

SUCCESSFUL KEYS TO IMMEDIATE IMPLANT PLACEMENT & IMMEDIATE PROVISIONALIZATION & SOFT TISSUE AUGMENTATION: CASE REPORT



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INTRODUCTION

Immediate implant placement (IIP) is one of the most technical sensitive and challenging treatment in maxillary esthetic zone. There are 7 important lucky number and successful keys to IIP.

1st, Before IIP we should check facial soft tissue height is normal and no recession.

The distance from free gingival margin to facial bone plate is less than 7 mm.

2nd, Before IIP we also check Cone Beam CT to make sure saggital root position is favorable for IIP. Buccal to lingual and interradicular distances from mesial to distal are more than 7mm.

3rd, After extraction, there are at least 4mm remaining bone apical to the socket, totally height are more than 7mm.

4th, please check the distance from papilla tip to interproximal bone is less than 7 mm.

5th, we place implant by a precision surgical guide at ideal position and correct angle, timing, soft tissue dimension and smaller diameter, (7D position)

6th, check the distance from implant center to buccal mid-facial gingival margin is more than 7mm.

7th, we always might need a soft tissue graft (Prefer DGG) to stabilized the soft tissue margin and prevent mid-facial recession. The graft size should be covered facial side, length is more than 7mm, width is more than 4mm and thickness isn less than 2mm.

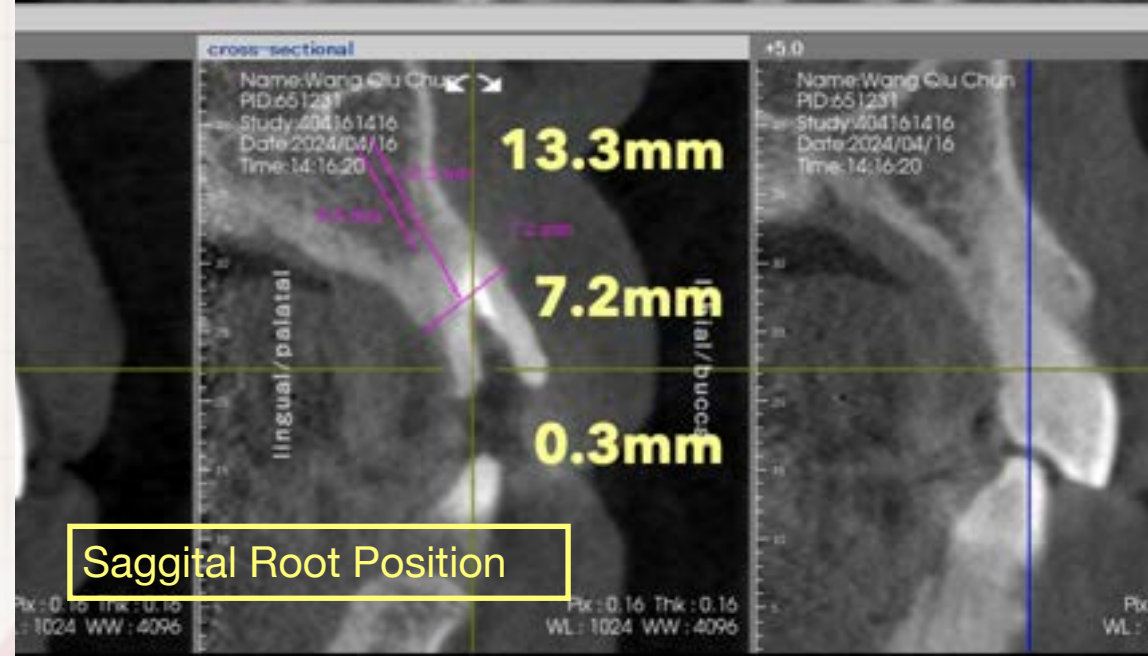
Following these rules, we can get the stable gingival margin and long-term successful result. Flapless approach which is less traumatic and avoiding damage papillae is also very important. Then follow the original emergence profile of natural tooth to maintain the soft tissue shapes and papilla height. The demonstrated case show the #22 lateral incisors root caries with fracture. After evaluation. and discussion, we decided to treat by immediate implant placement, immediate provisionalization if possible and soft tissue grafting. Finally we have a satisfactory results and stable tissue margin profile.

CASE REPORT ~ BEFORE EXTRACTION

① Soft tissue Height is Normal & Papilla Fill

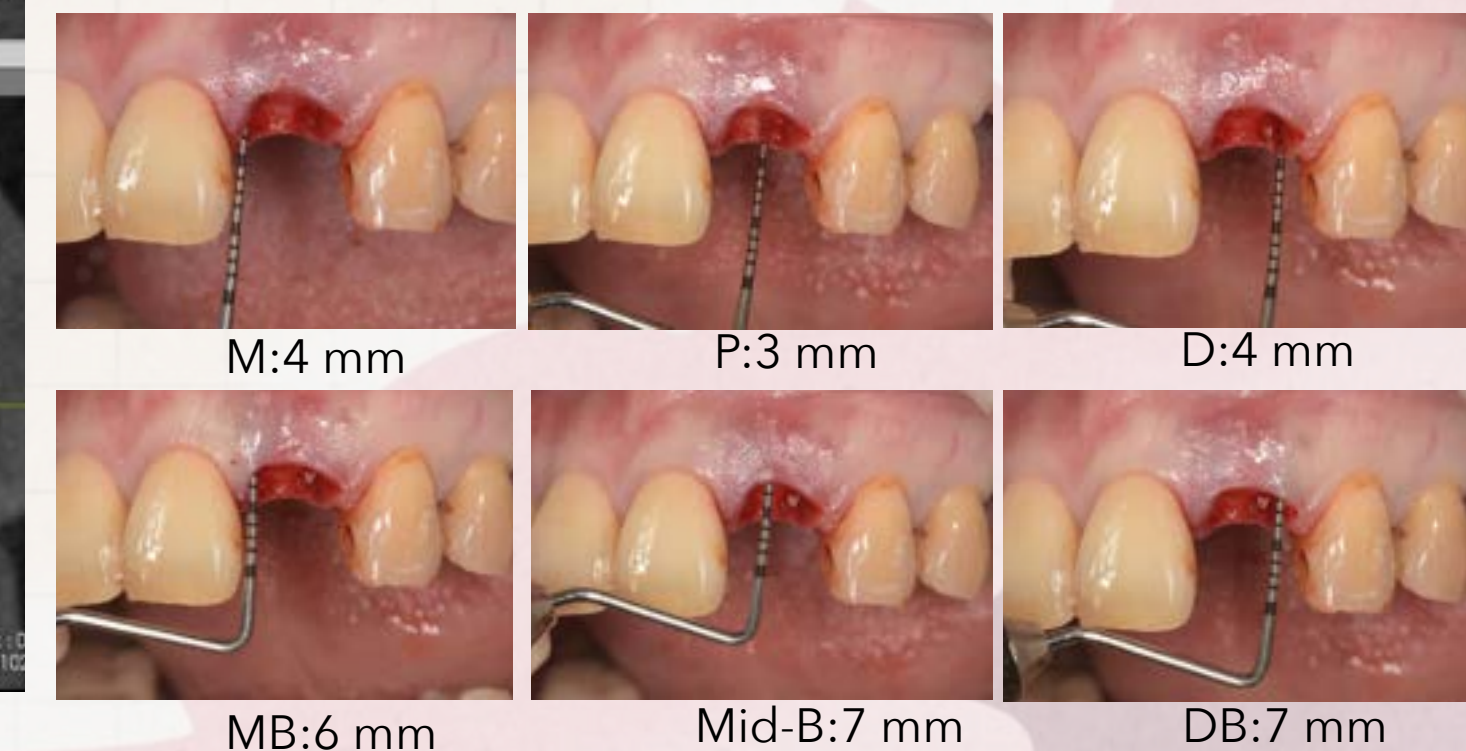


② ③ Check Cone Beam CT ~height/width/M-D space at least 7 mm



CHECK SOCKET BONE LEVEL

④ Papilla tip to interproximal bone over 7 mm



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PRECISION POSITION BY SURGICAL GUIDE

⑤ 7D position, ideal position, depth and angulation



⑥ Implant center to buccal mid-facial gingival margin over 7mm



⑥ Provisional abutment preparation and provisional crown fabrication



PICK-UP AND RELINE

⑥ Optimal Emergence Profile



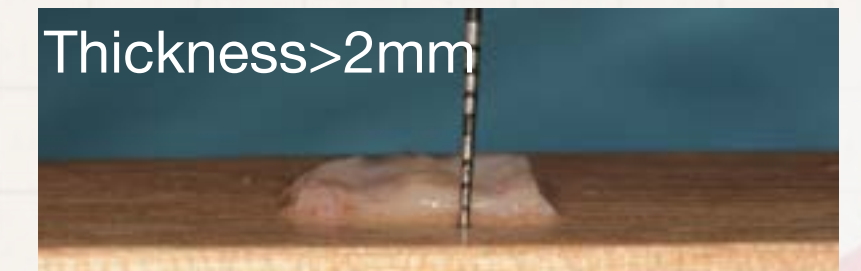
SOFT TISSUE AUGMENTATION

⑦ DGG: Length>7mm

Width>4mm



Thickness>2mm



Tunnel



Final



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3 MONTH FOLLOW UP



DEFINITE IMPRESSION

Customized Abutment



ESTHETIC & HEALTH



DEFINITE PROSTHESIS



STABLE SOFT TISSUE MARGIN



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CONCLUSION

Immediate implant placement is a reliable and minimal invasive treatment option if the case is optimally selected. Understanding the aesthetic components of implants and creating a successful niche are essential for achieving long-term stable results. Immediate implantation not only saves time for patients but, more importantly, focuses on maintaining the stability of tissue morphology and aesthetic outcomes. Through case sharing, we will address the challenges and difficulties encountered during treatment and overcome them one by one. By conducting a thorough diagnostic analysis beforehand, we can identify suitable indications, perform minimally invasive extractions without damaging the papillae, and use surgical guides to place the implants accurately in the ideal position, ensuring a strong foundation. Additionally, by preparing biomimetic provisional prosthesis, we can replicate the desired emergence profile and, if necessary, provide soft and hard tissue augmentation to achieve a harmonious state of tissue stability. We share the successful keys and critical numbers for immediate implant placement, provisionalization and soft tissue augmentation at the same time even can prevent complications. Through scientific measurement and precise execution, we will significantly increase the success rate and create aesthetically pleasing and natural results.

SURGICAL VIDEO



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