- they require minimal tooth preparation;
- they are reversible; and
- they provide an immediate improvement in appearance.

Another problem may be the lack of space on the palatal aspects of the teeth to allow for the provision of restorations. As the wear has been occurring, so has compensatory eruption of the teeth and alveolar growth and there may be a complete overbite. Further reduction of the palatal surfaces would risk pulp exposure. Space for restorations is therefore required. In general terms, such space may be gained by increasing the occluso-vertical dimension or using any difference between centric occlusion and centric relation, or by orthodontic treatment.

One method of orthodontic management is to use the Dahl appliance, which conventionally is an anterior bite platform. Interocclusal space is obtained by a combination of anterior intrusion and posterior overeruption. The Dahl appliance is an effective and predictable method of generating localized occlusal space before the provision of restorations, <sup>10</sup> and as such may be the type of treatment that would be involved in managing wear cases such as Emma's. The intermediate composite resin restorations could also act as a Dahl-

type appliance before the provision of definitive restorations.

A number of restorative techniques have been suggested for the management of localized anterior erosion, including adhesive metal castings or ceramic veneers on the eroded palatal surfaces. These techniques have the advantage of being minimally destructive to tooth tissue but may not be the most aesthetic possibility: the metal castings will not make the teeth look longer but will make the teeth appear darker. Palatal ceramic veneers may be used to increase the length of the teeth but a line may be visible on the labial face of the teeth where the ceramic abuts the teeth. Resin-bonded crowns are the most aesthetic solution but are also the most destructive of tooth tissue.

As with all dental treatment planning, prevention of further deterioration is the key to successful treatment. In an eating-disordered person, this may prove to be the most difficult part of the case management. As has already been stated, the psychological nature of such disorders, including low self-esteem, anxiety and feelings of lack of control mean that the dentist has to tread very carefully in pursuing dental treatment. Moreover, such treatment will simply be short term if the underlying problems associated with eating disorders remain unaddressed. Accordingly, in such

cases the patient should be referred via his/her GP to a psychologist, who can deal with these problems in more depth. The most appropriate management option should be arrived at via negotiation and with a clear understanding on the patient's behalf of the costs and consequences of any proposed treatment.

## REFERENCES

- Schentzel P. Etiology of dental erosion: intrinsic factors. Eur J Oral Sci 1996; 104: 178–190.
- O'Brien M. Children's Dental Health in the United Kingdom 1993. London: HMSO, 1994.
- Robb N, Smith B. Anorexia and bulimia nervosa: conditions of interest to the dental practitioner. J Dent 1996; 24: 7–16.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders IV. Washington DC: American Psychiatric Association, 1994.
- Hogg C. Eating Disorders: A Guide for Primary Care. Norwich: Eating Disorders Association, 1995.
- Waldman H. Is your next young patient preanorexic or pre-bulimic? ASDC J Dent Child 1998;
  65: 52–56.
- Hazelton L, Faine M. Diagnosis and dental management of eating disordered patients. Int J Prosthet 1996; 9: 65–73.
- Dababneh RH, Khouri AT, Addy M. Dentine hypersensitivity – an enigma? A review of terminology, epidemiology mechanisms, aetiology and management. Br Dent J 1999; 187: 606–611.
- Briggs P, Djemal S, Chana H, Kelleher M. Young adult patients with established dental erosion – what should be done? *Dent Update* 1998; 25: 166–170
- Gough MB, Setchell D.A retrospective study of 50 treatments using an appliance to produce localised occlusal space by relative axial tooth movement. Br Dent J 1999; 187: 134–139.

## **ABSTRACT**

## WE CANNOT PREVENT THIS...

Permanent Nerve Involvement resulting from Inferior Alveolar Nerve Blocks. M.J. Progrel and S. Thramby. *Journal of the American Dental Association* 2000; **131:** 901–907.

The fear of many dental students, the inferior dental nerve block, was investigated by these American authors with respect to the rare complication of nerve damage following administration. The authors studied 83 patients who reported a permanent (more than one year) altered sensation in the inferior dental nerve or lingual

nerve following the administration of an inferior dental nerve block. All of the patients were anaesthetized for restorative procedures.

The lingual nerve was affected over three times more than the inferior dental nerve, with the effect on the right side being equal to that on the left. Forty-seven patients were said to have experienced pain or an 'electric shock' sensation on injection but 36 did not recall any such sensations. Paraesthesia or anaesthesia was the symptom most commonly reported by 55 patients while 28 patients reported dysaesthesia; some of these patients subsequently developed pain and some developed involvement of the maxillary nerve trunk.

The authors estimated by extrapolation that the incidence of permanent nerve damage following inferior dental nerve anaesthesia may be as high as one in 26,762 blocks, roughly equating to once in every general practitioner's career. The authors discuss possible mechanisms for the nerve damage but conclude that the aetiology of this rare complication is still unknown and there appears no obvious way to prevent it. They conclude that exploratory surgery is not helpful and problematic cases should be dealt with medically, possibly by dedicated pain clinics.

> Richard Oliver University Dental Hospital of Manchester