

A radiograph taken in December 2001 confirmed progressive slow healing at the apex of 22. (Fig. 5)

Complications

On April 2002 tooth 22 fractured at the bone level (Fig. 6).

Treatment Decision Rational

Tooth 22 had received endodontic surgical treatment and over a period of three years the lesion had healed. The decision to replace the resin with a crown, preceded by a crown lengthening procedure was based on the 2 mm ferrule rule. The post however was left in place, as I believed that removal would risk fracture. A new core was created and a PFM was cemented with Fujii Plus. The restoration functioned without incident for 3 years and then fractured obliquely. Inter-

estingly the contra lateral tooth restored with a Composipost and resin core did not fracture and was still functioning.

A radiograph revealed that the fracture was deep to the free gingival margin and in order to restore this tooth an elongation procedure and a second crown lengthening would be needed. Measurement of the remaining root structure along with cosmetic concerns strongly suggested the need for removal and implant placement.

The length of solid tooth required should equal the sum of the biological width (2.5 mm.), the ferrule length (2 mm.), the apical seal (4 mm.), and the minimal retentive post length (7-8.5 mm). As well there should be 1mm. thickness to any remaining coronal dentin. Thus, the minimal tooth length needed is 15.5 mm.²

It is important to understand that these numbers are not absolute. Sometimes due to the importance of the tooth to a restorative dilemma, medical considerations or even psychological factors retention ~~are~~ favoured over removal. The cost and long term prognosis are also an important factors for the patient. In order to treatment plan, the dentist must be aware of all the available options and their long term consequences. **OH**

Bruce Glazer is Oral Health's Prosthodontic editorial board member.

Oral Health welcomes this original article.

REFERENCES

1. Ashley Martin and Harris Ian. The Assessment of the Endodontically Treated Tooth. Dental Update 28:247-252,2001.
2. Glazer Bruce. Restoration of the Endodontically Treated Tooth. Oral Health July:7-10,2001.