

Anterior Crown Mr M



History

Presenting Complaint

Mr M presented as a new patient complaining of the poor appearance of his 11. The existing crown was over 30 years old and had never given any trouble, however its appearance had deteriorated markedly over this time.

Medical History

- Clear

Extra - Oral Examination

- no TMJ clicking/crepitus/pain
- no limitation/deviation on opening
- no swelling/asymmetry/tenderness
- no headaches

Intra-oral Examination

- Soft tissues healthy
- Cheek faceting evident
- Relatively unrestored dentition

Special investigations

- 11 responds negative to endo frost

Occlusion

Class 3 skeletal base with Class 3
11 bites edge to edge with 41,42
Group function in lateral excursions
Anterior guidance on the canines
No NWSI/WI
Wear facets evident on all teeth
Posterior occlusion stable

Radiographic investigation



Radiograph shows 11 has a root treatment that is underextended by approximately 2mm with slight widening of the PDL apically and some evidence of internal resorption. There is a short fat metal post and the bone levels are good

Treatment

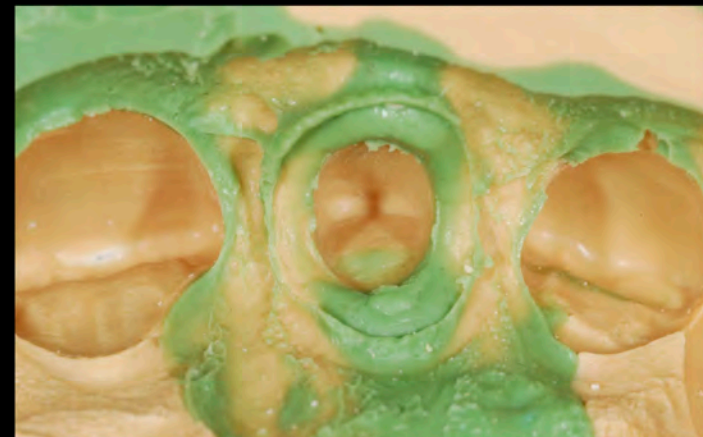
Given the situation with the root treatment on 11, it was discussed with Mr MM0263 the various options available to him, namely;

- leave
- redo crown only
- redo RCT post and crown
- implant

Mr M was reluctant to have the RCT redone due to the chance of root # and the fact that it had not given trouble in 30 years. Mr MM0263 was also reluctant to have an implant placed. The decision was made to redo the crown, construct an occlusal splint and monitor the tooth.

As Mr M was looking for an aesthetic result we decided to try an all ceramic if the preparation would allow it

Several photos were taken to match the shade and the old crown was removed, as expected a large cast post was present. It was decided to construct a procera crown as they are very effective in preventing the greyness of the metal post from shining through. Impressions were taken using a putty wash and the 2 cord technique. The tooth was temporised with a bis acryl temporary crown material.



Final Crown



The lab decided to send back a procera crown and an E-MAX crown as when they used the more opaque procera core they felt that they were not able to get enough translucency mesially and distally. For the second crown they used a more translucent E-MAX core and used an opaquer internally over the area where the metal core was.

When both were tried in they were both excellent however the more translucent core gave this crown the edge.

The internal surface was treated with hydrofluoric acid 3 min, then rinsed and scrubbed with phosphoric acid to remove the residue and silane was applied.

The tooth was prepared with phosphoric acid and kerr optibond solo plus.

The crown was then cemented with dual cure clear NX3

No adjustment was necessary as the bite was perfect

