

SCD

Case Study

February 2018

Patient treated by Dr David Reaney - 1090222A

Introduction



The patient presented with a failing maxillary dentition and her main concerns were a lack of function and the appearance of her upper teeth. Following an examination and treatment planning which included a discussion of the available options and their risks – a treatment plan was drawn up as follows:

Clinical Stages

The placement of implants in the UR 5 and 3 and UL 4 and 3 areas using guided surgery. These 4 implants were allowed to integrate for 4 months and at this stage a pick up impression was taken of the 4 posterior implants. The laboratory was instructed to provide a screw retained acrylic temporary bridge UR 6 to UL 5. The upper teeth were later extracted and immediate implants placed in the UR1 and UL1 sockets. Healing abutments were attached to these implants and the temporary bridge was placed UR6 to UL5. A healing period of 6 months followed after which the temporary bridge was removed. An open tray impression technique was used for a pick up impression of the 6 implants. A bite registration was taken and a wax try in was fabricated to help with approval of tooth position and as a guide to the occlusion.

A try in of the metal framework was prepared to check the occlusion and to ensure passive fit.

At the final stage the definitive bridge was prepared in two sections. Those sections were UL1,2,3 and 4 and UR 1,2,3,4,5 and 6.

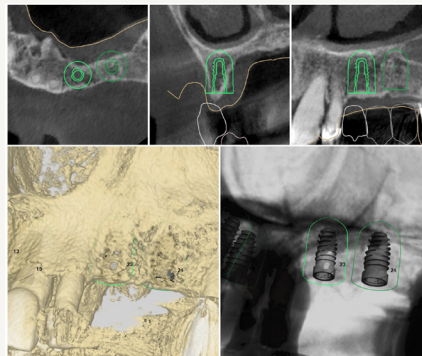
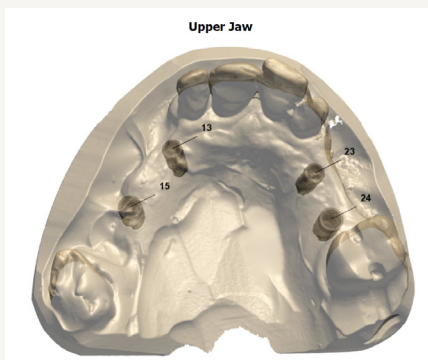
An option would be to treat this as an all on 4 case with immediate loading but it was preferred to place the short implants in the posterior maxilla and ensure they were well integrated before extracting the anterior teeth and placing immediate implants in the anterior maxilla. There was less risk with this procedure.

Techniques and materials used

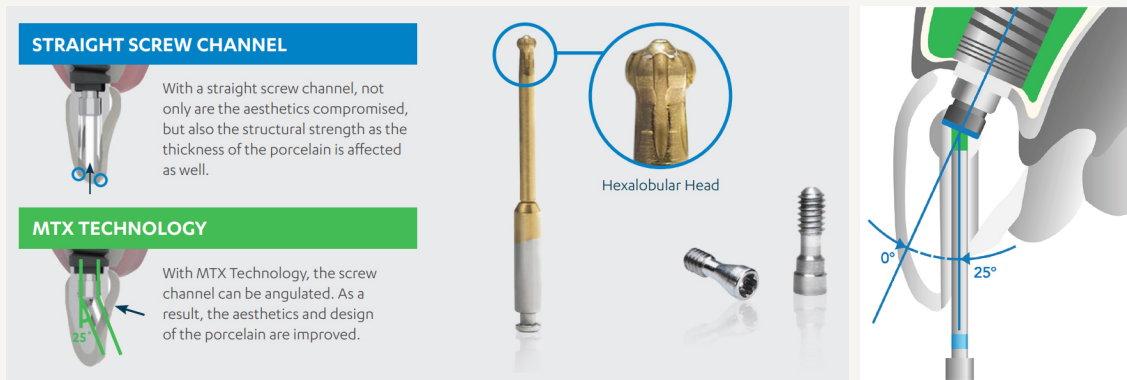


Digitek milled titanium framework that is layered with veneering porcelain. It was necessary to provide the bridge in two sections in view of the divergence of the implants from one side of the arch to the other. A one piece bridge unit would not have fitted into the fixtures.

A titanium framework was considered the best option for biocompatibility and also for compatibility of the framework / fixture interface. Traditionally the bonding of porcelain to titanium was unpredictable but advancements in ceramic technology has resulted in increased bond strengths and reliability.



The patient presented with a severely resorbed posterior maxilla and to avoid sinus grafting it was considered best to place short implants in the available bone. To ensure accurate implant positioning, a surgical guide was fabricated from the CT scan for implants UR 3 and 5 and UL 3 and 4. The implants on UR 1 and UL 1 were immediate placements which did not indicate the need for guided surgery.



In this case, MTX angled screw correction was used on implants UR3, 1 UL 1, 3 and 4 with a normal screw used on UR5.

Dentist / patient feedback



The temporary restoration was removed and the final bridges were placed without the need for any adjustment. These provided optimal aesthetics and the design of the prostheses allowed for interdental cleaning.

The patient was delighted with the outcome and after a long course of treatment felt the result justified the long and complex course of treatment.