speech and taste disturbances persisted in more than half the patients. No patient reported completely normal sensation, but most considered the surgery worthwhile.