

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.

PROSTHODONTICS

A systematic review of the survival and complication rates of resin-bonded bridges after an observation period of at least 5 years

Pjetursson BE, Tan WC *et al. Clin Oral Impl Res* 2008; **19**: 131-141

About 25% debonded.

The clinical requirements for successful resin-bonded bridges (RBBs) are exacting, and recent results are better than earlier. From 214 relevant studies, reviewers identified 17 (9 prospective, 8 retrospective) from 1990 to 2006 which were suitable for inclusion in the analysis.

In 12 studies which reported on 5 yr survival, 1,374 RBBs were placed and 187 were lost or debonded twice or more, giving a 5 yr survival rate of 88%. None of the 17 studies gave information on complication-free survival. In 4 studies, abutment caries occurred in 1.5% over a 5 yr period, and in 4 studies 7 of 253 RBBs were lost through recurrent periodontitis. Debonding occurred in all 17 studies, affecting 436 of 1,693 RBBs. Materials fracture was reported in 6 studies, losing 13 of 451 RBBs. The authors consider that the high frequency of technical complications needs to be studied over 10 or more yrs to estimate outcomes more fully.

DOI: 10.1038/sj.bdj.2008.458

CARIOLOGY; METABOLIC MEDICINE

Dental findings in diabetic adults

Bakhshandeh S, Murtomaa H *et al. Caries Res* 2008; **42**: 14-18

Poor metabolic control showed a trend towards higher DMFT.

Evidence on caries in diabetics is inconsistent. This study investigated 299 dentate patients (mean age 49, range 25-69) in a diabetic clinic in Tehran. Mean duration of diabetes was 9.6 yrs (1-44), 56 had a high level of education, 50 had type 1 diabetes, 238 type 2 and 11 other types.

Control was good in 160 patients (HbA1c < 7.6), moderate (7.6-8.5) in 62 and poor in 65 (8.6+). Respective mean DMFT scores were 12.5, 12.9 and 14.1. In men, no factors gave associations with DMFT >15 at the 5% level, although age and metabolic control showed trends in this direction. In women, there were trends towards associations for age and type 1 diabetes. The authors comment that oral self-care and diabetic self-care have been shown to share certain behavioural factors.

DOI: 10.1038/sj.bdj.2008.459

IMPLANT DENTISTRY

Long-term follow-up of dental implants placed in a grafted alveolar cleft: evaluation of alveolar bone height

Takahashi T, Tetsuji I *et al. Oral Surg* 2008; **105**: 297-302

Grafted bone was maintained in alveolar clefts after implant insertion.

Implants placed in grafted alveolar bone clefts may simplify treatment of these patients. One question on which there is little evidence is whether the implant bone height is maintained in these circumstances. This study evaluated 23 implants in 21 Japanese patients who had received iliac crest grafts in 1993-1995.

Grafts were placed at a mean age of 14 yrs (range 9-31), and implants 5 yrs (3-10) later. Follow-up of implants was 8.6 yrs (7-9). In 1 patient 2 implants were lost, 3 were in temporary restoration because of orthodontic treatment, and 1 patient had dropped out. Five patients had difficulty, but implants were maintained. In 19 patients 20 implants were retained, in 2 alveolar height was reduced, and in 14 it was maintained up to 6 yrs, and all these implants were functioning well 7-9 yrs after treatment.

DOI: 10.1038/sj.bdj.2008.460

IMPLANT DENTISTRY

A systematic review of the 5-year survival and complication rates of implant-supported single crowns

Jung RE, Pjetursson BE *et al. Clin Oral Impl Res* 2008; **19**: 119-130

The 5 yr survival rate for metal-ceramic crowns was 95% and for all-ceramic crowns, 91% ($P = 0.005$).

At 5 yrs, survival of cantilever and conventional fixed bridges is about 93-94%. The current review was undertaken to assess survival of implant-supported single crowns (SCs) in comparison. From 3,601 papers, 26 cohort studies were identified, including 1,558 implants in patients aged 13-94 yrs.

The studies reported 30 implants lost before loading and 24 lost in function. The 5 yr implant survival rate was estimated as 96.8% (CI: 95.9 - 97.6). Reconstruction survival was assessed in 13 studies with a total of 534 SCs as 90-100%; in 15 cases, implant loss accounted for SC loss, but in 18 cases, the reconstruction failed. The overall 5 yr SC survival rate was 94.5% (92.5 - 95.9).

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