

Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.

The abstracts on this page have been chosen and edited by Dr Trevor Watts.

CONSERVATIVE DENTAL SURGERY

Up to 17-year controlled clinical study on post-and-cores and covering crowns

Fokkinga WA, Kreulen CE *et al.* *J Dent* 2007; **35**: 778-786

The most important restoration survival factor seemed to be the amount of remaining coronal tooth structure.

This study followed up 2 clinical trials of different core restorations, placed by 18 Dutch dentists from 1988 to 1991. From an initial 307 crowns (118 with cast post and core, 150 with prefabricated post and composite core, and 39 with composite core only), data were available for 68% of teeth at 15 yrs, and 28% at 17 yrs.

In survival analysis, the different types of restoration had no significant effect on longevity, with 17 yr tooth survival rates of 83-92%, and restoration survival rates of 71-80%. However, for the teeth with prefabricated posts only, restoration survival was significantly less ($P = 0.03$) where dentine was of minimal height (71%) compared with substantial height (84%). Respective tooth survival rates for these subgroups were 92% and 83% ($P = 0.15$).

DOI: 10.1038/bdj.2008.102

PROSTHODONTICS

Dental state, prosthodontic treatment and chewing ability – a study of five cohorts of 70-year-old subjects

Österberg T, Carlsson GE. *J Oral Rehabil* 2007; **34**: 553-559

Self-assessed chewing ability varied little over 30 yrs.

In most industrialised countries dental conditions have improved over the last few decades. This study examined data from cohorts of 70-year-old Swedish subjects born in 1901-2 (1), 1906-7 (2), 1911-12 (3), 1922 (4) and 1930 (5). Data were thus collected from 1971-2001.

Mean number of teeth in dentate subjects increased from 14 in the earliest cohort to 21 in the latest. The % of subjects with RPDs increased from cohort 1 to cohort 2 and then declined considerably to cohort 5. Implants were recorded only in cohort 5, and 3.3% had 4+ implants, while 1.5% had 1-3. Prevalence of bridges increased from 26% to 58% over the 5 cohorts, and bridges of 5+ pontics were commoner in cohorts 3 and 4. However, the % of subjects with self-assessed good chewing ability varied moderately through the 5 cohorts: 70, 88, 81, 79, and 80.

DOI: 10.1038/bdj.2008.104

CONSERVATIVE DENTAL SURGERY; ENDODONTICS

Post placement affects survival of endodontically treated premolars

Ferrari M, Cagidiaco MC *et al.* *J Dent Res* 2007; **86**: 729-734

A fibre post and more coronal dentine were both factors appearing to reduce the risk of failure.

This was a prospective study of 240 teeth in 210 subjects to examine the effects of remaining coronal dentine and fibre post placement on survival of root-treated premolars at 2 yrs. Teeth were allocated to 6 groups according to the degree of remaining coronal dentine, and in each group of 40, half the teeth received a fibre post to help retain the restoration.

All subjects were followed up to 2 yrs, when teeth with posts had a failure rate of 7.5%, and those without, 30% ($P < 0.001$). In the 2 groups with least dentine, respective failure rates were 20% with posts and 55% without. In the 6 post sub-groups, there were 2 failures of endodontic treatment, compared with 6 failures and 9 root fractures in the 6 sub-groups without posts.

DOI: 10.1038/bdj.2008.103

SOCIOLOGY; DENTAL PUBLIC HEALTH

Social gradients in oral and general health

Sabbah W, Tsakos G *et al.* *J Dent Res* 2007; **86**: 992-996

Both oral and general health appeared to have similar social determinants.

Oral health is a part of general health and may have similar determinants. This study examined data from the large US health survey NHANES III to compare social gradients indicated by periodontal disease and perceived oral health with those indicated by ischaemic heart disease and perceived general health. Special data models were prepared for analysis, and odds ratios were adjusted for confounders including age, dental insurance, diabetes and smoking.

There was a similar gradient for all 4 health topics examined, in relation to possible social determinants. For instance, adjusted ORs for relationship of 3 descending levels of Poverty-Income Ratio with general health were: 1.6, 2.3 and 3.7; respective ORs with oral health were 1.4, 2.0 and 2.3. Similar gradients were found for years of education. The authors point out that because the gradients still existed after adjustment for confounders, there were likely to be other unknown factors affecting them.

DOI: 10.1038/bdj.2008.105