



**Figure 4.** Lateral view demonstrating the anterior location of the foreign body.

● radio-opaque foreign bodies.

In the case of a suspected rhinolith, the clinical examination should include enquiry about the placement of foreign bodies into the nasal passage. The object may have been placed several

years before presentation as it takes time for deposition of sufficient mineralization to show radiographically. In addition, examination of the anterior nares should be performed with the aid of a speculum, to visualize the condition. Rhinoliths may be removed via the anterior nares or, in cases of large rhinoliths, through the postnasal space.<sup>3</sup>

The management of these lesions may ultimately lie with the ENT and maxillofacial surgeons, but it is of great importance that the general dental practitioner is aware of their existence as it is to them that rhinoliths may initially present.

**ACKNOWLEDGEMENTS**

The authors wish to thank Mr D.W. Morgan, Consultant ENT surgeon and Dr J. Newman, Consultant Histopathologist, Birmingham Heartlands Hospital, Dr M.S. Saxby, Consultant in Periodontology, Birmingham Dental Hospital, and Mr M.J.C. Wake, Consultant Maxillofacial Surgeon, Birmingham Children's Hospital.

**REFERENCES**

1. Polson CJ. On rhinoliths. *J Laryngol Otol* 1943; **58**: 79-116.
2. Appleton SS, Kimbrough RE, Engstrom HIM. Rhinolithiasis, a review. *Oral Surg Oral Med Oral Pathol* 1988; **65**: 693-698.
3. Jones HS. Rhinolithiasis. *ENT J* 1988; **67**: 248, 250-251.
4. Allen GA, Liston SL. Rhinolith: unusual appearance on panoramic radiograph. *J Oral Surg* 1979; **37**: 54-55.
5. Aksungur EH, Binokay FB, Bicakci K, Apaydin D, Oguz M, Aydogan B. A rhinolith which is mimicking a nasal benign tumour. *Eur J Radiol* 1999; **31**: 53-55.
6. Munoz A, Pedrosa I, Villafruela M. 'Eraseroma' as a cause of rhinolith: CT and MRI in a child. *Neuroradiology* 1997; **39**: 824-826.
7. Allen SG. A rhinolith presenting in the palate. *Br J Oral Surg* 1996-7; **4**: 240-242.
8. Marano PD, Smart EA, Kolodny SC. Rhinolith simulating osseous lesion: report of case. *J Oral Surg* 1970; **28**: 615-616.
9. O'Dowling IB. A rhinolith perforating the hard palate. *J Irish Dent Assoc* 1984; **30**: 2.
10. Stoney P, Bingham B, Okuda I, Hawke M. Diagnosis of rhinoliths with rigid endoscopy. *J Otolaryngol* 1991; **20**: 408-411.
11. Flood TR. Rhinolith: an unusual cause of palatal perforation. *Br J Oral Maxillofac Surg* 1988; **26**: 486-490.

**ABSTRACTS**

**DAMAGE TO ADJACENT TEETH?**

Iatrogenic Damage to Approximal Surfaces in Contact with Class II Restorations. V.A.F. Medeiros, R.P. Seddon. *Journal of Dentistry* 2000; **28**: 103-110.

Evidence regarding the iatrogenic damage of teeth adjacent to the tooth being restored is largely anecdotal, and there have been few published studies. In this research, patients were examined who had received a new class II restoration involving a previously unrestored contact. Elastic separators were placed post-operatively, which created a space of 0.3 to 1.00 mm within a few days. This space was cleaned of plaque and debris, and an elastomeric impression taken of the contact area. These were examined under a binocular microscope.

It was found that over half of the unrestored tooth surfaces had been iatrogenically damaged during cavity preparation of the adjacent tooth. Briefly, the results showed extensive damage to

be present in 17% of these, with vertical grooves present in 26% and indentations and scratches in 12%. Damage was more frequently seen in maxillary teeth (61%) than mandibular (25%), and in permanent teeth (64%) than deciduous (23%). Of particular significance was the discovery that qualified dentists produced more iatrogenic damage (64%) than undergraduate students (23%). Although there is no evidence that such damage may lead to a carious lesion, the chance of misdiagnosis on a subsequent radiograph is distinctly possible, and practitioners are warned to be more vigilant in this difficult area.

**ARE YOUR DENTAL INSTRUMENTS REALLY CLEAN?**

Cleaning Dental Instruments: Measuring the Effectiveness of an Instrument Washer/Disinfector. C.H. Miller, C.M. Tan, M.A. Beiswanger, D.J. Gaines, J.C. Setcos and C.J. Palenik. *American Journal of Dentistry* 2000; **13**: 39-43.

There is considerable evidence that used dental instruments exhibit adherent blood, saliva, tooth debris and dental materials, all of which may be baked on

during sterilization and may shield harmful micro-organisms from the sterilizing agents. There is also evidence that mechanical cleaning rather than hand-washing provides a safer way to process contaminated dental instruments.

These workers artificially contaminated dental instruments with blood and test bacteria. Some of these were allowed to dry for six hours before cleaning, and some remained wet. The instruments were then processed through an instrument washer using the integral instrument baskets.

The results on over 1000 instruments showed that the vast majority were clean at the end of the cycle. No blood was detected on any instruments, and the few remaining test bacteria were adhered to known tenacious surfaces, such as haemostats. The bacteria would then have been destroyed by conventional sterilization.

It is recommended that dental practices consider mechanical instrument washers as an alternative to ultrasonic cleaners.

**Peter Carrotte**  
**Glasgow Dental School**