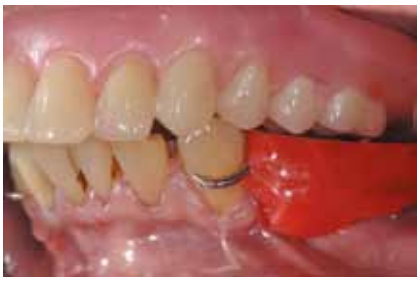
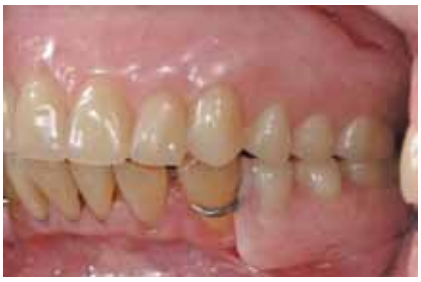
Case Conference 3

2013/06/22
台南奇美醫院
Instructor：Dr.葉松穎

Basic Information

Gender: male
Age: 42 y/o
Occupation: 鏡片拋光師
Attitude: Philosophical

Chief Complaint

I want to improve the swelling of upper anterior gum and remake my lower denture.

PMH

Hutchinson-Gilford Progeria syndrome
Denied any food and drug allergy

PDH

OD、endo、extraction、fixed prosthesis、periodontal surgery、removable prosthesis
Cellulitis of 13 s/p at ER on 101/01/05

Personal habit

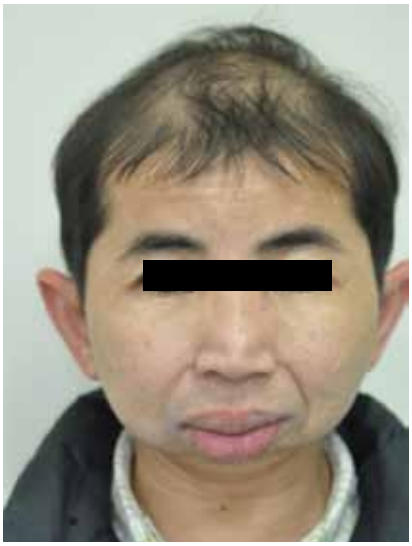
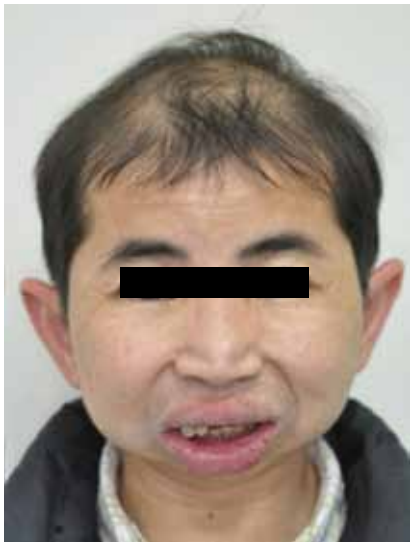
ABC history:
Smoking: denied
Betel nuts: denied
Drinking: denied
Parafunction: denied
Oral hygiene care:
Dental brush: 1 times per day (起床和睡前) 3 mins, arbitrary
Dental floss: never
Other appliances: nil

Extraoral Examination



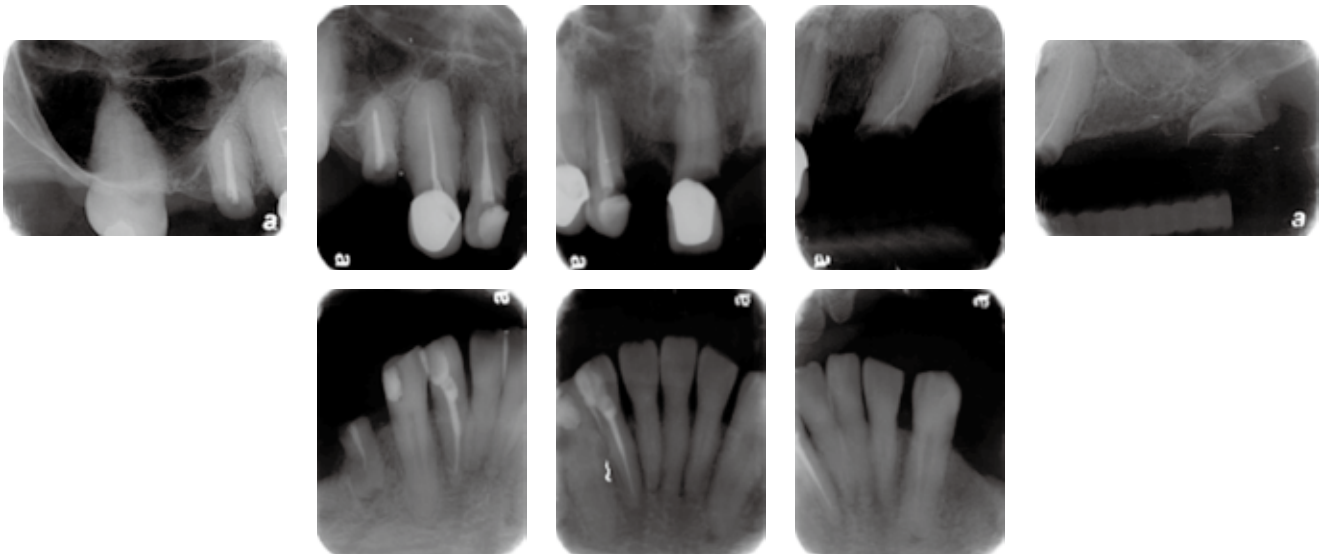
(With denture)

Facial Asymmetry: No
Facial profile: Convex
Lip line: Low
TMJ pain: No
TMJ click: No
Maximum mouth opening: 30 mm
Jaw deviation: No
Bruxism: No
Numbness: No
Weak chin: Yes


(Without denture)

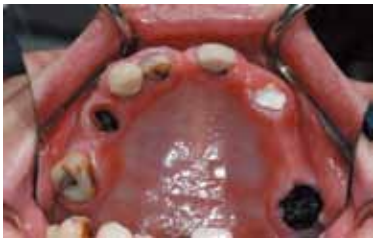
Radiographic Examination



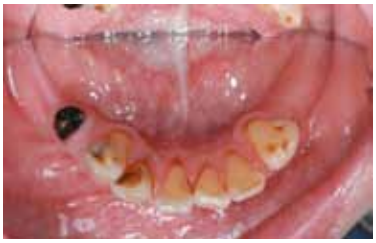
Missing: 11, 15, 16, 18, 22, 24, 25, 26, 28, 34~38, 45~48
Ill-fitted Crown: 12, 21
Residual roots: 14, 23, 27, 44
Caries: 12~14, 21, 27,42~44
Crowding: 32,33; 42,43
Spacing: 33, 34

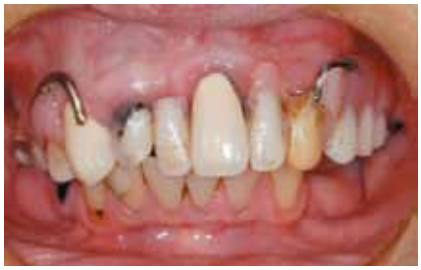
#13 residual root
#21-x-23 bridge, advanced periodontitis
#11,12,14,15,16,17,24,25,26,27 missing

Radiographic Examination



Asymmertry UA gingival zenith and tooth size
Flareout and attrition of lower anterior teeth
Missing: 11, 15, 16, 18, 22, 24, 25, 26, 28, 34~38, 45~48




Information related to denture construction:
Arch form: Maxillary and mandibular ovoid
Ridge form: Maxillary type I and mandibular type V (Atwood's classification)
Palate form: Class II (House's classification)
Lat. Throat form: Class II (Neil's classification)
Muscle tonus: Flaccid
Tongue position: Normal
Tongue size: Normal
Salivation: Serous

Probing Data

Distal				Facial									Mesial									M	F	D
	18			17			16			15			14			13			12			21		
A.L.				2	2	3							2	2	2	2	2	3	2	2	2	2	1	3
P.D.				2	2	3							2	2	2	2	2	3	2	2	2	2	1	2
P.D.				2	3	3							2	2	2	3	3	3	3	2	3	2	1	2
5A.L.				2	3	3							2	2	2	3	3	3	3	2	3	3	4	5
Mobili				0									0			0			0			0		
F.I.				0	0	0																		
Distal							Palatal									Mesial								

Mesial				Lingual															Distal					
	31			32			33			34			35			36			37			38		
A.L.	2	1	1	2	2	2	2	3	3															
P.D.	1	1	1	2	1	2	2	2	2															
P.D.	1	1	2	2	1	2	2	1	2															
5A.L.	1	1	2	2	1	2	2	1	2															
Mobili	0			0			0																	
F.I.																								
Mesial							Buccal									Distal								

Distal				Lingual										Mesial								
	48			47			46			45			44			43			42			41		
A.L.																1	2	1	1	1	1	2	3	1
P.D.																1	1	1	1	1	1	2	1	1
P.D.																3	1	2	2	2	2	2	1	3
5A.L.																3	1	2	2	2	2	2	1	3
Mobili																	0			0			0	
F.I.																								
Distal								Buccal												Mesial				

Problem List

- Ill-fitted Crown: 12, 21
- Residual roots: 14, 23, 27, 44
- Caries: 12~14, 21, 27, 42 , 43
- Lower anterior teeth: spacing & crowding, flare out & attrition
- Deep bite occlusion
- Insufficient R't inter-occlusal space
- Skeletal class II

Diagnosis

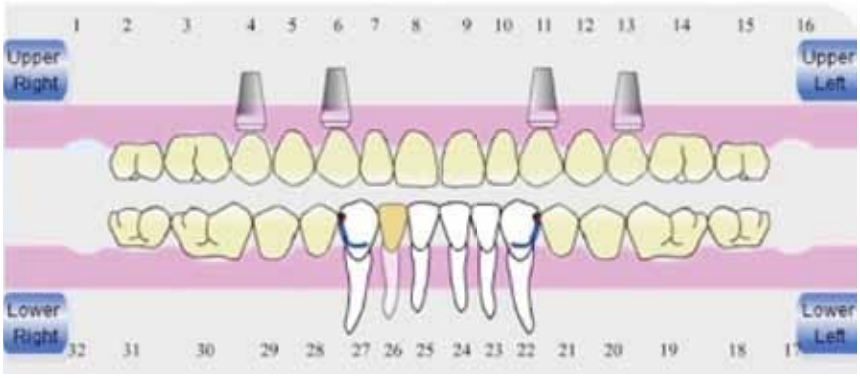
- Generalized chronic gingivitis
- Residual roots: 14, 21, 23, 27, 44
- Caries: 12~14, 21, 27, 42 , 43
- 12, 23, 42: Previously endodontic treatment, Normal apical tissue
- 13: Previously endodontic treatment, Asymptomatic apical periodontitis
- Hutchinson-Gilford Progeria

Definitive Treatment Plan-Option 1

Maxilla:
(12, 13, 21 with poor prognosis)

- FM scaling and OHI
- Evaluation of 12, 13 , 21
- Extraction of all maxillary retained teeth, 44
- Delivery of maxillary interim CD and mandibular interim RPD
- OD: 43
- Delivery of 42 provisional crown
- RCT: 42

Definitive prostheses:
Maxillary implant-supported overdenture
Mandibular Kennedy I RPD with 42 surveyed crown

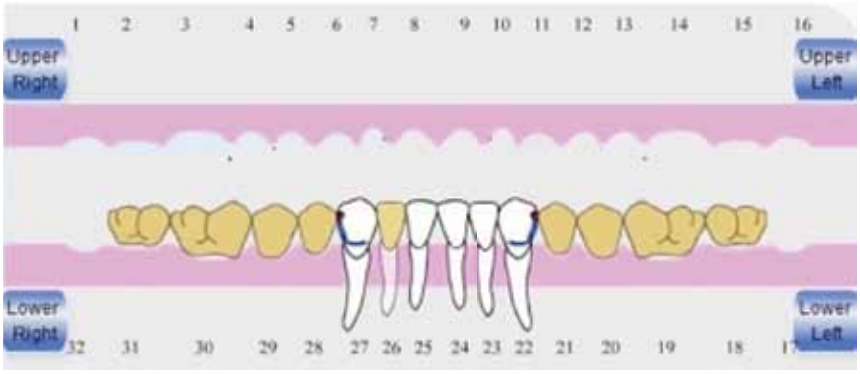


Definitive Treatment Plan-Option 2

(12, 13, 21 with poor prognosis)

- FM scaling and OHI
- Evaluation of 12, 13 , 21
- Extraction of all maxillary retained teeth, 44
- Delivery of maxillary interim CD and mandibular interim RPD
- OD: 43
- Delivery of 42 provisional crown
- RCT: 42

Definitive prostheses:
Maxillary complete denture
Mandibular Kennedy I RPD with 42 surveyed crown

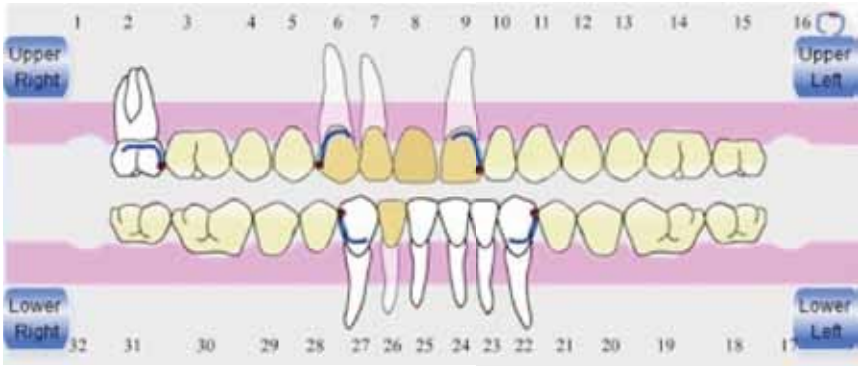


Definitive Treatment Plan-Option 3

(12, 13, 21 good prognosis)

- FM scaling and OHI
- Evaluation of 12, 13, 21 and delivery of 12~21 provisional FPD
- OD: 43
- Delivery of maxillary and mandibular interim RPD; Extraction of 14, 23, 44
- Delivery of 42 provisional crown
- Forced eruption and crown lengthening procedure: 12, 13, 21

Definitive prostheses:
Maxillary Kennedy II RPD mod. 1 with 12~21 FPD
Mandibular Kennedy I RPD with 42 surveyed crown

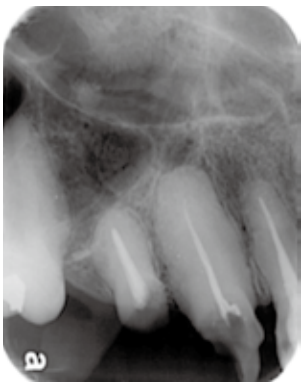
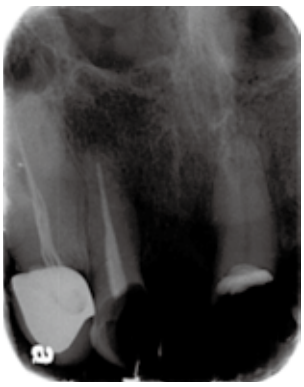
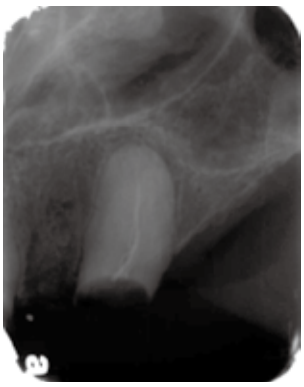
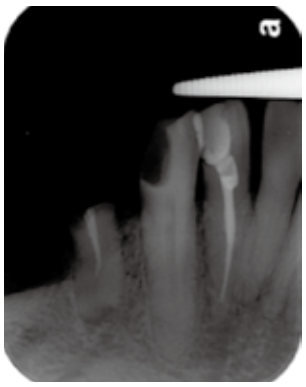
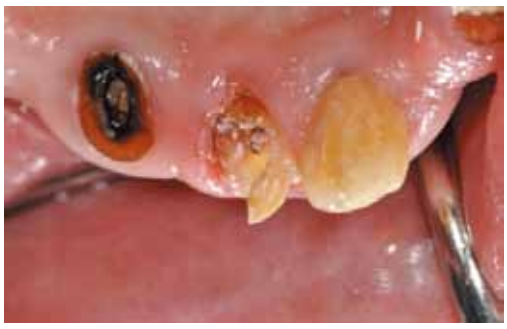
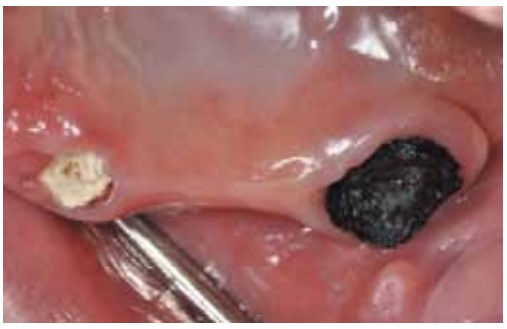


Pt's expectation

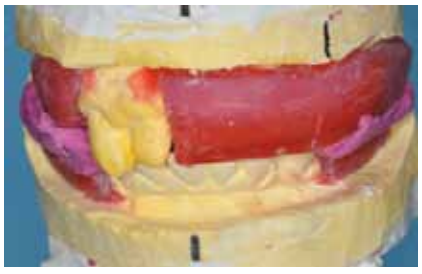
No orthodontic treatment
Preserve more teeth
Financial consideration

Definitive Treatment Course

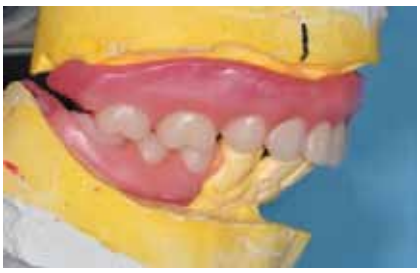
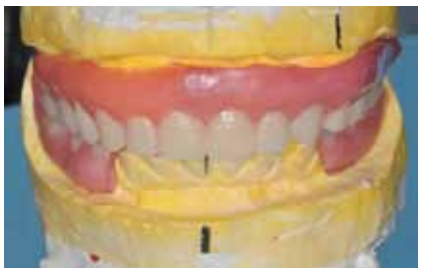
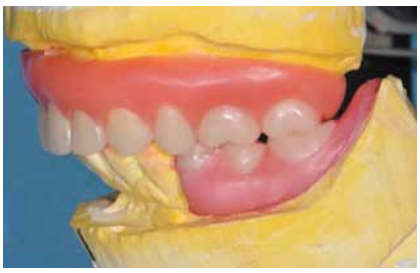
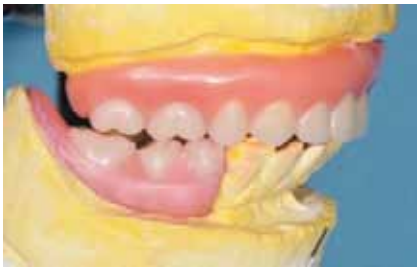
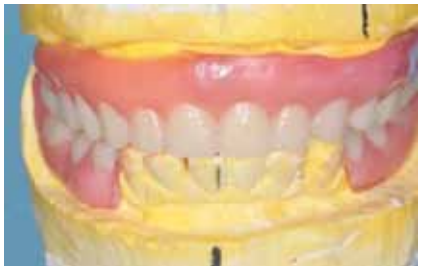
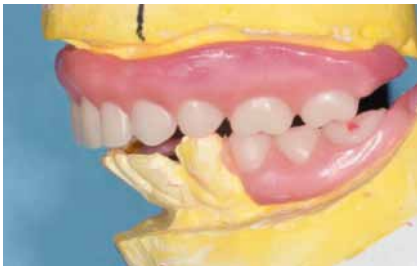
FM scaling and OHI
Evaluation of 12, 21, 43
12, 43 OD
Removal of 13 prosthesis and 23 caries

Occlusal rim

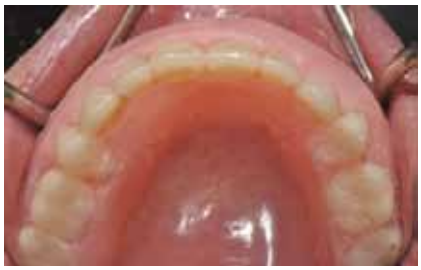

Interim wax denture

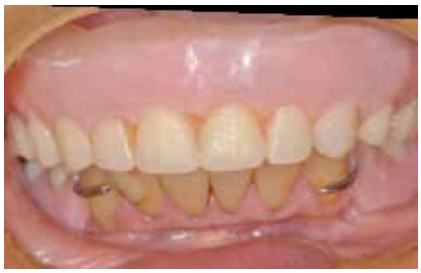
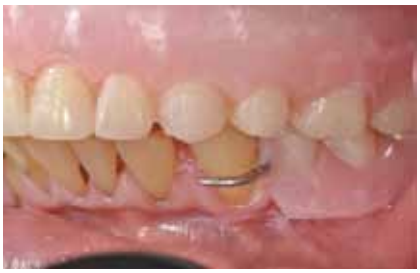
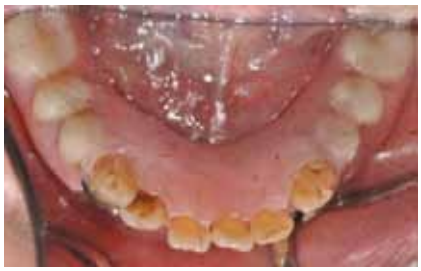







Lateral excursion　　Protrusion　　Lateral excursion

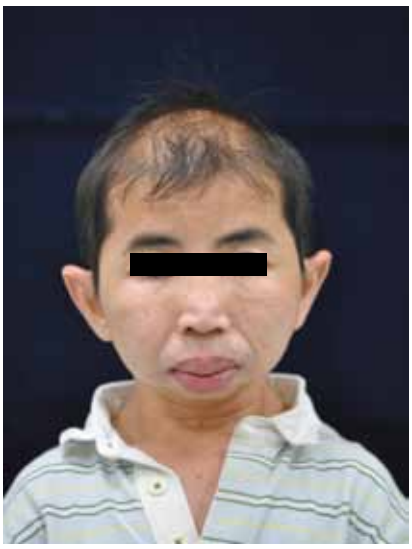
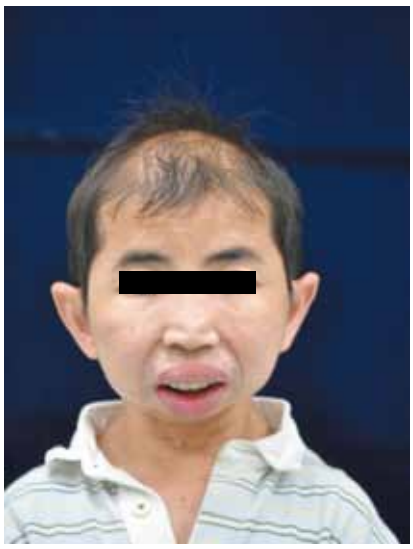
Delivery of interim complete denture

Extraction of 12, 13, 14, 17, 21, 23, 27, 44



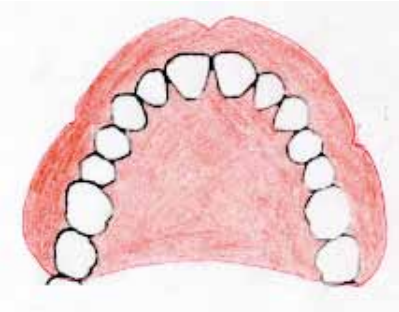
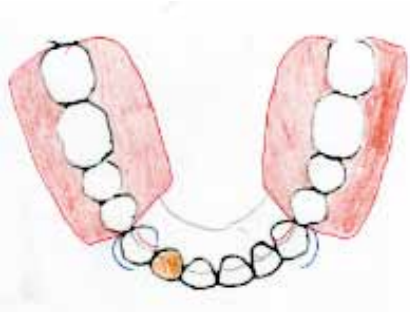
Provisionals and Interim Dentures- Extraoral


Perio. re-evaluation

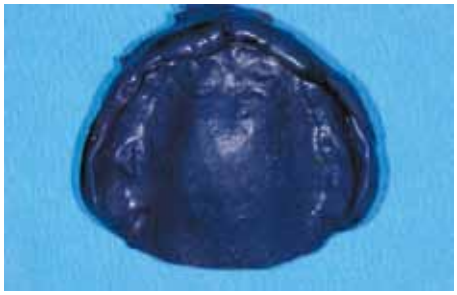
	43			42			41			31			32			33		
A.L.	1	2	1	1	1	2	2	3	1	2	1	2	2	2	1	1	3	3
P.D.	1	1	1	1	1	2	2	1	1	2	1	2	2	1	1	1	2	2
P.D.	2	2	2	2	2	3	2	1	3	2	1	2	2	1	2	2	1	2
5A.L.	2	2	2	2	2	3	2	1	3	2	1	2	2	1	2	2	1	2
Mobili	0			0			0			0			0			0		
F.I.																		

Definitive Treatment Plan

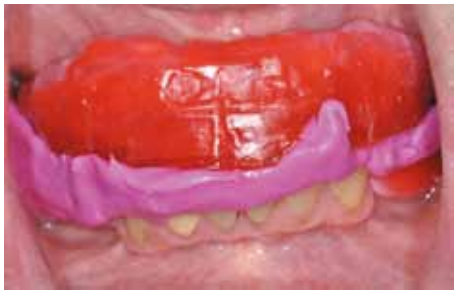



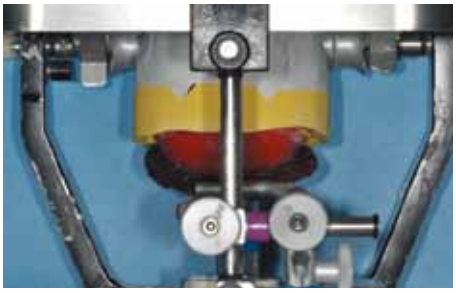
Delivery of 42 provisional crown
42 endodontic treatment
Definitive prostheses
Maxilla: complete denture
Mandibular: Kennedy I RPD with 42 surveyed crown

Border molding & final impression

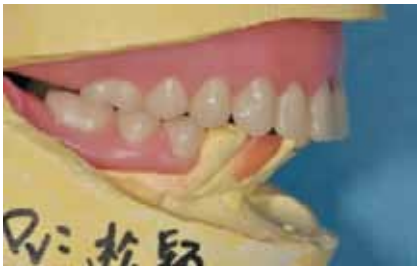


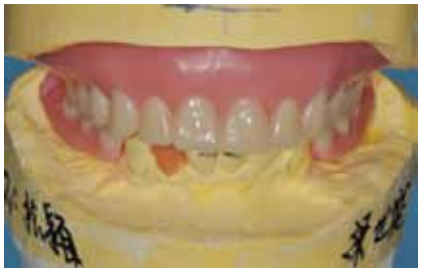
Bite Registration and Facebow Transfer

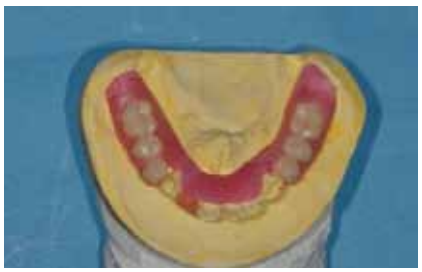




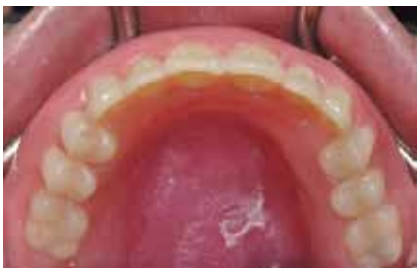
Diagnostic wax up and tooth arrangement

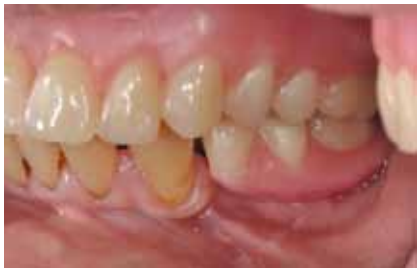


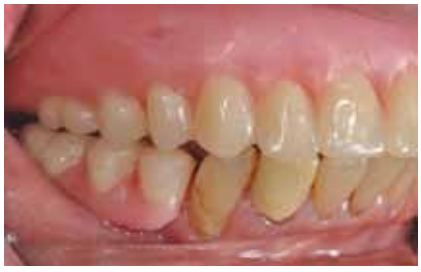


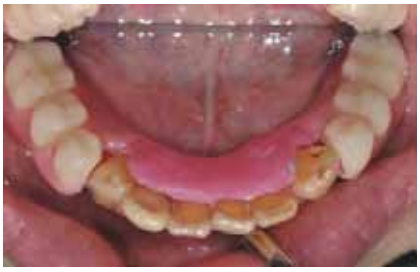


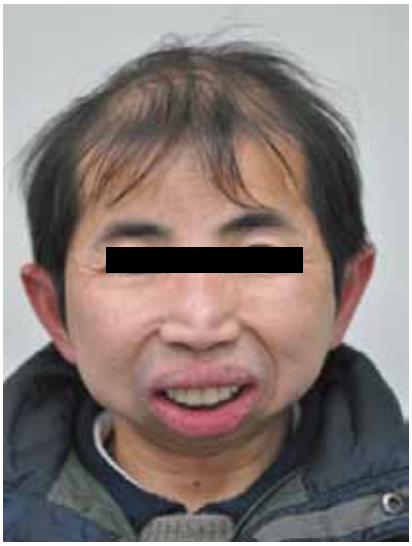
Wax denture try-in



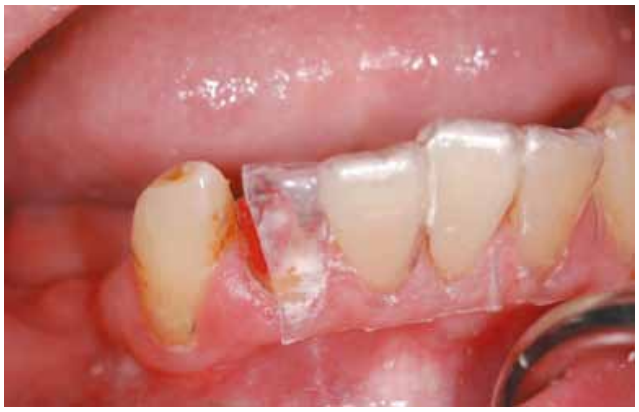


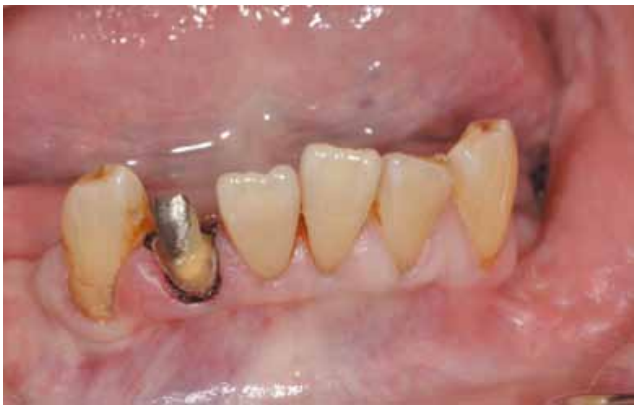


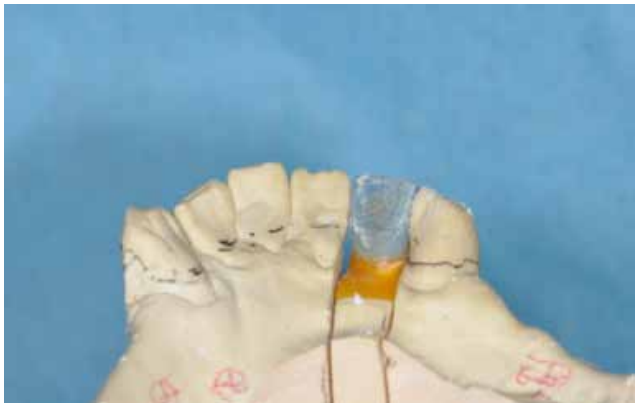


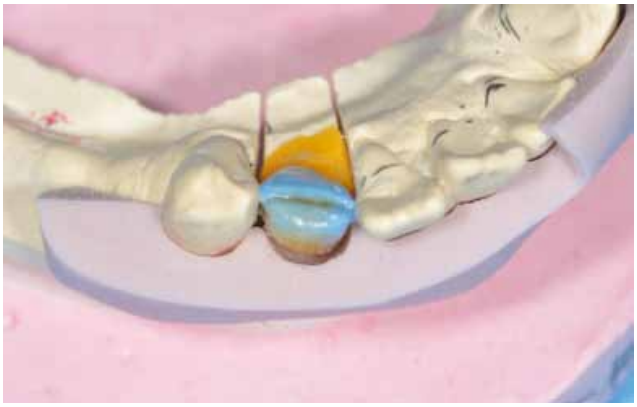


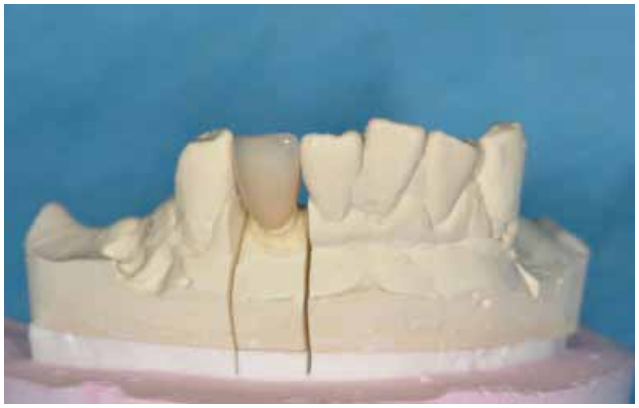
#42 surveyed crown

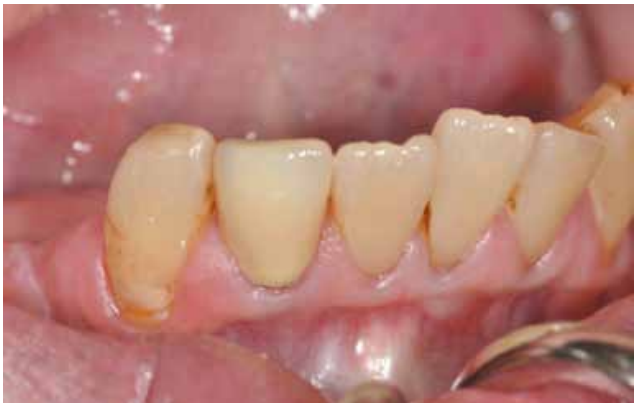




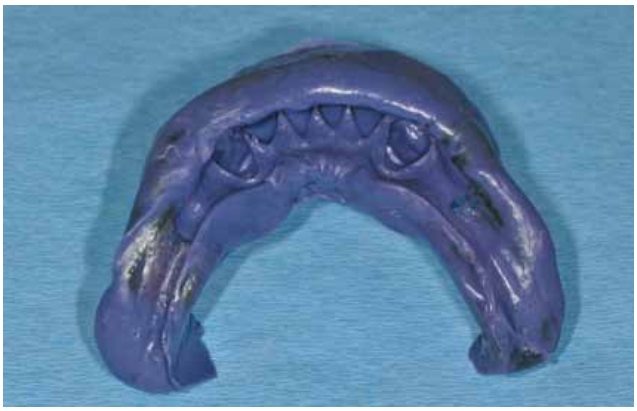
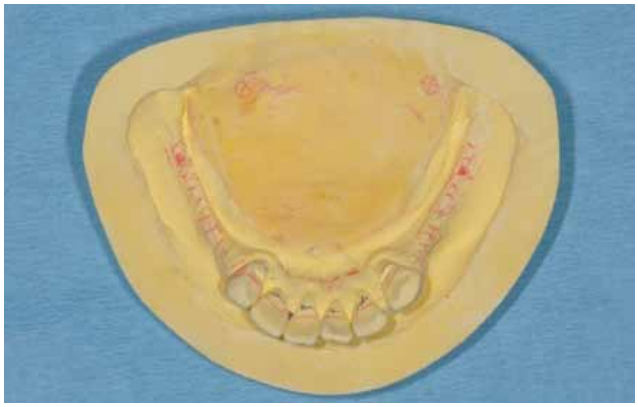
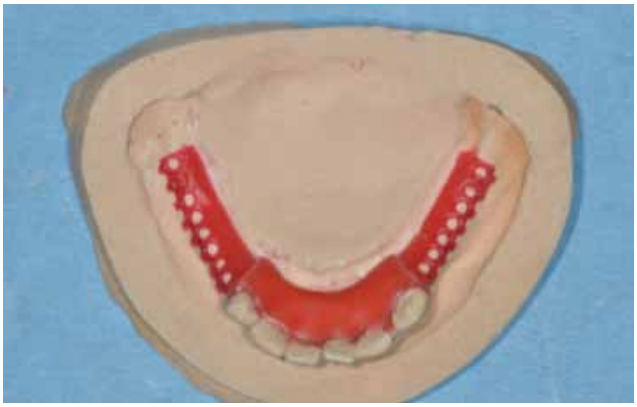
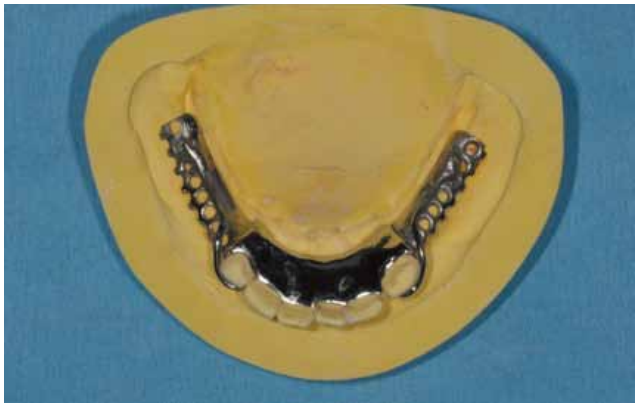
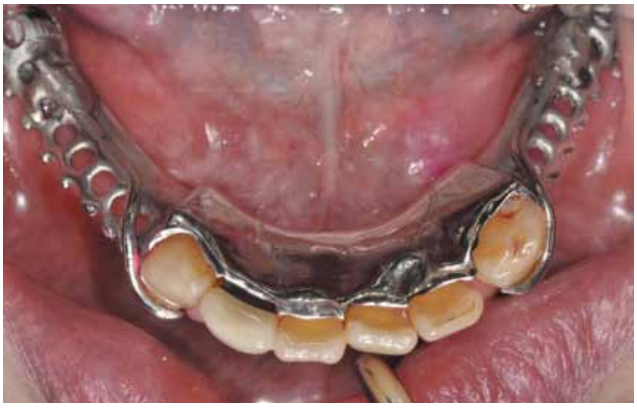








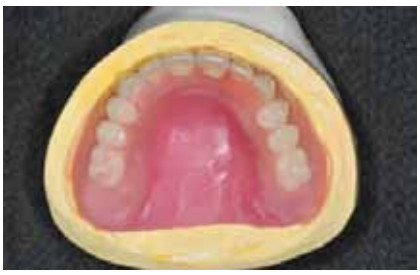
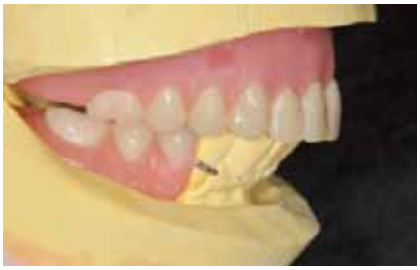
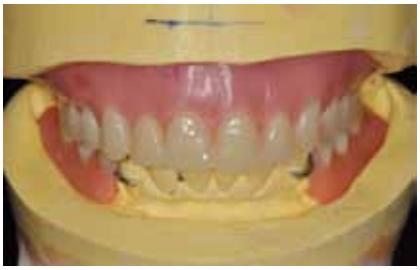
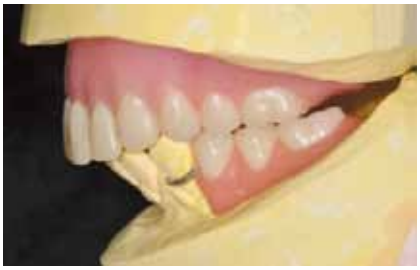
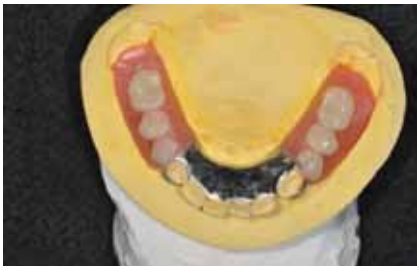
Border molding and final impression of mandibular arch

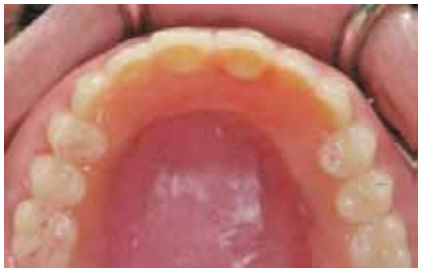







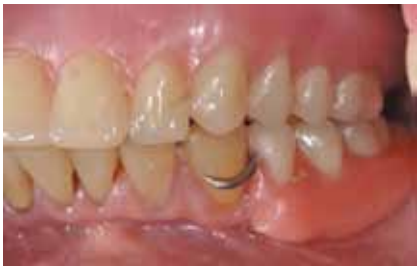
CR record

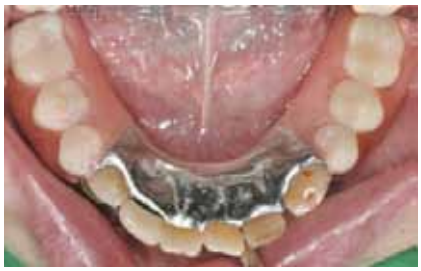


Definitive wax denture

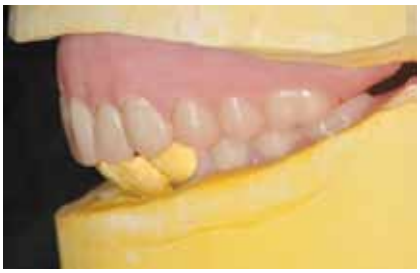






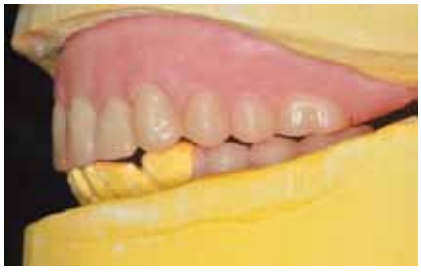






Lab remounting

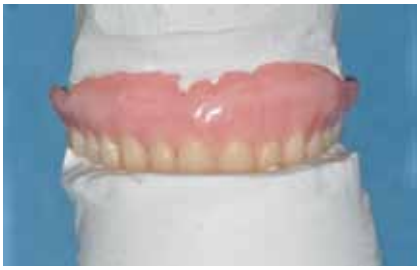




R't Lateral movement

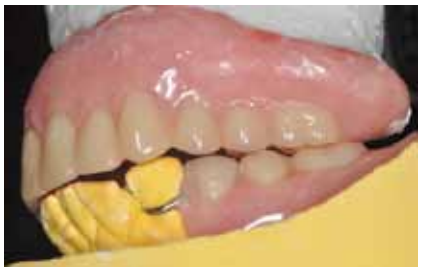
L't Lateral movement

Clinical remounting



R't Lateral movement

L't Lateral movement

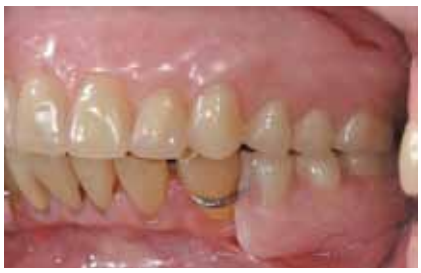


R't Lateral movement

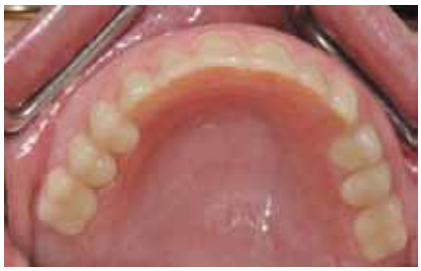
L't Lateral movement

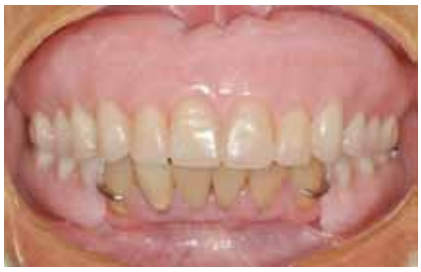
Definitive prostheses

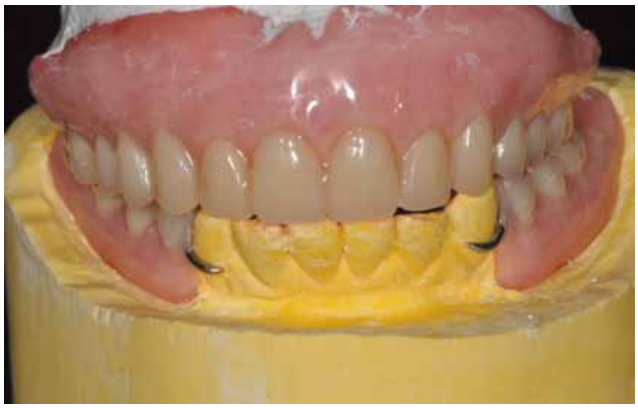
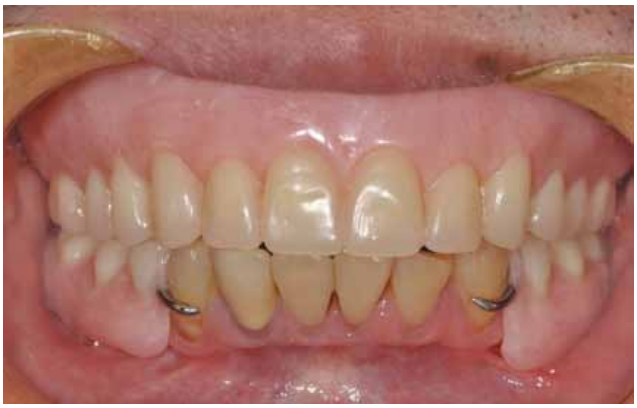
R't Lateral movement

L't Lateral movement



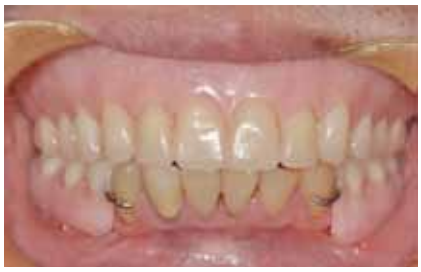


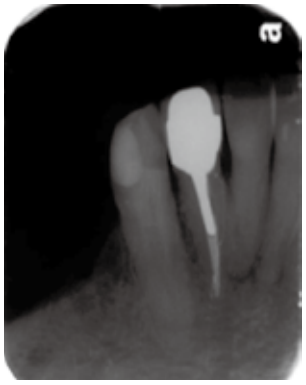
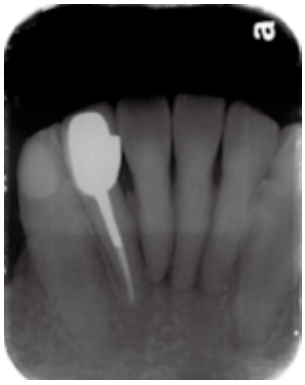
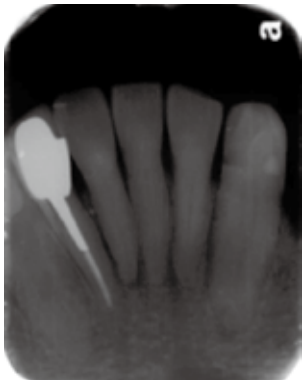




Protrusion



6 months f/u

Q1： 這位病人的upper abutment看起來還不錯，請問最後決定拔掉的原因是什麼？

A1： 原本一開始的確是有考慮幫病人留住upper牙齒製作overdenture，可以避免resorption保留住ridge、也可仰賴abutment增加retention，但最後因為種種因素決定把牙齒全部拔掉然後作上顎的CD。原因如下：

1. 若要製作overdenture那麼上顎的abutment teeth還要coping，病人無法多負擔這些費用。
2. 病人的開口度只有30mm，第一考慮到tray置入的困難性與整個治療的方便性，希望能夠拔牙騰出空間，第二張口度太小要放兩個假牙進去也有困難，拔牙會可以增加空間方便假牙的置入。
3. 病人的arch discrepancy很大，拔完牙後會希望upper resorption以後降低archdiscrepancy。

Q2： 這個case最大的困難點在那兒？

A2： 1. 第一是剛剛提到的vertical dimension的問題。

2. 第二就是CR的位置，因為這位病人dentition是Class II，有習慣向前咬的習慣，也可以看到他前面的牙齒就是因為有習慣protrusion所以在incisal edge上都有attrition。所以在找CR點時時常都咬不太到，碰到的點通常都是病人前突下顎時，所以在製作上有經過多次的測試然後一邊訓練病人咬到正確的CR點。

Q3： 請問是何時拔除upper牙齒？

A3： 並不是一開始就把upper牙齒拔除，一開始有先保留住然後印模準備製作interium denture，等印完模做完cast後才同時在 口內跟cast上拔除牙齒。

Q4： 請問早衰症的症狀是如何？

A4： 壽命較短、通常男性好發率比女性高，同家族出線機率也較高，是因為LMNA gene出現問題，這類患者的心血管常有問題需要長期服用asprin控制。另外文獻也指出他們的鎖骨、hip bone也會出現問題，比較可惜的是我們沒有幫他拍攝pano，所以並不曉得這個病人他TMJ的情形如何，不知是否也有受到影響。另外有發現這個病人的傷口癒合的比一般人慢。

Q5： 請問原本考慮的矯正計畫是要做什麼事情？

A5： 希望能關閉space然後改正occlusal plan，這個病人不會去考慮upright他的牙齒，upright後會造成咬合更不好。

Q6： class II ，病人會有習慣往前咬的問題，如何設計前牙的咬合關係？

A6： 在CR時light contact，前凸運動時有contact。

Q7： 下顎前牙flare out ，製作過程中遇到的問題？

A7： 的確會不利於製作，所以在治療計畫中有建議病人矯正。

建議： 取完bite之後可將bite取下再去照相，可以較清楚的看到上下顎的相對位置。治療上似乎缺乏對這個病人的好奇心，沒有去觀察病人較適合那一種的治療計畫選擇，或許可再多花點時間去觀察病人的狀況。