

Posterior Bridge Mrs B





Intra Oral Photos 10/4/12



History

Presenting Complaint

Mrs B presented for her routine check up she had no issues with her teeth

Medical History

- Migraines
- Takes omeprazole for a gastric ulcer

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
- Very heavily restored dentition
- 16 has a very poor margin

Occlusion

Class 2 Div 2

ICP = RCP

Wear facets seen on 17,14,13,23,27,37,43,44,46,47
Right lateral excursions are guided by 43,44, with a NWSI on 27

Left Lateral excursions are guided by group function on 23-27 with a NWSI on 17

Skeletal base II

Special Investigations

44,46 respond positive to endo frost

Radiograph



Treatment Plan

Radiographic Results

There was one bitewing and an IOPA of the lower right quadrant taken, unfortunately the IOPA has been mislaid. The bitewing shows;

- mild horizontal bone loss with localised bone loss where 45 was lost
- 16 has a huge overhang at the distal of the crown which will need replaced
- 15, 44 and 46 are heavily filled

Treatment Plan

It was decided to restore 44 and 46 which were heavily filled. These teeth required occlusal protection and indirect restorations with full occlusal coverage were indicated. The issue of the missing tooth 45 was discussed. As a implant was not an option due to Mrs B's desire to avoid surgery it was decided to place a 3 unit bridge. Given the huge variation in angulation's it was decided to make the bridge fixed movable. It was also felt that to keep the preparation on the 46 as minimal as possible a gold crown would be used as a retainer. The restoration was to be constructed within the existing occlusal scheme.

Treatment

- 2 sets of articulated study models were constructed, one with a diagnostic wax up of the proposed 3 unit bridge
 - several putty indexes were constructed and sectioned
- teeth 44 and 46 were prepared for the bridge using the putty index's as a guide
- teeth 44 and 46 were temporised using a silicone index, this helped to highlight any areas still under prepared however due to the angulations it was not possible to remove it to adjust the margins.
- provisional restoration removed and preparations refined.
 - impressions and facebow taken
- bridge inserted using zinc phosphate, several areas of the preparations were eased slightly as per reduction guide to ease placement.
 - no adjustments to bridge required, original occlusion reestablished with right lateral guidance on 43 and 44 and the same centric stops on 43 and 47

Construction of Fixed Movable Bridge



Final Result



This was a challenging case given the very different angulations of the teeth involved and the restricted access. The technician also found this quite a challenging case due to the angulations involved and the materials used. He had to get a special gold alloy that could be soldered to and the incorporation of the fixed movable joint made this more difficult.

Restorations were also required on 43 and 47 as decay was noted after the teeth had been prepared.

Ideally the fixed movable joint would have been within the distal of the 44, however given the angulations involved this was not possible.

Despite all this a good result was achieved, one that the patient is very happy with.

The crown on 16 will be replaced shortly

For lab sheets see appendix