

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

MICROBIOLOGY; ORAL HYGIENE

The effects of a triclosan/copolymer dentifrice on oral bacteria including those producing hydrogen sulfide

Sreenivasan P *Eur J Oral Sci* 2003; **111**: 223-227

The effect was greater than that of a fluoride toothpaste and may account for a reduction in halitosis.

A crossover trial was performed in 20 subjects using a fluoride dentifrice containing 0.3% triclosan in the copolymer formulation, and a traditional fluoride dentifrice as negative control. For 7 days, the control was used by all subjects, salivary microbial samples were taken, and subjects were randomized to test or control dentifrice for 7 days, when more samples were taken before and 2 hrs and 4 hrs after brushing. Subjects then used the other toothpaste for 7 days and were sampled similarly.

There were moderate significant reductions of all bacteria in CFU/ml of saliva in the 3 samples taken after dentifrice use. When sulfide-producing bacteria were examined, they too showed a significant decrease. The authors note that a previous study using the organoleptic method of assessment (human noses rather than industrial sulfide monitors) showed a decrease in halitosis after using a triclosan-copolymer dentifrice, and suggest that their findings account for the effect.

doi:10.1038/sj.bdj.4810397

ORTHODONTICS; OCCLUSION

Occlusal status in orthodontically treated and untreated adolescents

Svedström-Oristo A-L, Pietilä I *et al.* *Acta Odont Scand* 2003; **61**: 123-128

Only 19% of all subjects had a morphologically and functionally acceptable occlusion.

Orthodontic care is free up to age 18 in the Finnish health-care system. In the catchment area of one health centre, 121 of a total 159 16-year-olds were examined, and 57 had received orthodontic treatment. Active treatment was for a mean 2 yrs, and 80% had received non-extraction treatment. Principal techniques included cervical headgear and fixed appliances, with a quad helix in 1/4 of cases.

Occlusion was rated with the recently developed occlusal morphology and function index (OMFI). A *morphologically* unacceptable occlusion was present in 40% of untreated subjects, and 73% of treated patients, with postnormal canine relationship and excessive overbite as the main reasons. However, a *functionally* unacceptable occlusion was found respectively in 39% and 37% respectively, with lack of anterior guidance during protrusion as the commonest reason.

doi:10.1038/sj.bdj.4810398

HEALTH CARE DELIVERY

Dental services and perceived oral health: are patients better off going private?

McGrath C, Bedi R *J Dent* 2003; **31**: 217-221

Dental attendance seemed to account more for oral health than did method of payment.

From a random sample of 2718 UK addresses, 1838 adult subjects were interviewed. Of these, 1/3 reported private treatment on their last dental visit, and most of the remainder, treatment under the NHS. A few had seen a work dentist, and 3 had never visited a dentist.

Private attenders had more teeth than NHS attenders (74% v. 67% had 20 or more), fewer complete dentures (11% v. 16%) and fewer wore dentures (17% v. 33%).

Logistic regression analysis showed that the principal factors related to patients attaining the WHO goal of 20 or more teeth with no dentures were age < 65 yrs, higher social class and being a regular attender. Social class, attaining the WHO goal and regular attendance were also significant factors associated with higher quality of life (QoL). Private attendance was not significantly associated with the WHO goal or QoL.

doi:10.1038/sj.bdj.4810399

ORAL AND MAXILLOFACIAL SURGERY

Removal of miniplates in maxillofacial surgery: University Hospital Birmingham experience

Bhatt W, Langford RJ *J Oral Maxillofac Surg* 2003; **61**: 553-556

About 1/6 of miniplates were removed, mostly within 1 yr of insertion.

This retrospective study audited the incidence and causes of osteosynthesis miniplate removal over a 13 month period in a British hospital. The reasons for use of the plates during this period were trauma (225 plates in 119 patients), reconstructive and access surgery (47 in 24) and orthognathic surgery (36 in 10).

During the period, respective removals in 28 patients were 32, 12 and 7. Most plates removed were of titanium. Infection accounted for 43% of plate removal, dehiscence for 18%, pain for 12%, patient request for 10%, being palpable for 4% and paraesthesia for 2%. Most were removed within 1 yr, the longest duration being 7.5 yrs.

Factors not related to plate removal included gender and age. The authors state that small numbers of patients prevented them commenting on the previously reported increase in plate removal after orthognathic surgery in patients over 30 yrs old. They conclude that removal is indicated only when there is a justifiable reason.

doi:10.1038/sj.bdj.4810400