

Full arch implant care: the evolution continues (Part 3)



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Parts 1 and 2 of our series showed that it is possible to pre-fabricate a definitive implant supported bridge (milled titanium bar with acrylic teeth) prior to surgery, insert it in the patient's mouth at the same visit as extractions and the implants are also performed. This may all be achieved with a variety of implant numbers, implant positions and with the use of implant abutments.

There are occasions, however, when posterior implants are required. This is usually the case when patients require additional molar teeth replaced and a posterior cantilever needs to be avoided. Commonly in the posterior maxilla there is inadequate bone height due to the location of the maxillary sinus. While the placement of zygomatic implants is possible, it is very technique sensitive and has anatomical requirements for a predictable outcome.

The following case shows that it is possible to use my technique with simultaneous bone grafting of the posterior maxilla, which circumvents the need for separate grafting procedures and the use of zygomatic implants.

Patient 4

This patient presented with an upper Kennedy Class I partial denture which she found very uncomfortable. The partial denture had been provided several years prior and the patient was unable to adapt to it. There were 5 remaining upper teeth, 4 of which had PFM restorations and large areas of dental caries (Figure 1). The lower teeth were manageable with improvement in oral hygiene required. After a discussion about the different treatment options and their pros and cons the patient elected to have an **AUDENTES** Implant Bridge.

The planning process involved a CBCT scan to determine bone volume, impressions and a try-in (Figure 2) to ascertain the correct tooth position before finalizing the appropriate implant position. There was limited posterior bone volume (Figure 3) but the patient was firm that she wished to have the posterior teeth replaced. In order to minimise the posterior cantilever 1 implant in



Figure 1

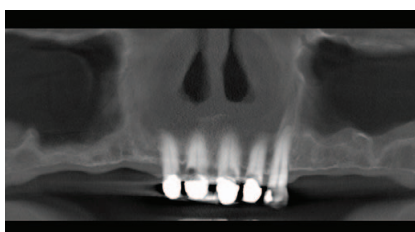


Figure 3



Figure 5



Figure 7

each posterior quadrant was planned in addition to a direct sinus lift plus the usual 4 anterior implants. The surgical guides and restoration were manufactured and finalised by Omni Dental Laboratory at their Melbourne facility

Surgery was done under a general anaesthetic where the teeth were removed, selected areas of bone recontoured, implants were placed, prosthetic abutments were placed, the restoration was placed and finally the direct sinus lift was performed. An OPG was taken 1 week after surgery (Figure 4). The patient returned for 3 brief reviews over the course



Figure 2

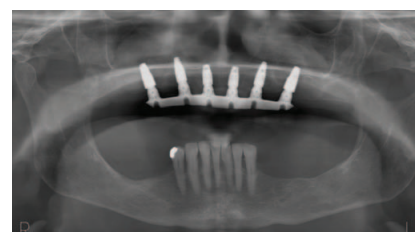


Figure 4

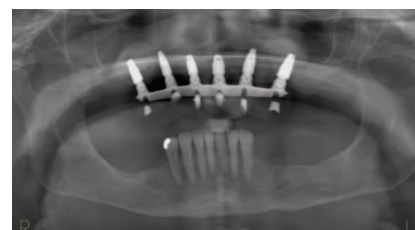


Figure 6

of 4 months. At 4 months before the bridge was removed for the first time. Some soft tissue inflammation from excess pressure was noted on the left side as well as some debris around the abutments (Figure 5). The intaglio of the bridge was adjusted to lessen the tissue pressure and all parts were cleaned. Implant integration was verified clinically and with a follow up radiograph (Figure 6). Overall the patient was happy with the outcome (Figure 7) as it mirrored the tooth appearance she selected prior to surgery and she could not eat and speak without fear of her upper bridge dislodging.

Part 4 will show the application of the implant bridge to patients who both upper and lower dentitions replaced at the same time. ♦

For details on Dr Philip Tan's upcoming lecture events contact Rebecca: rebecca@specialistsmiles.com.au or 0432 144 534