## Gerodontology

- J Prosthet Dent 1978: 40: 610-613.
- 15. Rissin L, House JE, Manly RS, Kapur KK. Clinical comparison of masticatory performance and electromyographic activity of patients with complete dentures, overdentures and natural teeth. J Prosthet Dent 1978; 39: 508–511. 21. Preiskel HW, Preiskel A. Precision
- 16. Dodge CA. Prevention of complete denture problems by use of "overdentures". J Prosthet Dent 1973; 30: 403-411.
- 17. Preston AJ. Removable prostheses revisited: challenges for primary dental care. 3. Overdentures. Prim Dent Care 2007; 14: 145-148.
- 18. Ralph JP, Basker RM. The role of overdentures in gerodontics. Dent Update 1989; 16: 355-359.
- 19. Ettinger RL, Qian F. Abutment loss in patients with overdentures. J Am Dent

- Assoc 2004; 135: 739-746.
- 20. British Society for the Study of Prosthetic Dentistry. Guidelines in Prosthetic and Implant Dentistry. London: Quintessence Publishing, 1996.
- attachments for the 21st century. Dent Update 2009; 36: 221-227.
- 22. Darvell BW, Clark RW. The physical mechanisms of complete denture retention. Br Dent J 2000; 189: 248-252.
- 23. Patsiatzi E, Malden N, Ibbetson R. A radiographic review of bone levels around Calcitek dental implants supporting mandibular overdentures. Preliminary results at 3 to 6 years. Eur J Prosthodont Restor Dent 2006; 14: 169-173.
- 24. Ellis JS, Thomason JM, Jepson NJ,

- Nohl F, Smith DG, Allen PF. A randomized-controlled trial of food choices made by edentulous adults. Clin Oral Implants Res 2008: 19: 356-
- 25. Bornstein MM, Cionca N, Mombelli A. Systemic conditions and treatments as risks for implant therapy. Int J Oral Maxillofac Implants 2009; 24: 12-27.
- 26. Strietzel FP, Reichart PA, Kale A, Kulkarni M, Wegner B, Kuchler I. Smoking interferes with the prognosis of dental implant treatment: a systematic review and meta-analysis. J Clin Periodontol 2007; 34: 523-544.
- 27. Feine JS, Carlsson GE, Awad MA et al. The McGill Consensus Statement on Overdentures. Montreal, Quebec, Canada. May 24-25, 2002. Int J Prosthodont 2002; 15: 413-414.

## **Abstracts**

## **HOW FAST ARE YOUR ALGINATE IMPRESSIONS CAST?**

Accuracy and dimensional stability of extended-pour and conventional alginate impression materials. Imbery TA, Nehring J, Janus C and Moon PC. J Am Dent Assoc 2010: 141: 32-39.

As the authors of this very interesting paper observe, dental practitioners have been taught for decades that irreversible hydrocolloid impressions (alginate) should be poured as soon as possible, ideally within 12 minutes, to ensure dimensional stability. In this quite simple experiment, two different alginate materials were used to take an unspecified number of impressions of a modified resin model. These were taken using the exact measurement of materials specified by the manufacturers. The impressions were either poured immediately or stored, again according to the manufacturer's instructions, by wrapping the impression in a paper towel dampened with 12 ml tap water and sealing them in plastic zipper storage bags. A number of impressions was poured each day for the following five days.

The resultant gypsum casts were analysed by measuring key points and comparing these measurements with the master model to assess the dimensional stability of the alginate impression material.

Although dimensional changes were recorded, these were not deemed to

be clinically significant and none was found to exceed the parameter initially laid down of 0.50% dimensional change. At the end of five days no significant differences were found between the casts poured at the six time intervals, or between the two different materials.

Perhaps the most important implication of the paper for the busy general practitioner is that it is recommended that the correct storage method is used in accordance with the manufacturer's instructions. The habit of wrapping impressions in a saturated towel and sealing them in a bag with excess water may well still be detrimental to the final outcome. Train your staff accordingly!

## WILL YOUR NEXT VT BE COMPETENT AT **IMPLANT THERAPY?**

Outcome of single-tooth implantsupported replacements placed by dental students'. A 10-year clinical and radiographic retrospective study. Bonde MJ, Stokholm R, Isidor F and Schou S. Eur J Implantol 2010; 3: 37-46.

The teaching of implantology to undergraduate dental students is controversial. Some argue that competence in basic restorative treatment must be attained before such advanced procedures can be taught, whilst the opposite view is that such treatment is now part of mainstream dental practice and students

should be taught at least the basic principles, upon which they may build their expertise as with all other dental disciplines.

In this study in Denmark, 51 single tooth implants were placed and restored by undergraduate students under close supervision by dentists and oral/maxillofacial surgeons with a special knowledge of this field. The students were involved in the patient assessment, learning the assessment criteria required; monitored those patients accepted into the study who were cigarette smokers; evaluated the technical problems that arose (two patients reported porcelain fracture and three the loosening of abutment screws, all of which were amenable to treatment); learned the indications for bone augmentation (although where indicated this procedure was carried out by the qualified staff); and audited the eventual survival rate. This was found to be 94% which is comparable to other published work from qualified practitioners.

It is therefore suggested that, with proper supervision, the teaching of implantology may be included in the undergraduate clinical curriculum, provided a focus remains on straightforward cases and substantial supervision by trained dentists.

> **Peter Carrotte** Glasgow

470 **Dental**Update September 2011