



Figure 2 Clinical pre-operative photographs. (a) Labial view (b) Right buccal view (c) Left buccal view (d) Upper occlusal view (e) Lower occlusal view

Treatment plan

1. Oral hygiene and dietary advice
2. Supra gingival scaling
3. Remove existing coronal restorations & assess restorability 37, 36, 46, 47.
(Tooth 47 was found to be unrestorable)
4. Extraction of tooth 47
5. Root canal retreatment 37, 36, 46
6. Composite restoration 37, 36, 46
7. Clinical and radiographic review

All teeth were treated over two appointments using calcium hydroxide as an inter appointment medicament. Studies have shown that teeth dressed, with calcium hydroxide exhibit fewer bacteria, sufficiently enough to produce negative cultures (Bystrom and Sundqvist 1985; Sjogren et al 1991). It has also been shown the calcium hydroxide is effective against *E.faecalis* and lipopolysaccharides which has been associated with periapical disease (Staskenko 1990; Nelson-Filho et al 2002; Silva et al 2002; Portenier et al

2005).

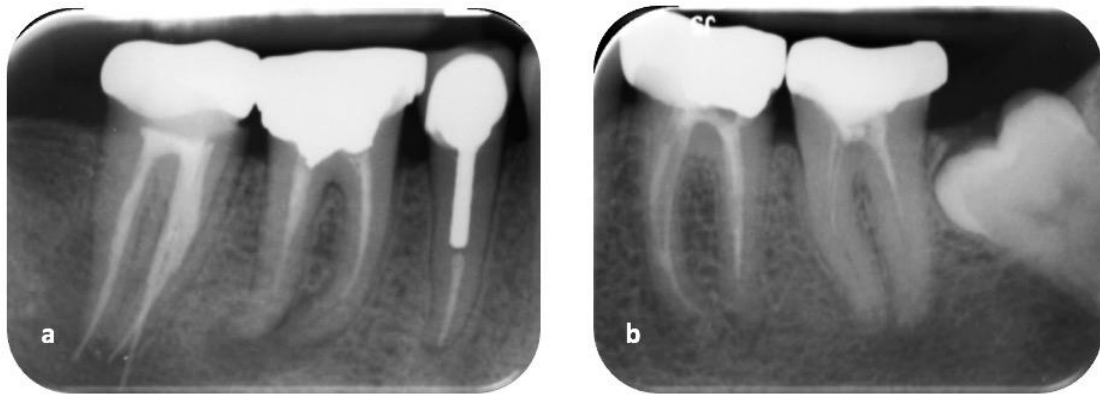


Figure 3 Pre-operative PA radiographs of teeth 36, 37, 45, 46 and 47

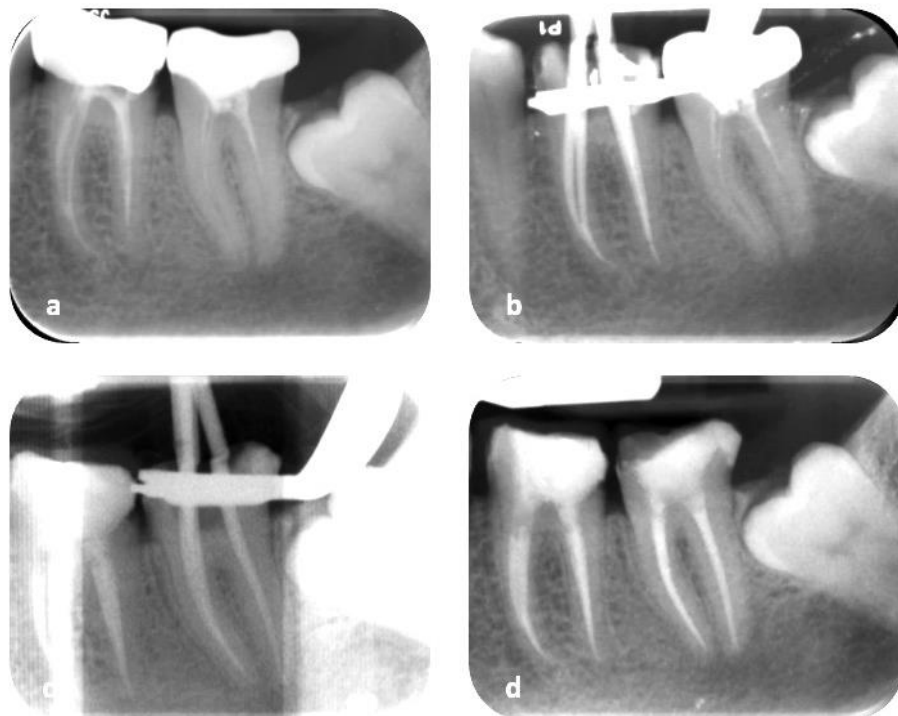


Figure 4 PA radiographs of tooth 36 and 37 (a) Pre-operative (b) Master cone 36 (c) Master cone 37, (d) Postoperative.

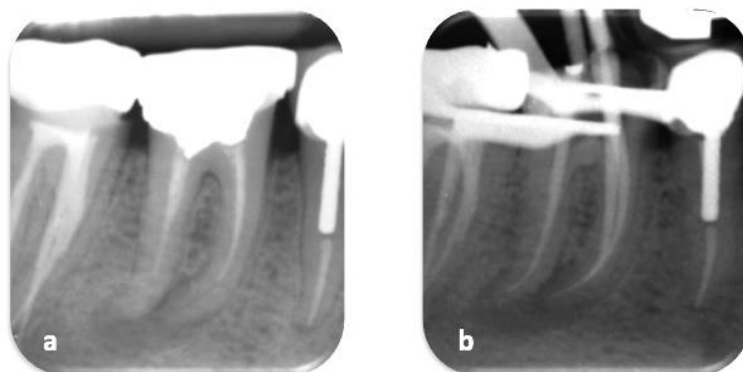




Figure 5 PA radiographs of tooth 46 (a) Pre-operative (b) Master cone 36 (c) Postoperative.

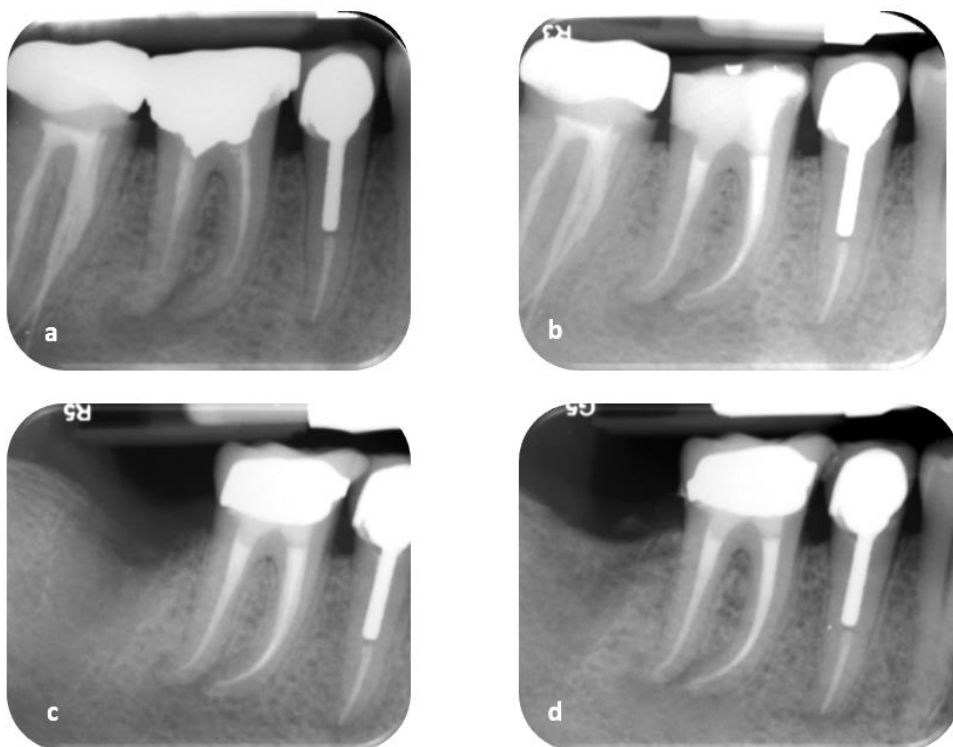


Figure 8 Review of tooth 46 (a) Pre-operative radiograph (b) Postoperative radiograph (c) 1-year review, showing periapical radiolucency is less dense (d) 2-year review, showing further reduction in the density and size of the periapical radiolucency

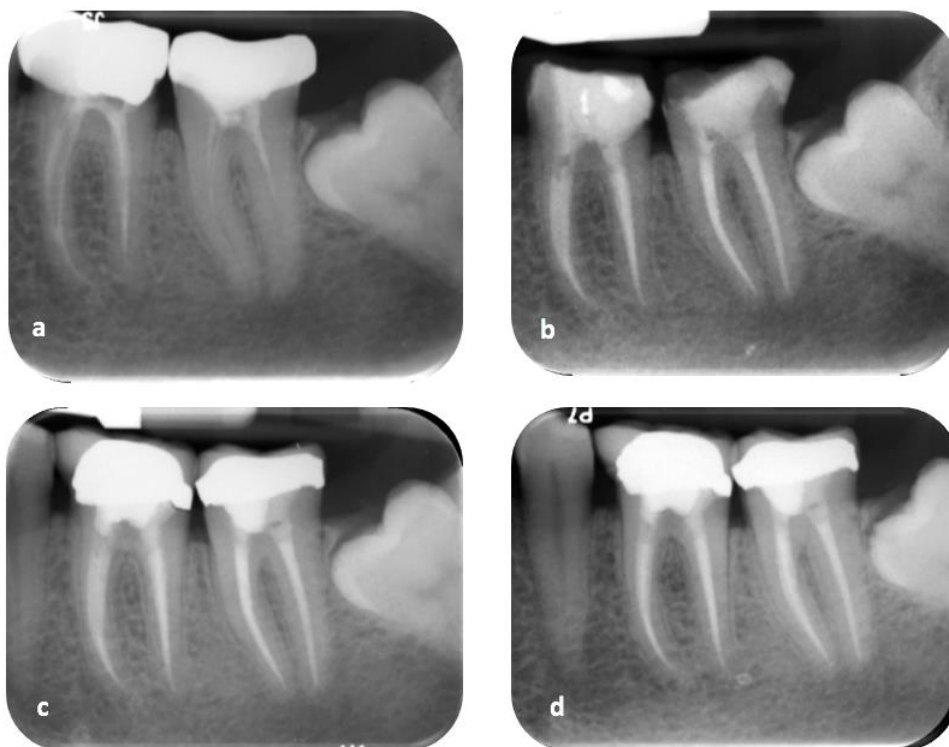


Figure 9 Review of teeth 36, 37 (a) Pre-operative radiograph (b) Postoperative radiograph (c) 1-year review (d) 2-year review, showing no apical pathology