



Figure 2 Clinical pre-operative photographs. (a) Labial view (b) Right buccal view (c) Left buccal view (d) Upper occlusal view (e) Buccal sinus adjacent to tooth 16.



Figure 3 Pre-operative PA radiographs of teeth 16, 26, 27, 46 and 47

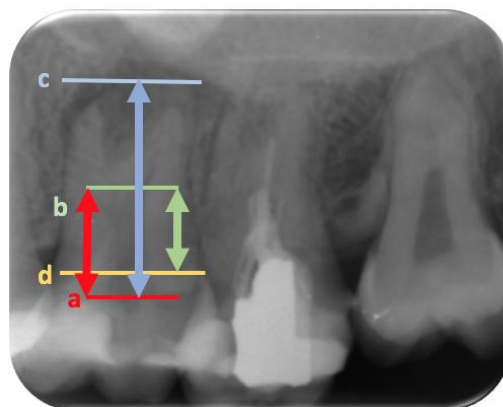


Figure 5 Taurondont Classification by Shifam and Chanannel 1978 applied to tooth 26. (a) lowest point of the roof of the pulp chamber (b) to the highest point of pulp floor, when divided by the distance from (a) to root apex (c) should be equal to or greater than 0.2 mm and/or distance from (b) to cement-enamel junction (d) should be greater than 2.5 mm

Treatment plan

1. Oral hygiene and diet advice and supra gingival scaling
2. Indirect pulp cap 46, 47, composite restoration 45, 46, 47
3. Remove existing coronal restorations & assess restorability 16, 26 and 27
4. Root canal treatment 26
5. Root canal retreatment 16, 27

6. Composite restoration 26, 16, 27
7. All ceramic crowns 16, 26, 27
8. Clinical and radiographic review

The term taurodontism derives from both latin and greek, meaning ‘bull tooth’. It is used to describe the developmental disturbance of a tooth resulting in a lack of constriction at the level of the cemento-enamel junction, vertically elongated pulp chambers, apical displacement of the pulp floor and bifurcation or trifurcation of the roots.

This case was particularly difficult to treat due to the unusual anatomy. Managing such cases with persistent apical periodontitis can present a challenge. Root canal treatment can reduce intracanal bacterial loads however even when a strict protocol is adopted periapical lesions can persist due to the complexity of the root canal system (Perrini and Castagnola 1998; Ricucci and Siqueira 2010).

All teeth were dressed with calcium hydroxide between appointments to try and reduce bacterial levels and irrigation was activated by sonic activation to increase the efficiency of penetration into areas of difficult anatomy (Virdee et al 2018).

At one year review the patient has no clinical signs or symptoms and radiographically there was a significant reduction in the size of the apical radiolucencies of all treated teeth.



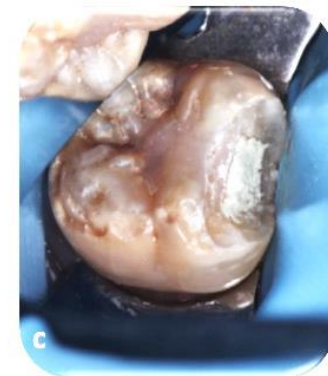
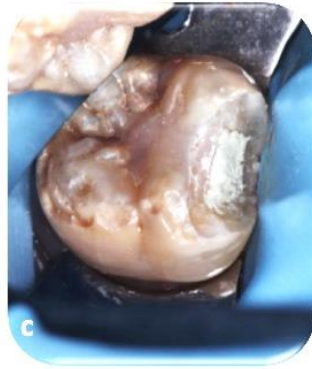
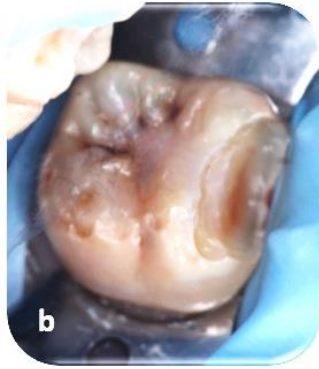




Figure 6 Clinical photographs of the indirect pulp cap on tooth 47. (a) Pre-operative (b) Caries removed 47 and extends close to the mesial pulp horn (c) MTA pulp cap 47 (d) GIC used to cover the MTA 47. An Automatrix and wedge placed prior to composite restoration. Composite placed tooth 47 (e) caries removal and matric placement (f) composite placement tooth 45 (h) Postoperative photograph tooth 45, 46, 47.

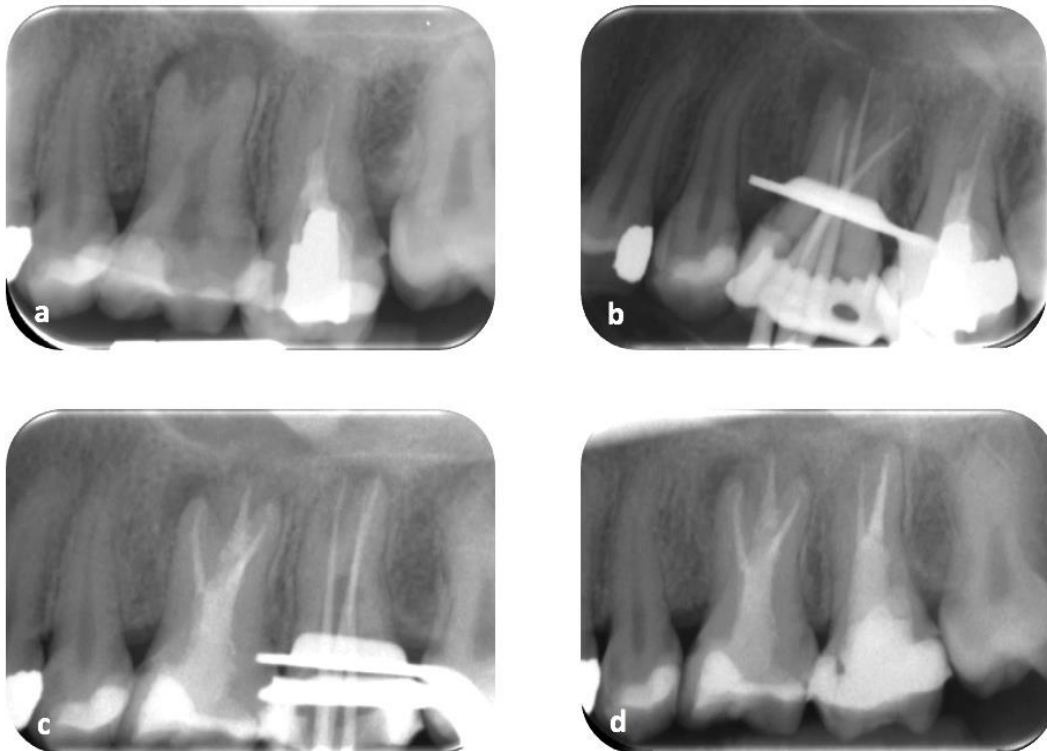


Figure 7 PA radiographs of tooth 26 and 27 (a) Pre-operative (b) Master cone 36 (c) Master cone 27 (d) Postoperative.

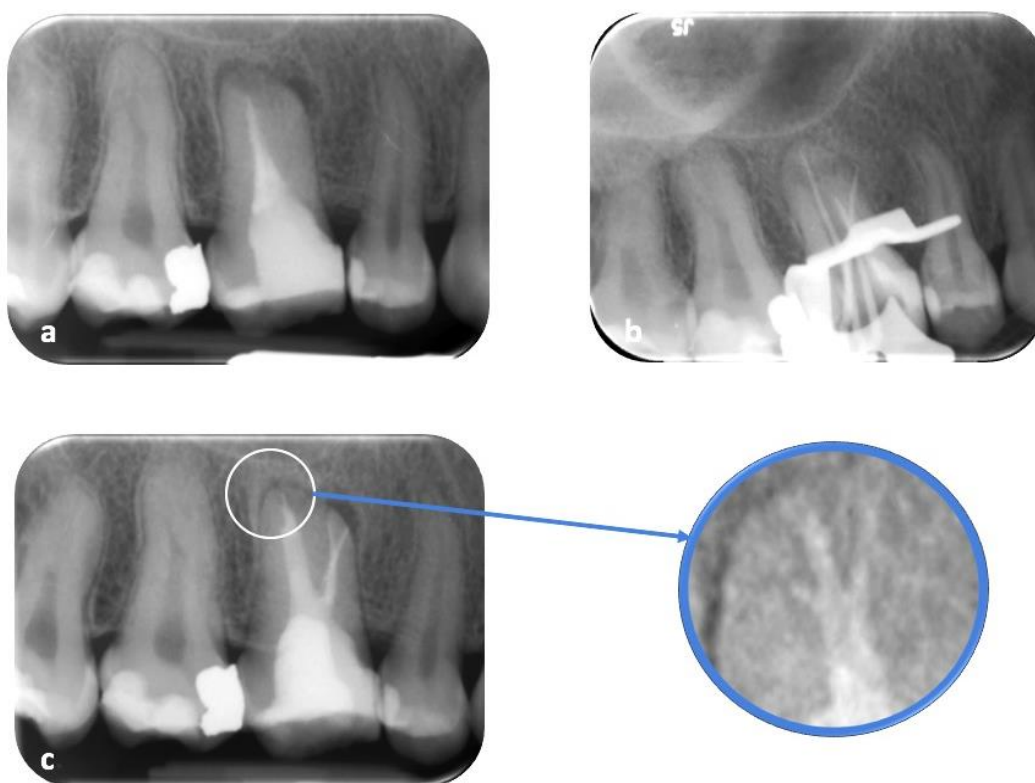


Figure 8 PA radiographs of tooth 16 (a) Pre-operative (b) Master cone of tooth (c) Postoperative radiograph, highlighting apical delta

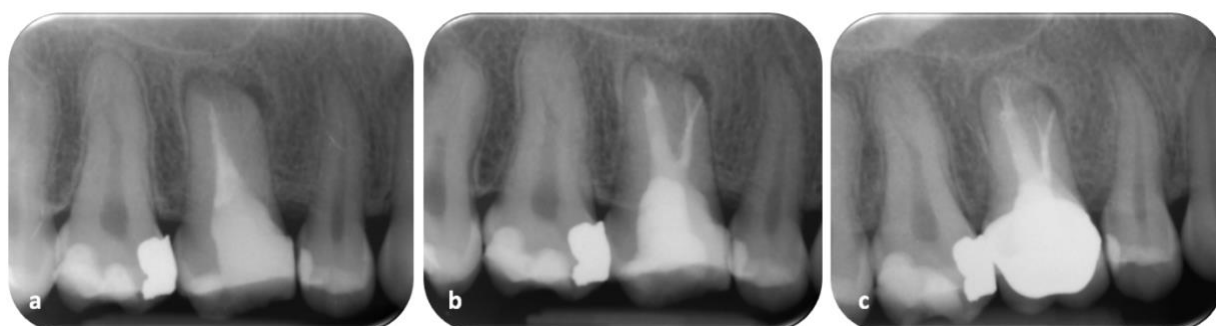


Figure 11 Review of teeth 16, 26 and 27 (a) Pre-operative radiograph (b) Postoperative radiograph (c) 1-year review, showing periapical radiolucency is less dense

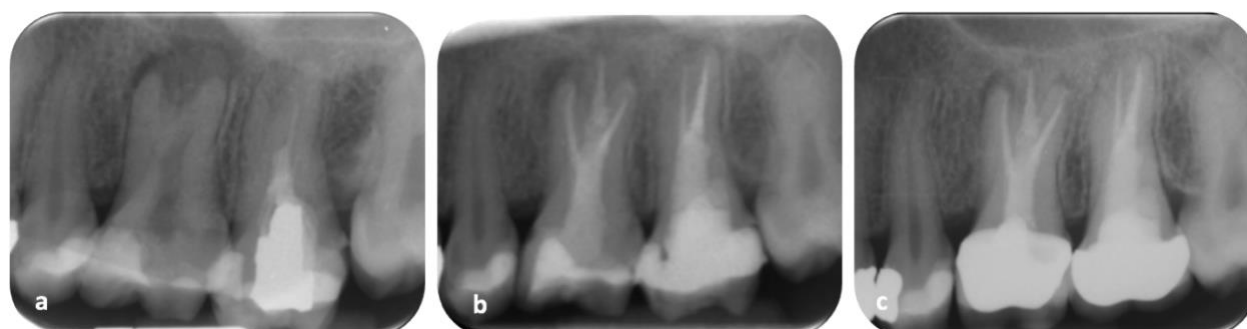


Figure 12 Review of teeth 26 and 27 (a) Pre-operative radiograph (b) Postoperative radiograph (c) 1-year review, showing periapical radiolucency is less dense

