

Bone and tissue level

Chang I Chun Teoh looks at a bone level and tissue level implant in the aesthetic zone

The replacement of natural teeth with dental implants in aesthetic zone has become a predictable procedure; however, clinicians may face many challenges that may affect the final outcome, for instance, the amount of bone available, the thickness of soft tissue and its biotype, and position of the lip line. Straumann tissue level implants have enjoyed a highly predictable outcome in aesthetic zone. They are normally placed in a semi-submerged position using standard plus implant with a predetermined soft tissue collar height of 1.8mm which allows the soft tissue attachment. However, certain clinical conditions, like very thin tissue biotype, may require the placement of implant in a more apical position or soft tissue grafting to increase the tissue thickness so to avoid the showing

of metal collar of tissue implant. The newly introduced Bone level Straumann implants allow more flexibility in the management of the soft tissue in aesthetic demanding cases. This article presents the clinical experience of immediate placement of tissue level implant and BL Straumann implant in anterior part of the mouth. It provides an opportunity to compare the aesthetic outcome of different design.

A 40 year old Caucasian lady was referred to the practice with chronic sinus tract associated with the upper right central incisor 11. There is no relevant medical history. The patient had root canal treatment on the upper right central (11) and lateral incisor (12) many years ago. Apical surgery was performed on upper right central incisor some years later with little success. There is a radiolucent area



Figure 1



Figure 2



Dr. Chang I Chun Teoh
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He gives talk in UK and Hong Kong and provides implant mentoring for dentists in South East London. Chang is a member of the International Team for Implantology and the Association of Dental Implantology (UK).

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Image 3 - Implant in 11 & 12 sites with the bone defects in apical part of 11



Image 4 – Bio-Oss particles to cover the dehiscence



Figure 5 - Radiograph of the implants

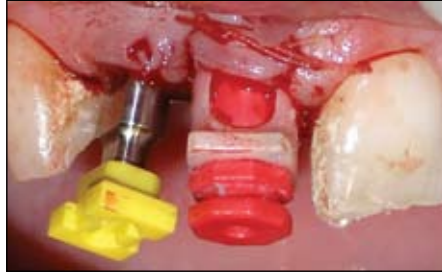


Figure 6 – Impression of the implants



Figure 7 – Temporary crowns and abutments after 3 months of soft tissue moulding



Figure 8 – Final metal abutments in place



Figures 9 (top right) and 10 (above) – The Final aesthetic outcome is satisfactory with both types of implant

associated with the apical part of the central incisor. Amalgam tattoo and inadequate root filling in both incisors were evident. After a thorough discussion with the patient, it was decided to extract the two incisors and replace them immediately with dental implants. Because of the previous treatment received on the central incisor, bony defect was expected. There is no sign of bone loss associated with the crestal part of the two incisors.

On the day of the surgery, the two incisors were extracted with great care and all the granulation tissue was removed. Bony dehiscence was evident and implant preparation in 11 and 12 positions according to Straumann

implant surgical protocol. One Straumann TE Tissue Level Implant with 3.3mm diameter were placed in 11 with semi-submerged approach and 12 in a completely submerged approach respectively. Both implants exhibited good primary stability. The exposed implant surface and the bony defect were covered with Bio-Oss particles and Bio-Guide membrane. The flap was closed with no tension and the missing teeth were replaced with a temporary a Rochette bridge.

Four months after the implant placement, the implants were exposed. Implant level impression was taken and the technician fabri-

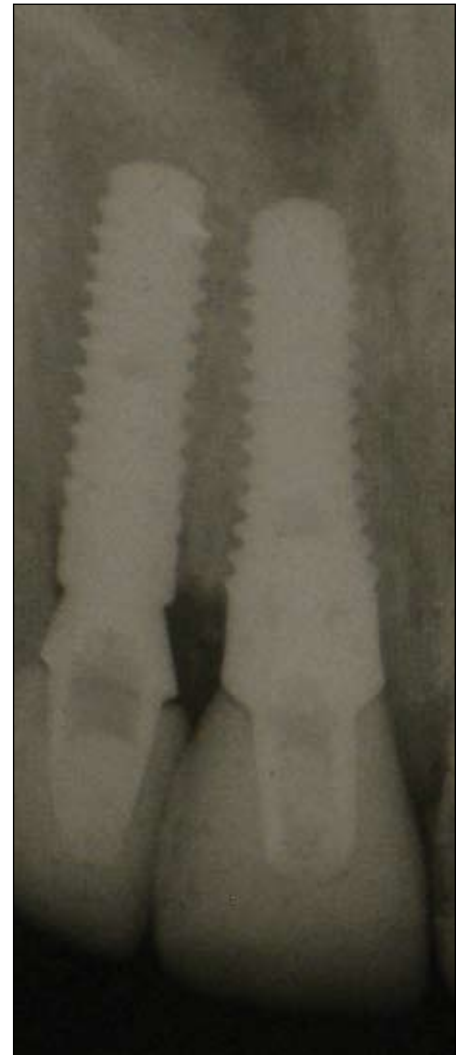


Figure 11 – Final satisfactory aesthetic

cated temporary crowns on the temporary abutments. The temporary crowns were left for 3 months to mould the soft tissue as to give a more natural appearance before fabrication of the final crowns.

Finally all ceramic crowns were cemented in place on the metal abutments. Satisfactory aesthetic outcome can be achieved with both Tissue level and Bone level implants. **1**