

病例討論三

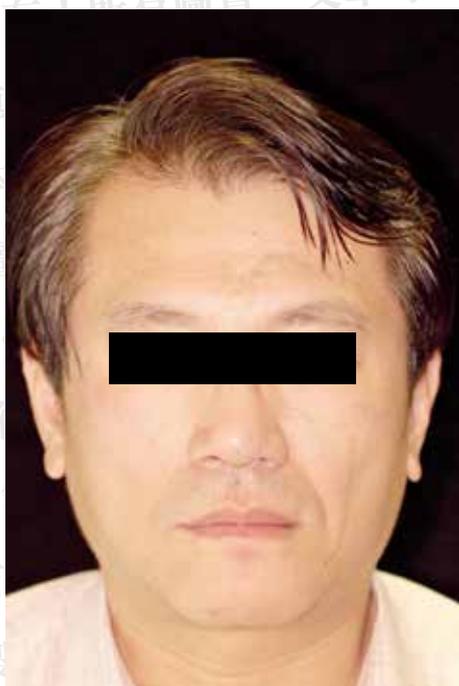
指導醫師：林秀娜 醫師

時間：2016.09.24

林郁華 醫師

• 台北長庚紀念醫院義齒補綴科

General Data



Name: 邱〇昌
 Age: 49 years old
 Gender: male
 Chart number: 10738305
 Personality: Philosophic
 Occupation: Sales
 First visit: 104-02-03

• **Chief complaint :**

Upper anterior bridge mobile, asking for FM reconstruction.

• **Present Illness :**

The 49-year-old male found his 13-12-X-X-X-23 FPDs mobile for a long time, which is fabricated 7 years ago in LDC. He had a car accident 20 years ago, causing his 11 21 22 and 31 extracted or avulsed. Thus, he had 13-12-XX-X-23 and 42-41-X-32 at that time. He renewed the upper anterior bridge for esthetic concern in 7 years ago. He noted his upper anterior bridge mobile for 3-4 months, and he came to LDC for help at first. The dentist told him that he need full mouth reconstruction and suggested him to come to our hospital for detail information.

• **Past Medical History**

DM under medication control
 Hyperlipidemia
 Family history of oral cancer(father and brother)

• **Past Dental History**

Facial trauma 20 years ago
 42-41-X-32 FPDs, 20 years ago
 13-12-X-X-X-23 FPDs, 6-7 years ago
 General care
 Denture experience(-)

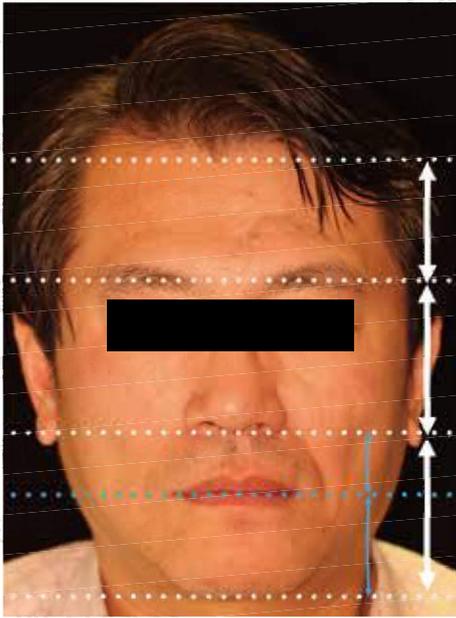
• **Personal Habits**

Alcohol drinking (+)
 Betel nuts chewing (quit for more than 20 years)
 Cigarettes smoking (-)
 Bruxism (-)
 Clenching (-)

• **Oral Hygiene Care**

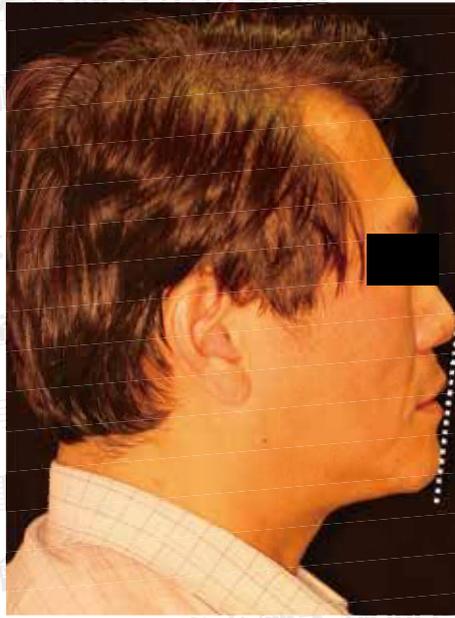
Tooth brushing
 Horizontal method
 2 times/day
 Flossing : sometimes
 Interdental brush(-)
 Super floss(-)

Extraoral Findings



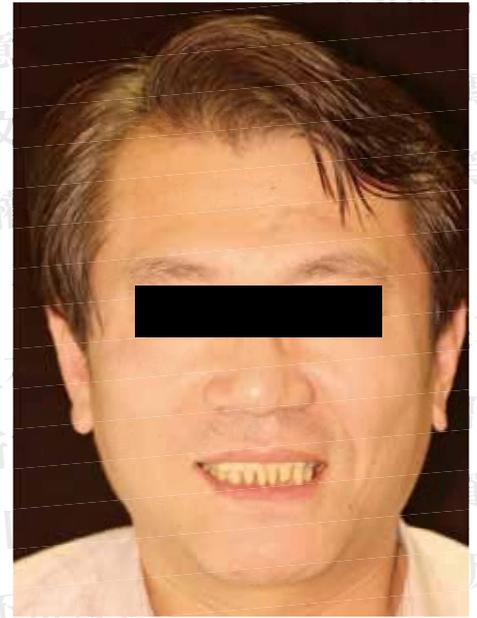
Frontal View

- Facial symmetry
- Facial form: ovoid
- Facial proportion: 1 : 1.27 : 1.32
- Lower facial proportion: 1 : 1.56
- Lip incompetence (-)



Lateral View

- Facial profile: convex
- Nasolabial angle: 89 degree
- Labiomental fold: average
- Upper lip to E-line: on
- Lower lip to E-line: on



Smile Analysis

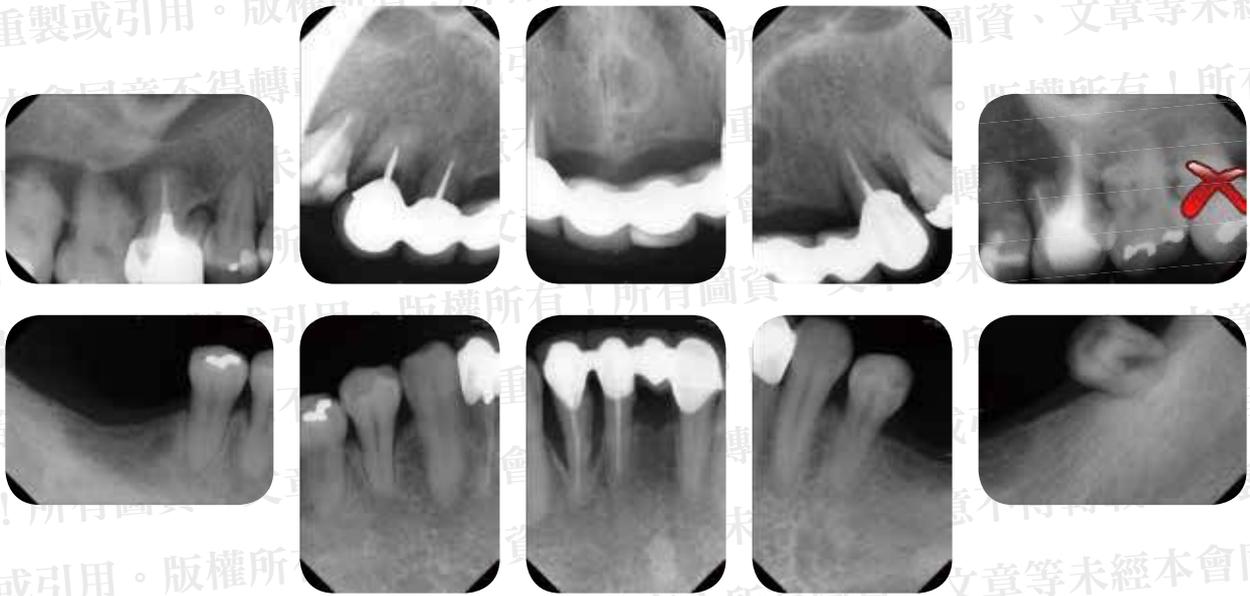
- Gummy smile(-)
- Smile width: 10 teeth
- Upper midline to facial midline: on
- Lower midline to facial midline: shift to left 2mm

Intraoral Findings



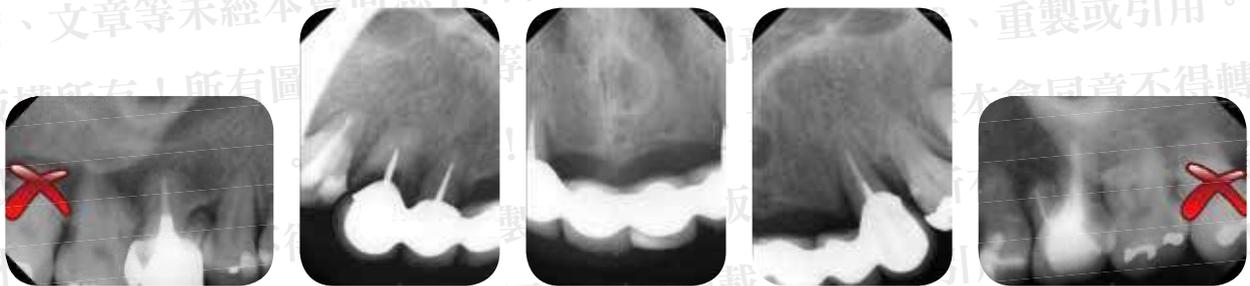
Panoramic Films & Periapical Films

104/02/03



Radiographic Findings & Periodontal Charting

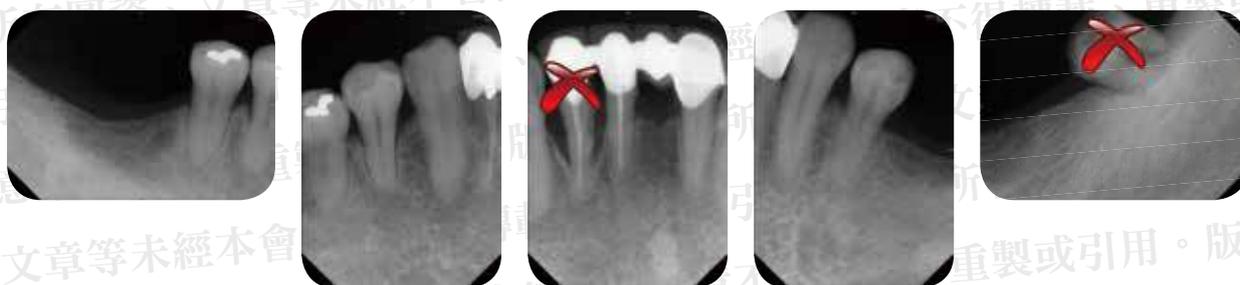
104/03/19



| 牙位 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
|----------|-----|-----|-----|-----|-----|-----|----|----|----|-----|-----|-----|-----|-----|
| Buccal | 535 | 356 | 334 | 335 | 545 | 434 | | | | 333 | 535 | 333 | 333 | 534 |
| Palatal | 333 | 455 | 334 | 555 | 355 | 333 | | | | 567 | 433 | 434 | 535 | 535 |
| Mobility | | | | II | II | II | | | | II | II | | | |

Radiographic Findings & Periodontal Charting

104/03/31



| 牙位 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 |
|----------|----|----|-----|-----|-----|-----|-----|----|-----|-----|-----|----|----|----|-----|
| Buccal | | | 223 | 233 | 223 | 565 | 222 | | 222 | 233 | 222 | | | | 353 |
| Lingual | | | 333 | 334 | 323 | 645 | 323 | | 333 | 323 | 323 | | | | 454 |
| Mobility | | | | | | | | | | | | | | | |

Diagnosis

- 18, 28, 38 malposition and adv. periodontitis
- 16 elongation and adv. periodontitis
- 13 12 deep caries under the crown
- 42 adv periodontitis with severe bony destruction
- FM chronic moderate periodontitis

Problem List

- Reverse occlusal plane
- Insufficient posterior support
- Esthetic

Tentative Treatment Plan

- OHI (interdental brush)
- 18,16, 28, 38 ext
- 13-12-X-X-X-23 ill-fitted FPD, remove then evaluation
- 42-41-X-32 remove then evaluation
- Upper and lower interim denture

Treatment Sequence

| Date | Procedure | |
|-----------|---|--|
| 104-02-03 | Initial visit. Impression for study cast. | |
| 104-02-12 | Osteotomy and 12,13 16 ext, ID delivery. | |
| 104-02-16 | Suture removal and softliner relined. | |
| 104-02-23 | 23 crown removal, provisional crown fabricated and fit to ID. | |
| 104-03-02 | | FM periodontal evaluation. Scaling. |
| 104-03-11 | 18 ext | |
| 104-03-19 | 42-41-X-32 bridge removal, 42 and 28 ext. X-41-X-32 provisionalization. | Upper arch curettage |
| 104-03-25 | 42 extraction wound suture removal. | |
| 104-03-31 | | Lower arch curettage. |
| 104-04-09 | 38 ext and FM impression for lower ID. | |
| 104-04-22 | Lower ID delivery. | |
| 104-05-07 | 22 denture repaired. Follow the lower ID situation. | |
| 104-05-21 | Repeat upper ID impression. | |
| 104-05-27 | | FM periodontal condition re-evaluation |
| 104-06-04 | 23 crown cut as upper denture root abutment. X-41-X-32 provisional relined. | |
| 104-06-18 | Upper arch: mouth preparation.FM impression and take bite. | |
| 104-07-06 | X-41-X-32 final prepared and master cast impression. | |
| 104-07-13 | X-41-X-32 repeat impression. | |
| 104-08-06 | X-41-X-32 PFM bridge metal substructure try-in. | |
| 104-08-19 | | FM periodontal condition re-evaluation |
| 104-08-27 | | |
| 104-09-02 | X-41-X-32 PFMM bridge check fit | FM periodontal condition re-evaluation |
| 104-09-17 | 26 remove previous restoration, Parapost insertion. | |
| 104-09-23 | X-41-X-32 PFM bridge TS and ID adjustment. | |
| 104-10-01 | 26 gross preparation and provisionalization. | |



| Date | Procedure | |
|-----------|---|--|
| 104-10-22 | 26 survey crown final preparation and impression | |
| 104-10-29 | X-41-X-32 PFM bridge PS with RelyX.Study cast impression. | |
| 104-11-23 | 26 survey crown PS and mouth preparation | |
| 105-07-13 | Upper and lower impression for metal framework | |
| 105-08-04 | Lower RPD framework check fit | |
| 105-08-06 | Upper RPD framework check fit | |
| 105-08-13 | Lower arch: altered cast impression | |
| 105-08-20 | Upper RPD framework check fit | |
| 105-08-27 | Take bite. | |
| 105-09-13 | Wax denture esthetic try-in. | |
| 105-09-22 | Upper and lower RPD insertion. | |

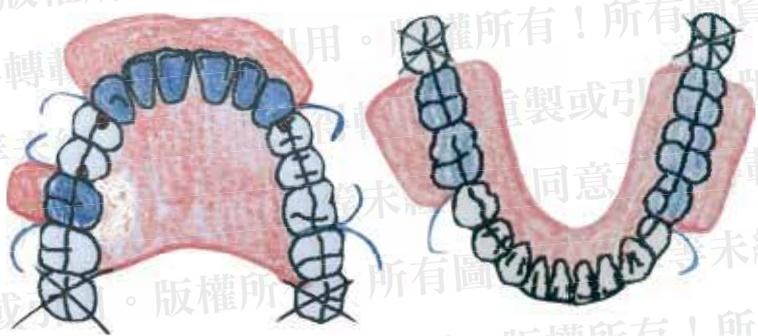
Treatment Course of Provisional Phase



104/02/03

- Consultation and initial record taken.

104/02/12



Interim denture design

104/03/02

- Periodontal department consultation and phase I treatment.

104/03/19

- 42-41-X-32 FPD removal, 42 ext then X-41-X-32 provisionalization.

104/04/22

- Lower ID delivery.

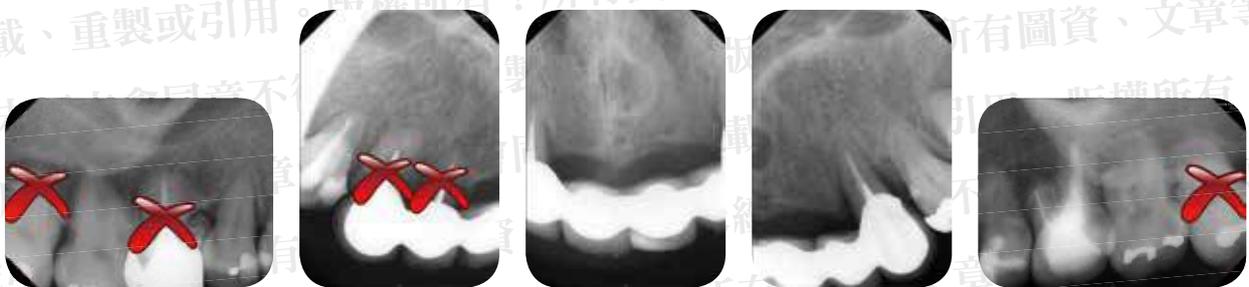




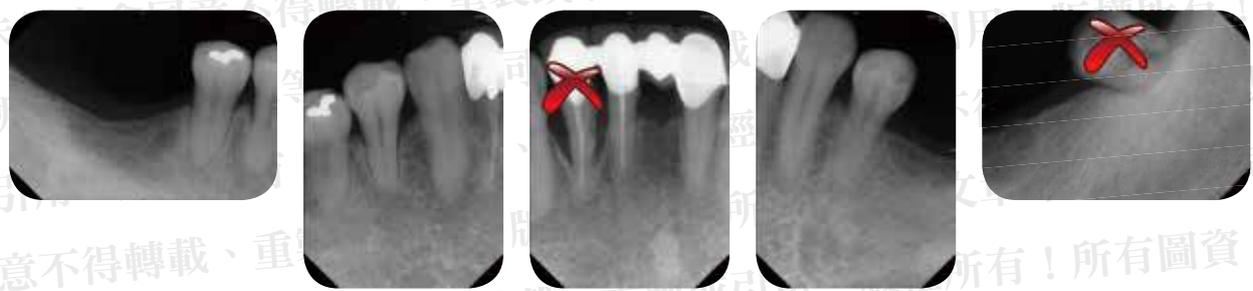
104/04/22-104/06/18

- Regular denture follow-up.

Radiographic Findings & Periodontal Charting



| 牙位 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
|----------|-----|----|-----|-----|----|----|----|----|----|-----|-----|-----|-----|-----|
| Buccal | 343 | | 333 | 426 | | | | | | 222 | 334 | 323 | 535 | 434 |
| Palatal | 332 | | 225 | 334 | | | | | | 223 | 333 | 444 | 323 | 434 |
| Mobility | | | | I | | | | | | I | I | | | |



| 牙位 | 47 | 46 | 45 | 44 | 43 | 42 | 41 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|----------|----|----|-----|-----|-----|----|-----|----|-----|-----|-----|----|----|----|
| Buccal | | | 313 | 323 | 323 | | 333 | | 323 | 324 | 323 | | | |
| Lingual | | | 323 | 323 | 423 | | 322 | | 223 | 323 | 333 | | | |
| Mobility | | | | | | | | | | | | | | |

Patient's Satisfaction

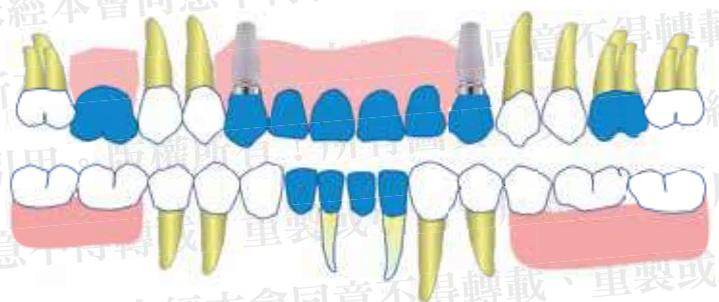
- Adaptation: good
- Esthetic: good
- Denture stability and retention: good
- Phonation: good
- Chewing function: increase

Patient's Expectation

- Easy self-maintain
- Economic limitation
- Removable dentures acceptable

Definitive Treatment Option

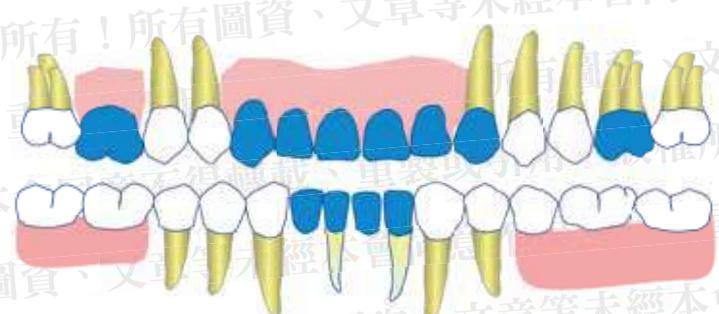
Option 1



Option 2



Option 3



Treatment Course of Definitive Prosthesis

X-41-X- 32 Preparation



X-41-X- 32 Impression



X-41-X- 32 Try metal Substructure

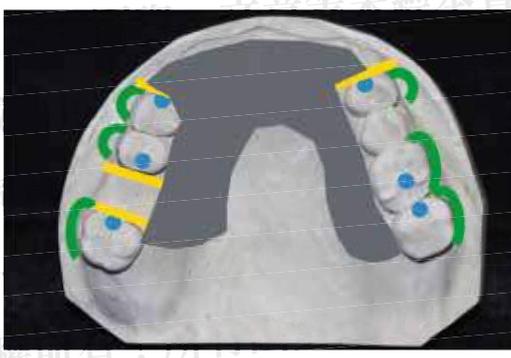


X-41-X- 32 Try metal Substructure

X-41-X- 32 Insertion



Framework Design



| Major connector | U shape |
|-----------------|-------------------|
| Guiding plane | 14M 15D 17M 24M |
| Occlusal rest | 14 15 17 24 26 27 |
| Casting clasp | 15 17 26 27 |
| I bar | 14 24 |



| Major connector | lingual plate |
|-----------------|---------------|
| Guiding plane | 45D 34D |
| Occlusal rest | 33 43 |
| Occlusal rest | 34 45 |
| I bar | 34 45 |

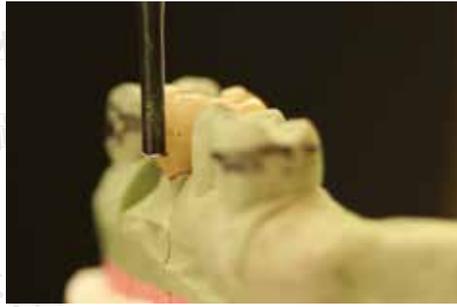
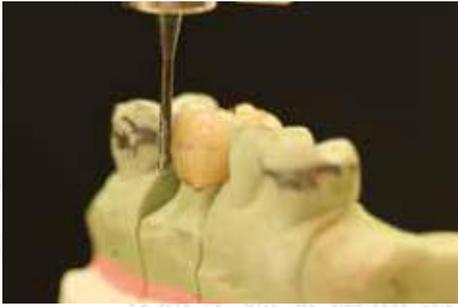
26 Survey Crown Preparation



26 Survey Crown Survey Tripod



26 Survey Crown Try-in



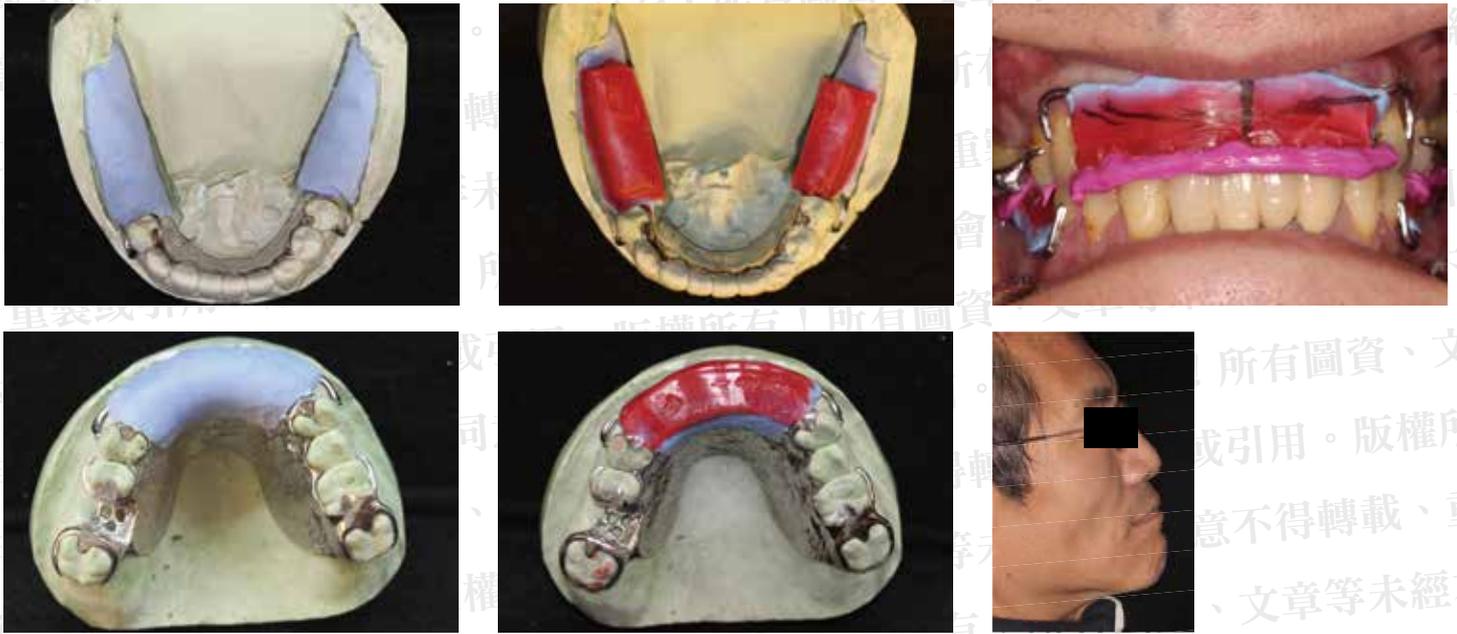
26 Survey Crown Try-in



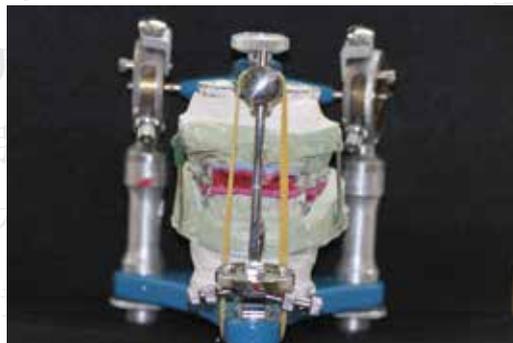
Altered Cast Tech. Impression



Bite Registration



Mounting



Denture Teeth Set-up



Denture Teeth Try-in & Bite Verification

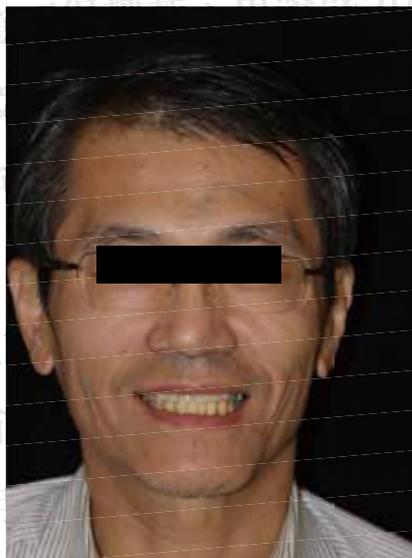


Denture Teeth Try-in & Bite Verification



Denture Delivery





治療前



治療後



Q&A

Q1：能不能敘述一下你的 abutment selection ？

A1：14 這顆既是 Endo 過的牙齒，有 extensive restoration，又是 key abutment，應該做 survey crown，而 23 這顆作為 root abutment，在 periodontal condition 的確應該有更嚴格的標準，若是要留下來，也應該考慮 root capping，病人日後易於清潔。

Q2：為何沒有考慮 rotational path 的設計？

A2：本病例為 tooth borne + 前牙 modification 的 case，的確是 rotational path 的 indication，也可以解決病人抱怨 clasp 出現在美觀區的問題。但是 rotational path 的 fabrication 和 adjustment 相形之下，也更為困難。

Q3：tooth 38 為何不留？

A3：雖然留下 38 可以讓下顎的假牙變成不是 bilateral distal free end，可是從 periodontal condition 來看，已經有 furcation involvement，而且這顆牙齒 mesial shift 和 tilting，對後續取 bite 和排牙沒有助益。

