

One step border molding on removable prosthesis

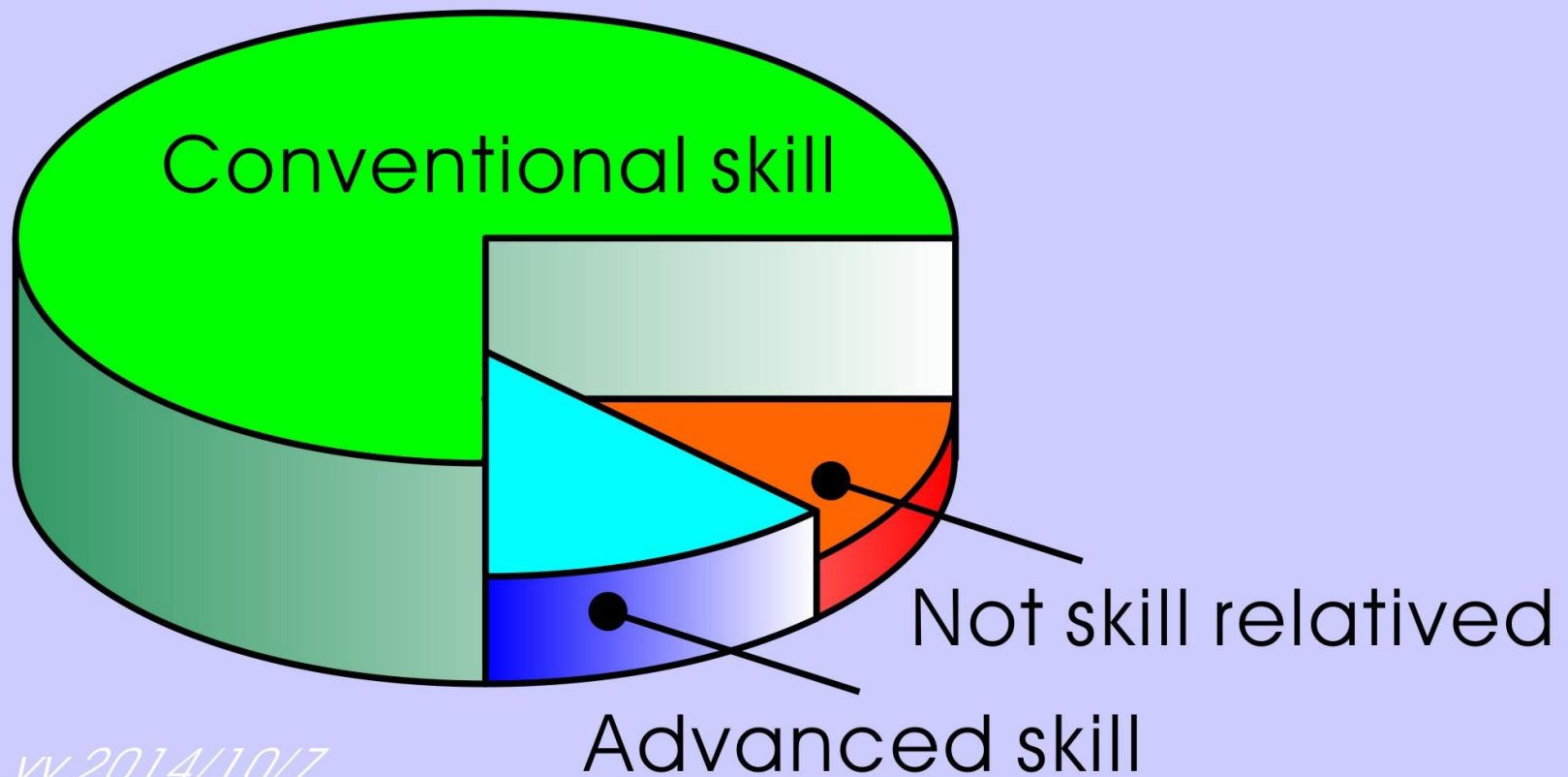
蔡正文醫師

- 高醫牙研所牙周補綴學碩士
- 家庭家醫學專科醫師
- 牙周補綴學專科醫師
- 前高醫牙科補綴科助教、牙科總醫師
- 前大寮聖若瑟醫院牙科主任
- 高雄縣教育局教師口腔衛教指定講師
- 唯真審美牙醫診所負責人

高屏澎聯合會刊漫畫專欄作者

vincent.prostho@gmail.com

What border molding can offer?



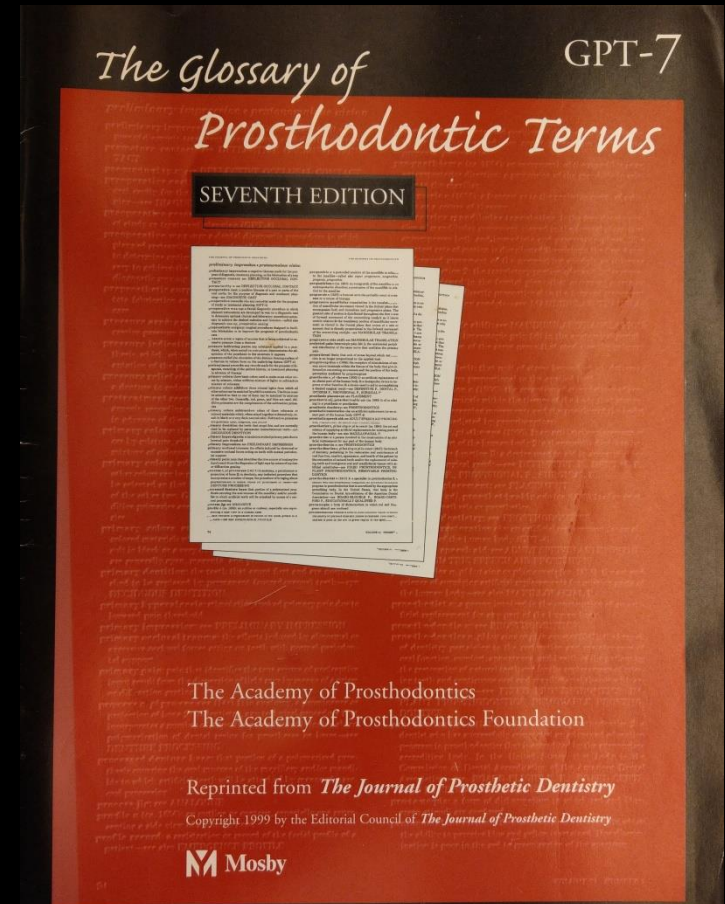
yy 2014/10/7

Impression philosophies of CD

David A. Felton, Lyndon F. Copper

JPD,1996; 4(1): 39~51

- Low pressure technique (Mucostatic)
- Functional impression technique
- The selected pressure technique



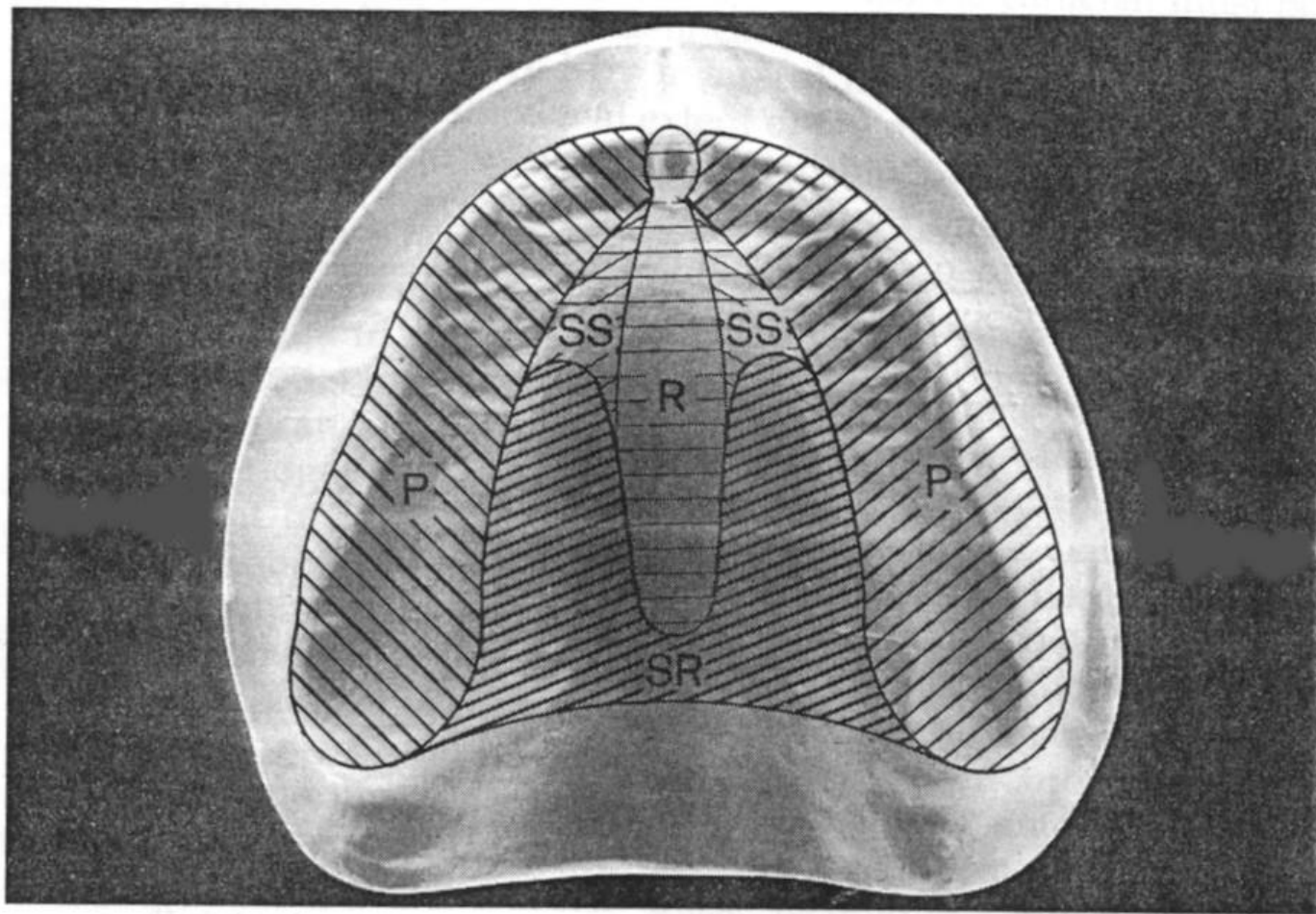


Figure 1. Maxillary cast indicating primary [(P) (residual ridge)] and secondary [(SS) (rugae)] stress-bearing areas, secondary retention [(SR) (slopes of residual ridges)] area, and areas of necessary relief (R).

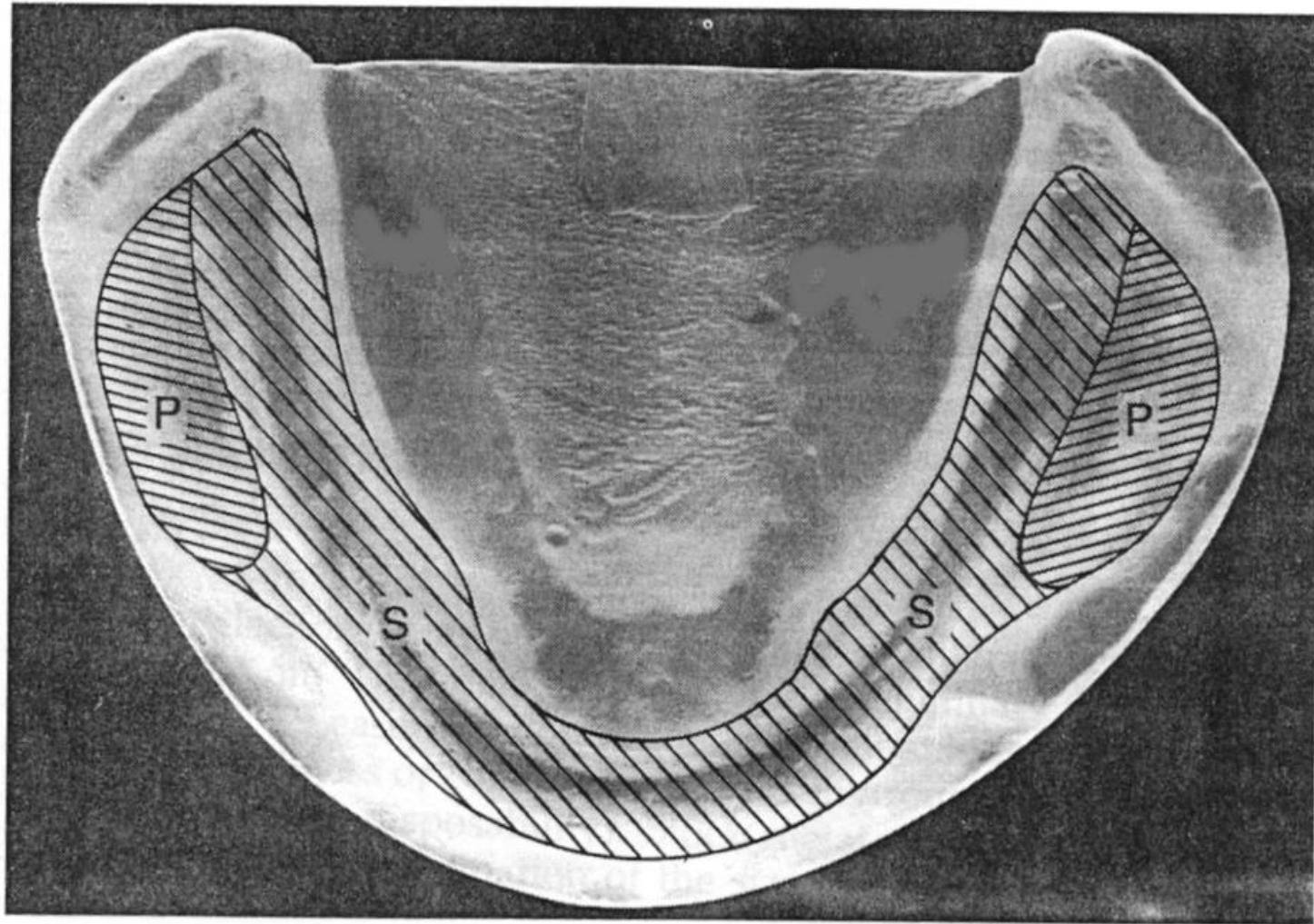


Figure 2. Mandibular cast indicating primary [(P) (buccal shelf)] and secondary [(S) (slopes of residual ridges)] stress-bearing areas.

3M of successful denture impression

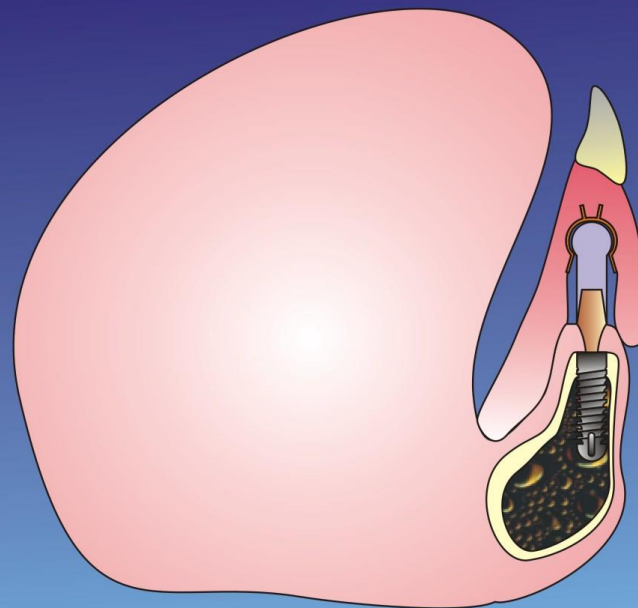
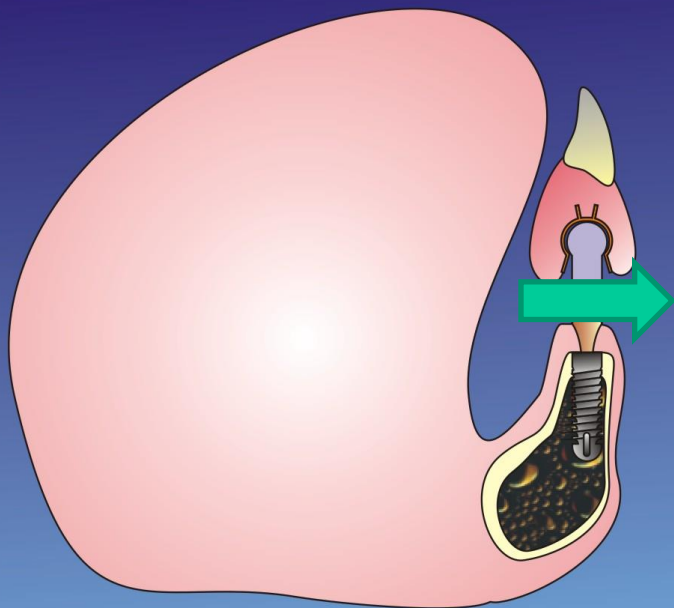
- Mold
- Material
- Method



- 1) Preliminary impression
- 2) Master impression

Mold:

1. Rigidity
2. Easy modification
3. Anatomic coverage
4. Stability



Review of anatomic coverage

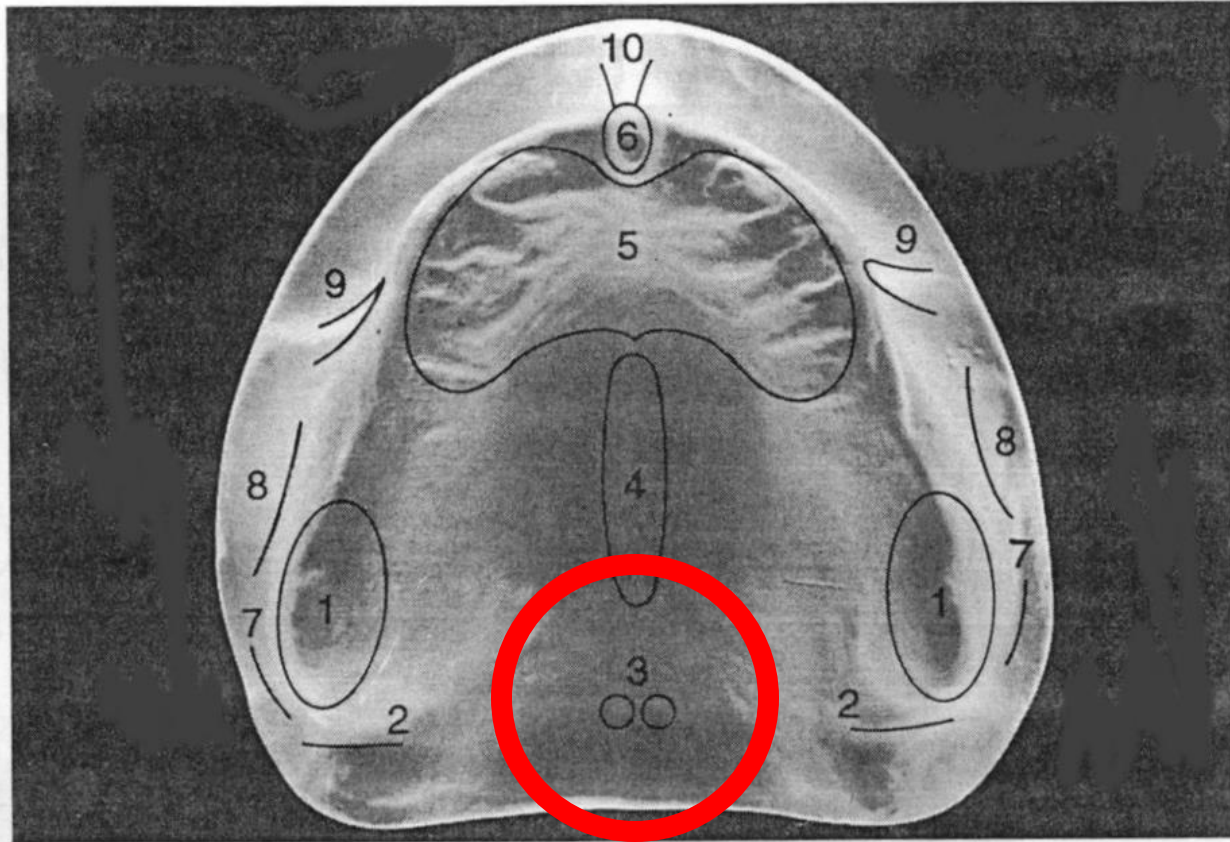


Figure 2. Maxillary diagnostic cast indicating duplication of anatomic features. 1 - tuberosities; 2 - buccal cusps; 3 - central incisors; 4 - upper central incisor; 5 - upper lateral incisors; 6 - upper canine; 7 - buccal cusps; 8 - tuberosities; 9 - buccal cusps; 10 - upper canine.

Boucher's Prosthodontic treatment for edentulous patients, 1982, 8th edition, P140 / P412.....?

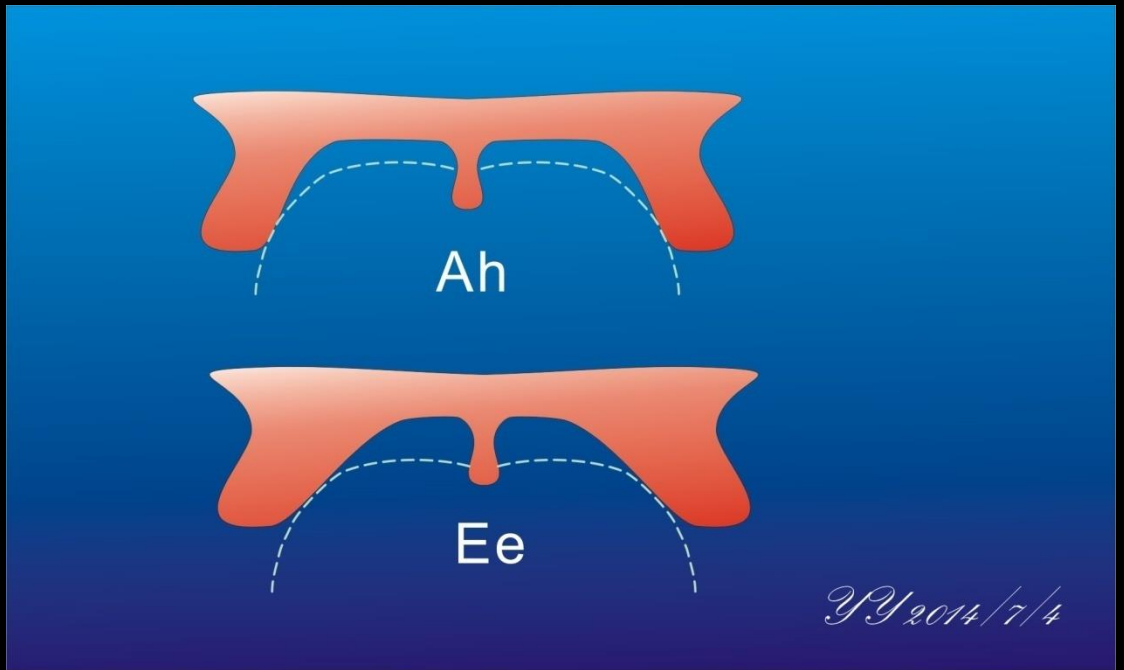
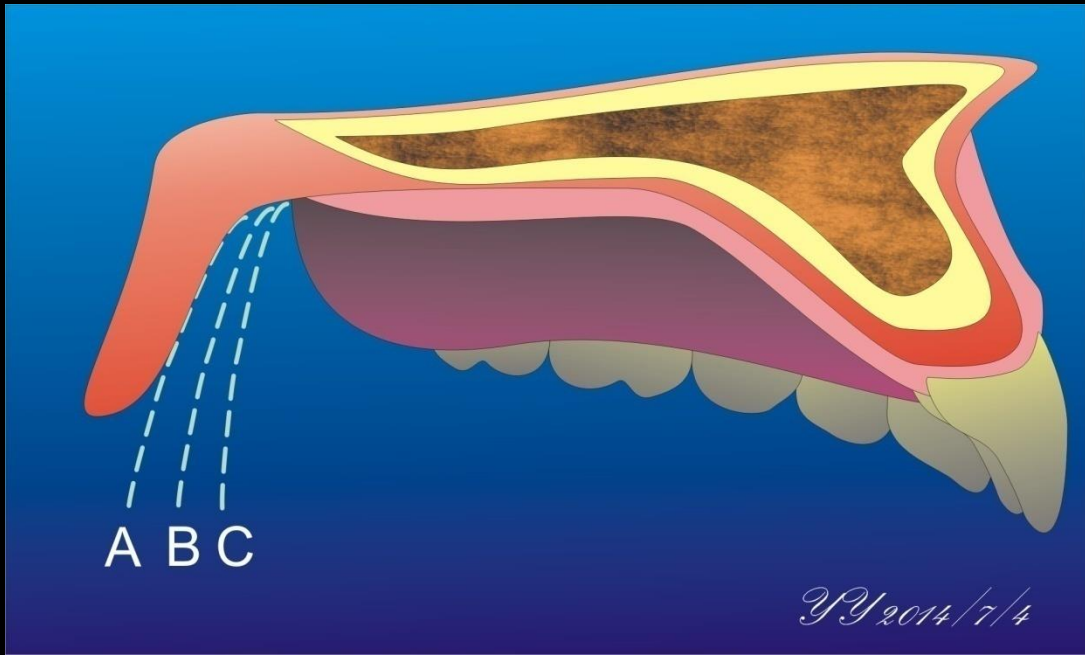
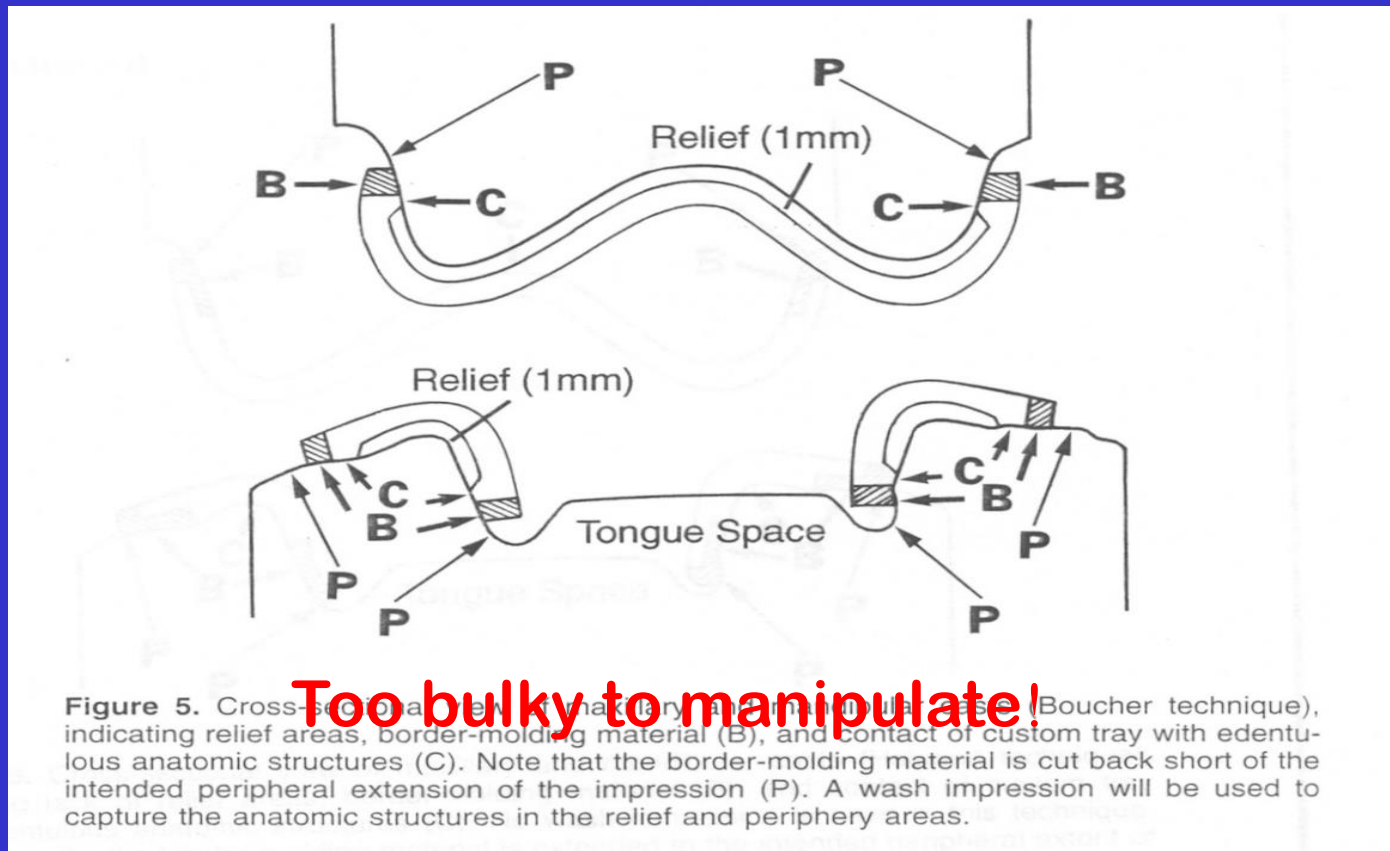




Figure 4. Mandibular diagnostic cast, indicating duplication of anatomic features. 1 = buccal shelf, 2 = masseteric notch, 3 = retromolar pad, 4 = retromylohyoid fossa, 5 = alveololingual sulcus, 6 = buccal vestibule, 7 = buccal frenum, 8 = labial frenum, 9 = lingual frenum, and 10 = labial vestibule.

Individual tray fabrication

Boucher technique



Halperin technique

- Impression materials depending.

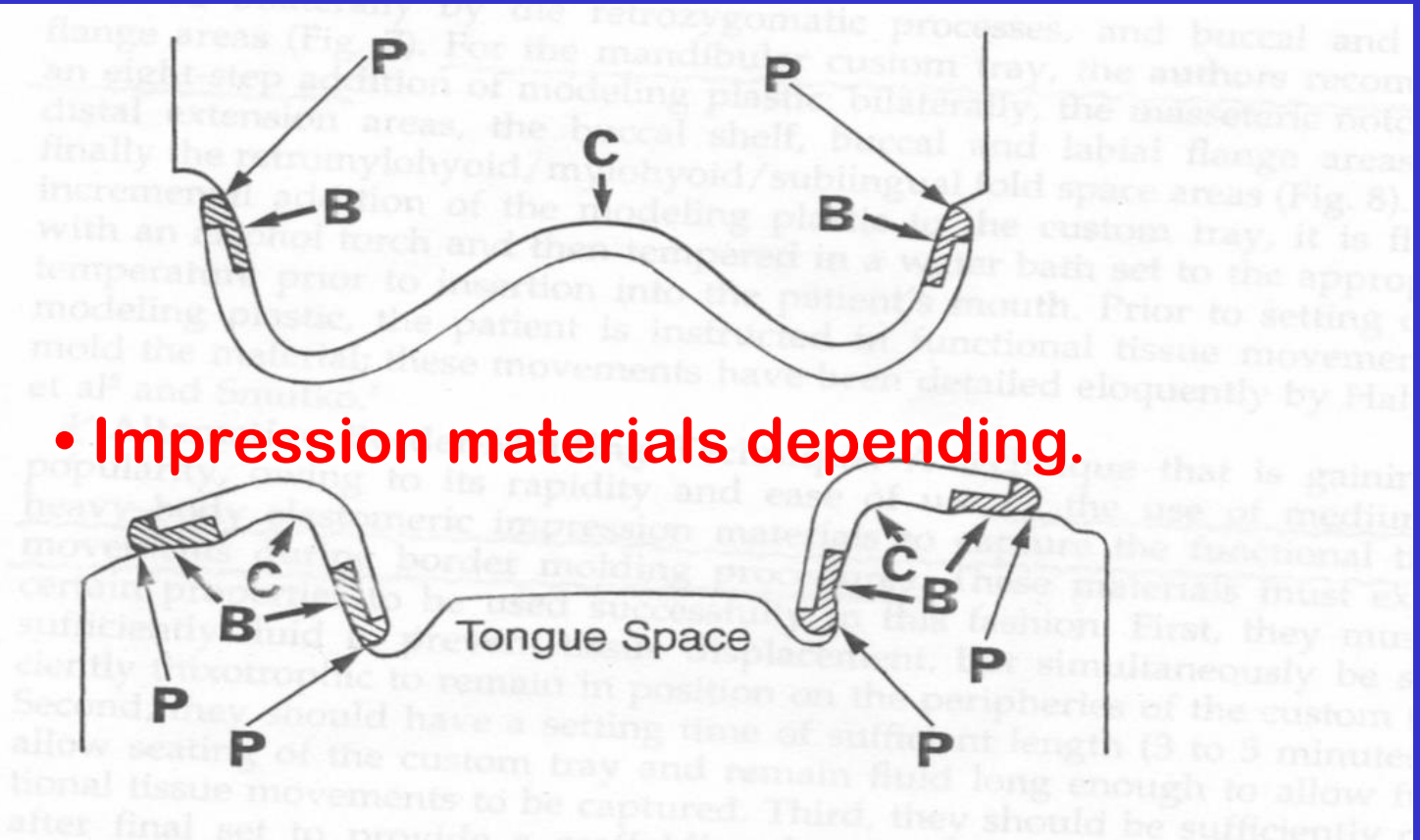


Figure 6. Cross-sectional view of maxillary and mandibular casts (Halperin technique), indicating lack of relief areas, border-molding material (B), and contact of custom tray with edentulous anatomic structures (C). No wash impression is used in this technique. Consequently, the border-molding material is extended to the intended peripheral extent of the prosthesis.

Review of one step border molding technique

- Lawrence S. Lipkin 1988, JPD;60(3): 399 **Soft compound syringe loading technique**
- George A. Kirk, John E. Holt 1985, JPD; 53(4): 598~599 **Perio-pack rolled rope technique**
- Ali Bolouri 1977, JPD; 37(1): 89~91
Wax & self-curing acrylic resin technique

Sequence of CONVENTIONAL border molding

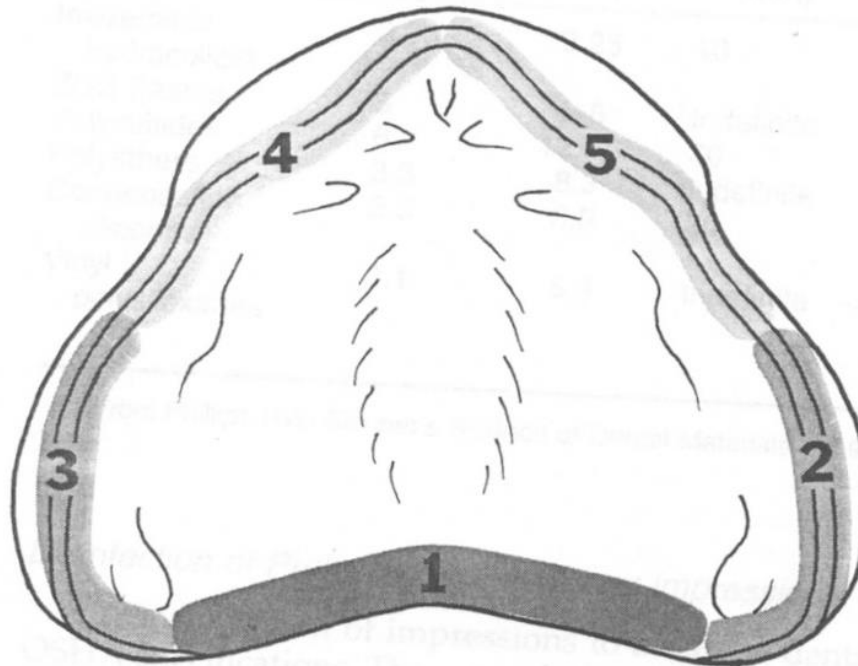


Figure 7. Interior aspect of the maxillary custom tray showing the five-step addition of modeling compound used for border-molding procedures on the maxillary custom tray. The posterior palatal seal area is recorded first (1), followed bilaterally by the retrozygomatic processes (2, 3), and finally, by the buccal and labial vestibules (4, 5).

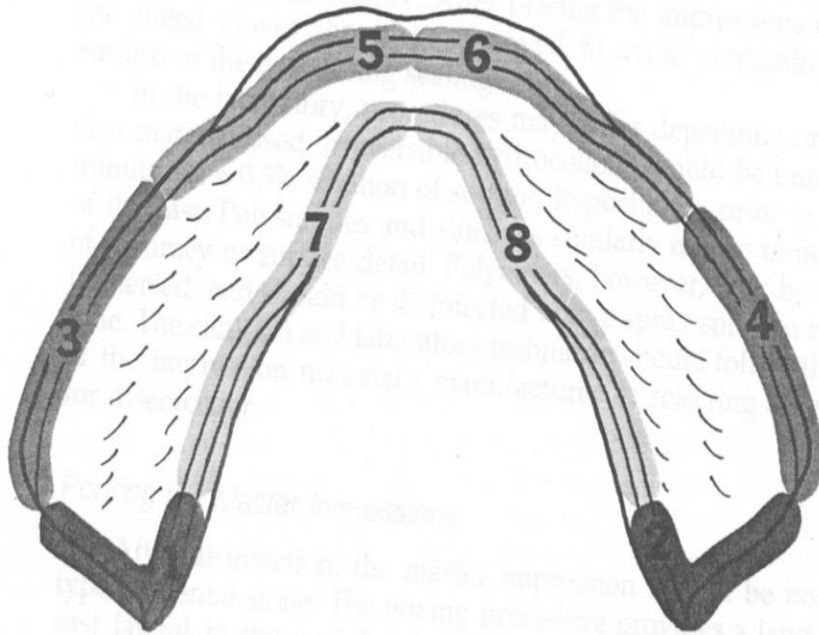


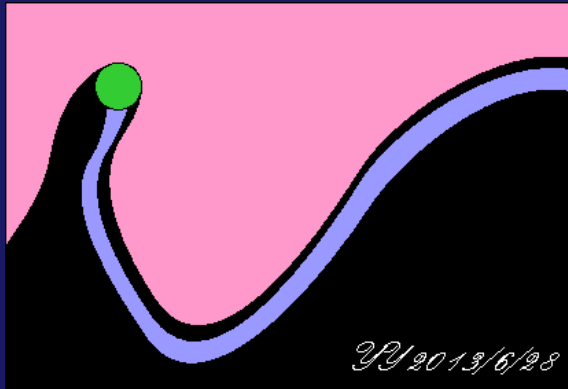
Figure 8. Interior aspect of the mandibular custom tray showing the eight-step addition of modeling compound used for border-molding procedures on the mandibular custom tray. The masseteric notch and distal extension areas are captured first (1, 2), followed by the buccal shelf/buccal vestibule areas (3, 4), labial flange areas (5, 6), and finally, by the retromylohyoid/mylohyoid, and sublingual fold spaces (7, 8).



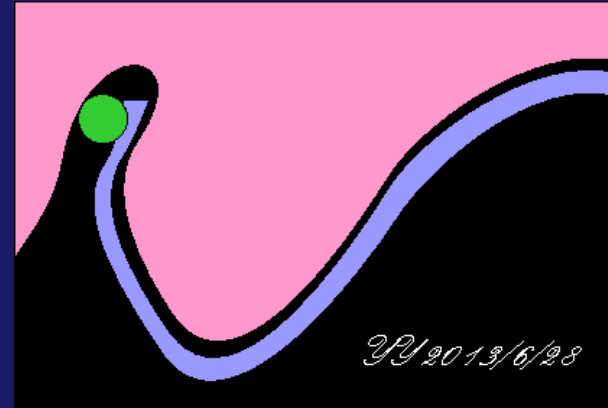
Suggestion: symmetric approach
Cross landmark approach

Problems of CONVENTIONAL border molding

a. Orientation ?

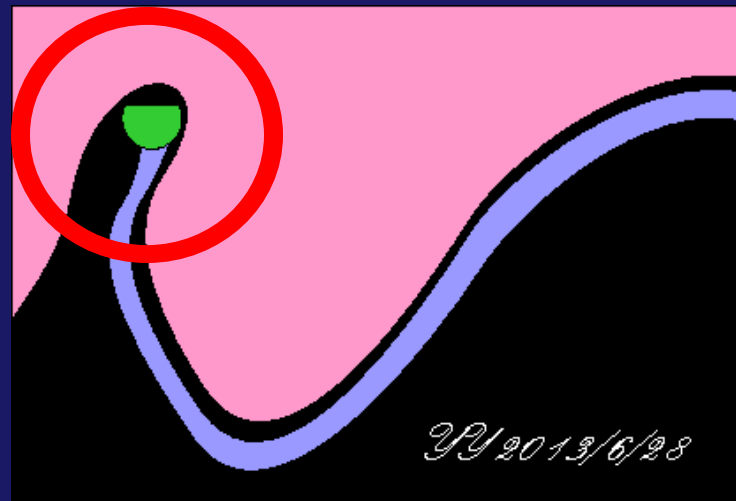


Boucher technique



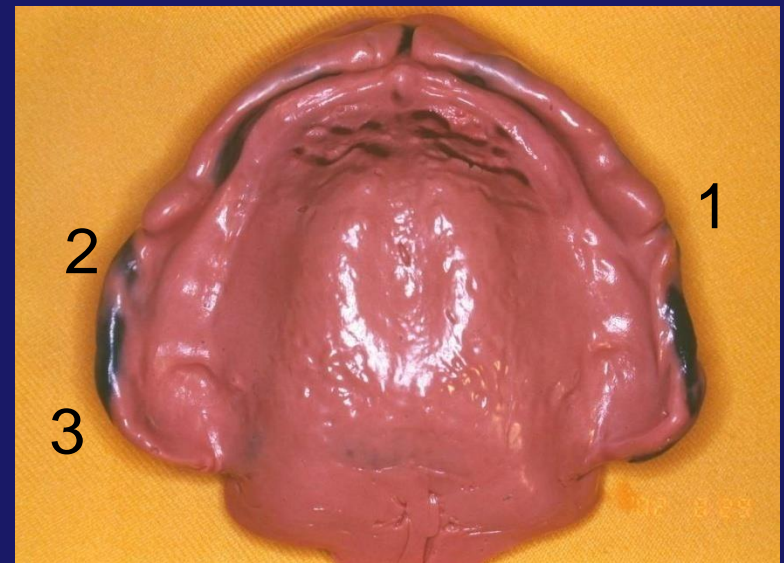
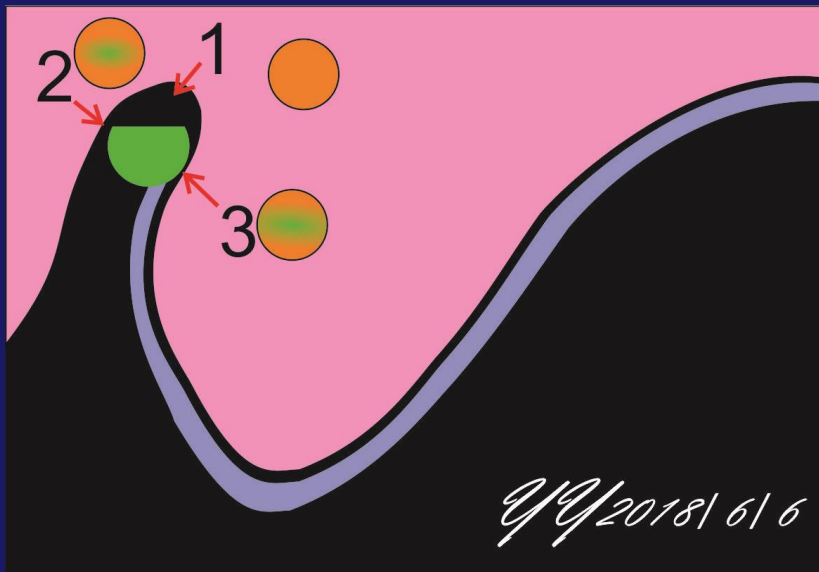
MacGregor technique

b. cut-back ?

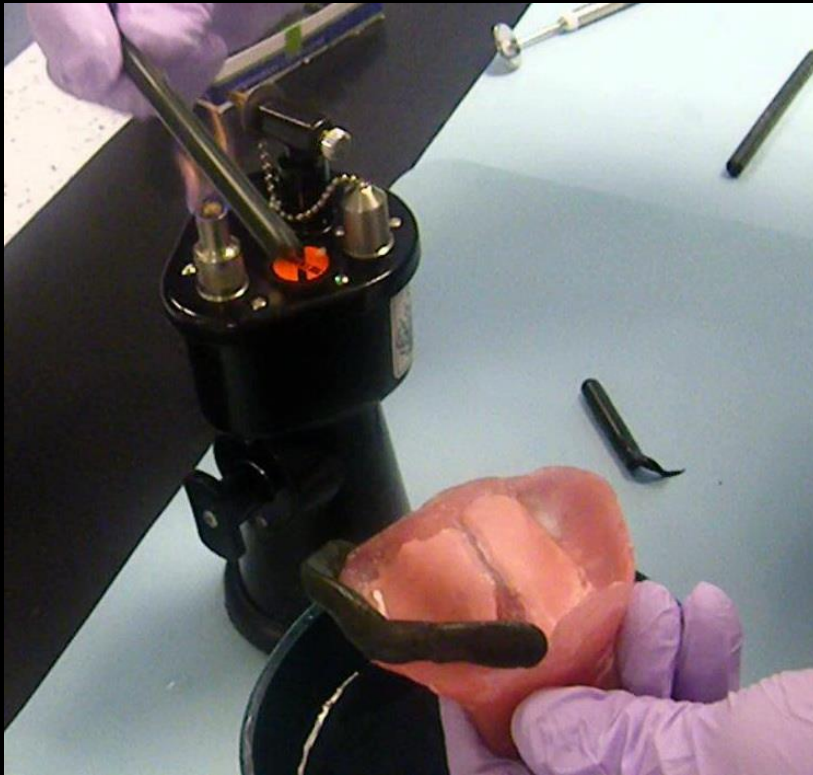
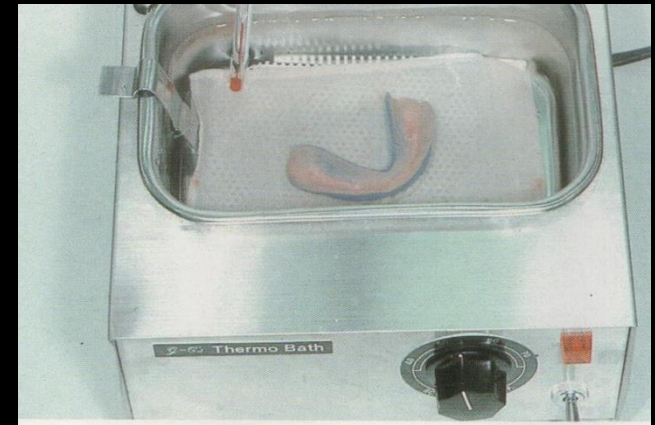


What's wrong if
border molding substance
exposed within impression material?

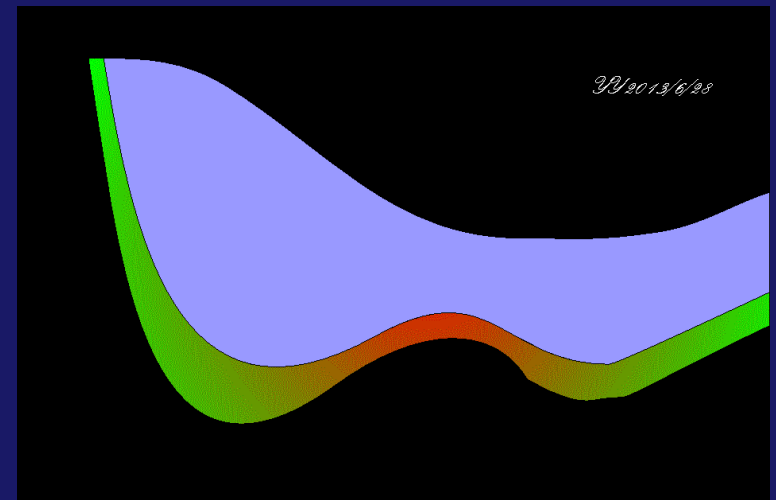
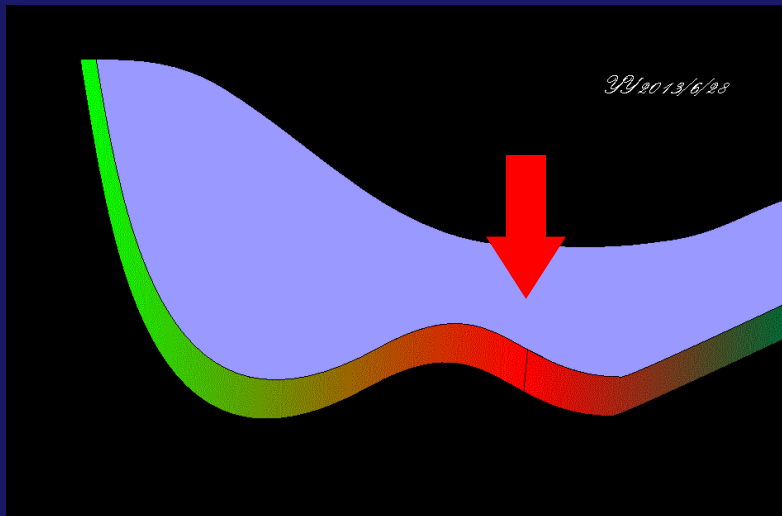
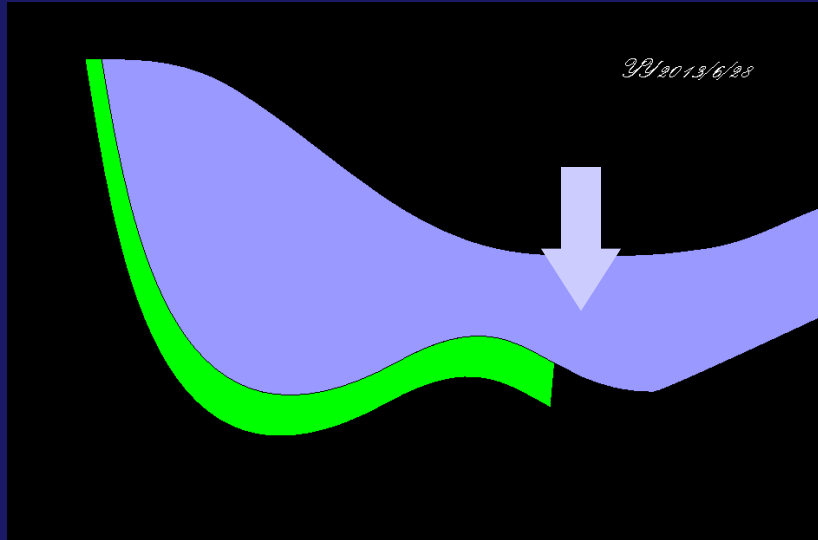
What's wrong if
border molding substance
became a part of border seal?



- Peri / Iso compound
- scalpel / knife
- torch
- Tempering unite
- **Medicament of burned wound !**



c. Thermal stress



Inherent distortions

著者の略歴



豊 田 静 夫

1953年 九州歯科大学卒業
1954年 九州歯科大学助手
1960年 同校講師
1962年 同校助教授
1972年 同校教授
1981年 同校附属病院長

Kyushu Dental College
Continuing Education Program

This certificate is presented to

Dr. 蔡正文 JEN-WEN TSAI

for participation in a Continuing Education Program in

Seminar of Advanced Course for Complete Denture

from 25. June, 1988

To: 26. June, 1988



Director of Continuing Education

Shizuo Toyoda



President of the College

Kihiroshi Yamada

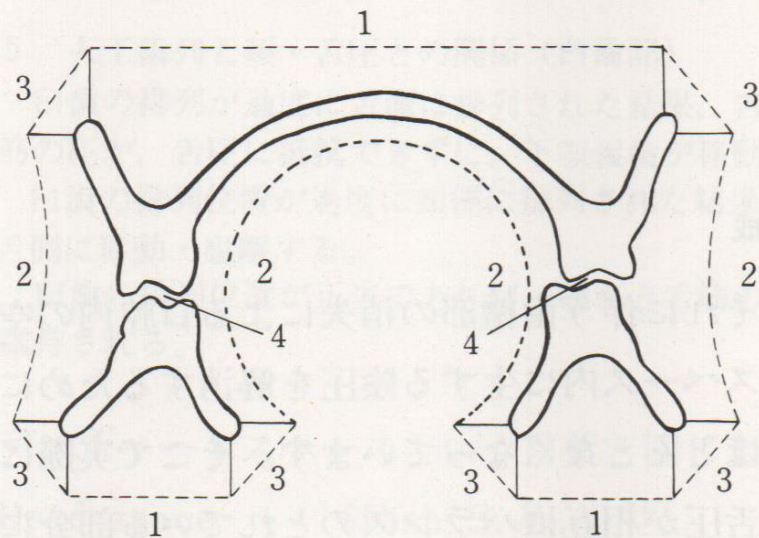
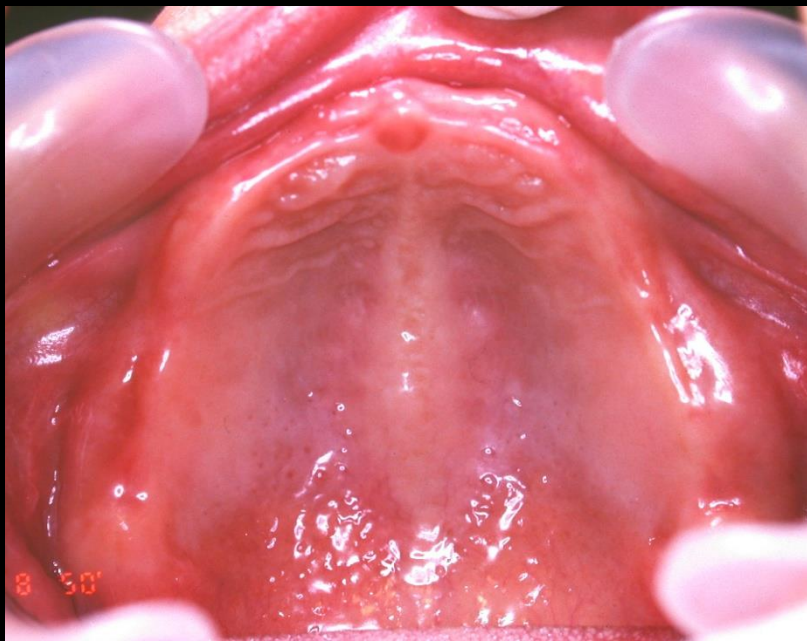


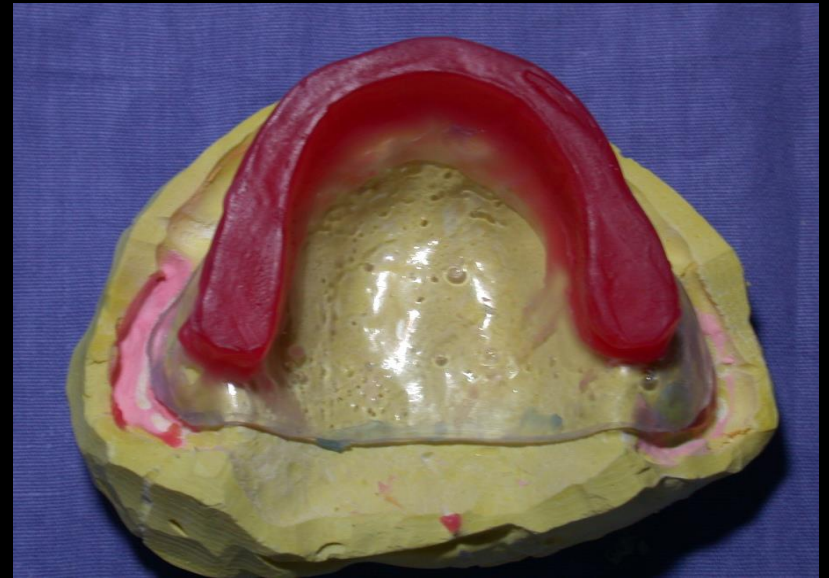
図1 義歯の構成

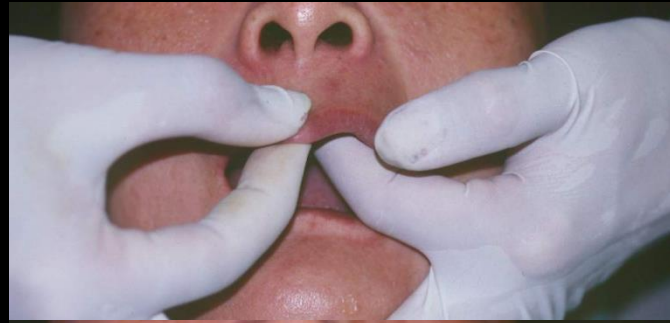
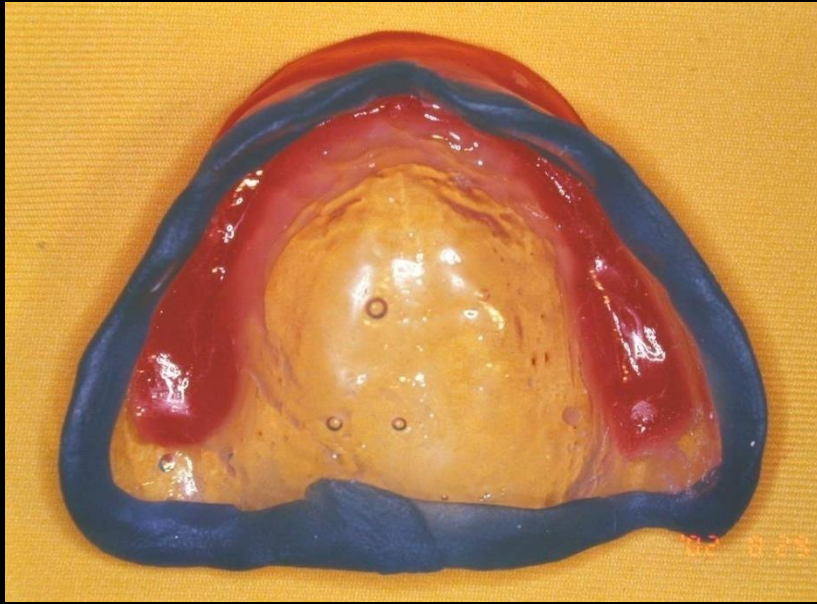
- | | |
|----------|-------------------------------|
| 1. 義歯印象面 | Impression surface |
| | Primary supporting surface |
| | Basal surface |
| | Pressure transmitting surface |
| 2. 義歯研磨面 | Polished surface |
| | Secondary supporting surface |
| 3. 床辺縁部 | Denture border |
| 4. 咬合面 | Occlusal surface |
| | Pressure relieving surface |

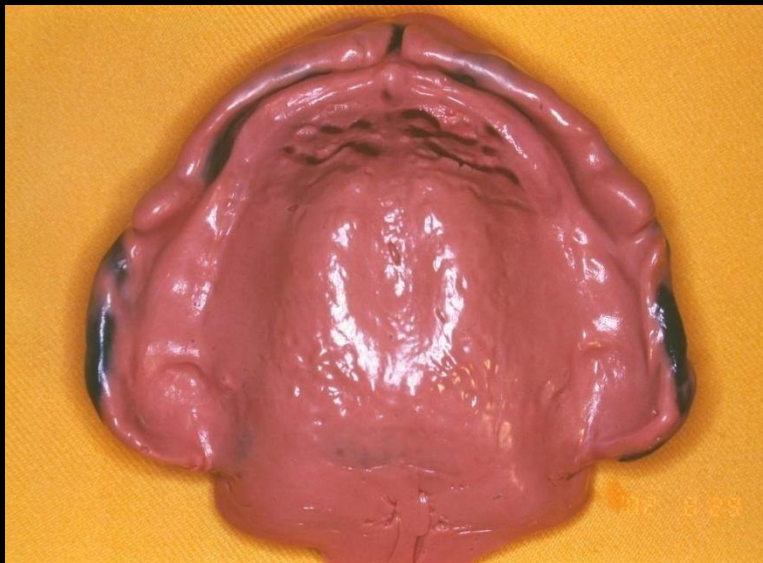
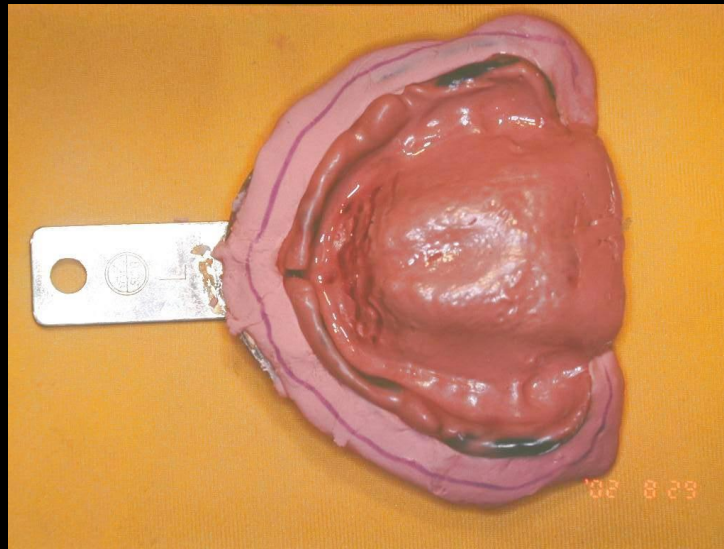


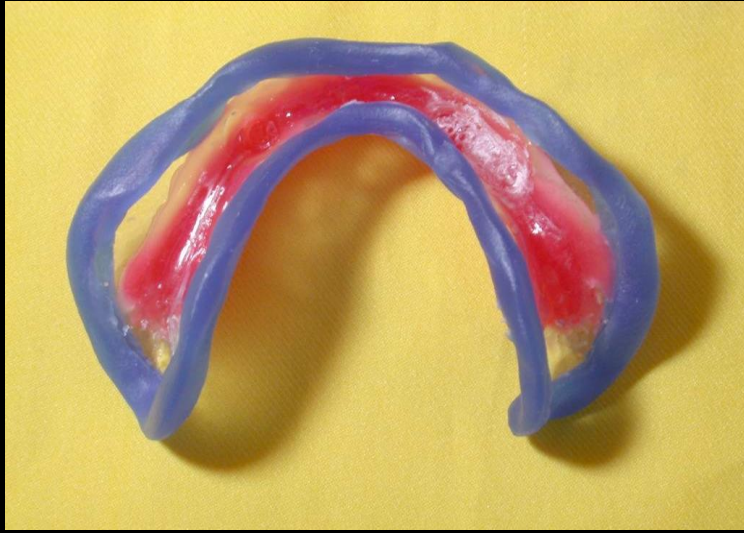


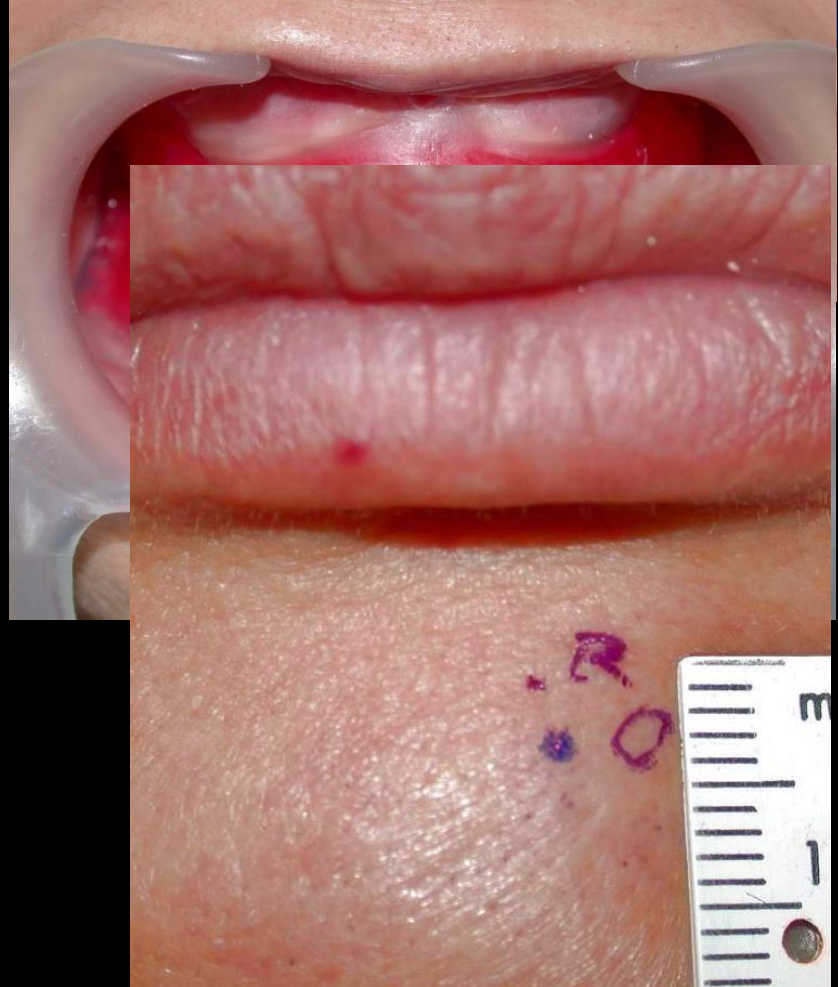


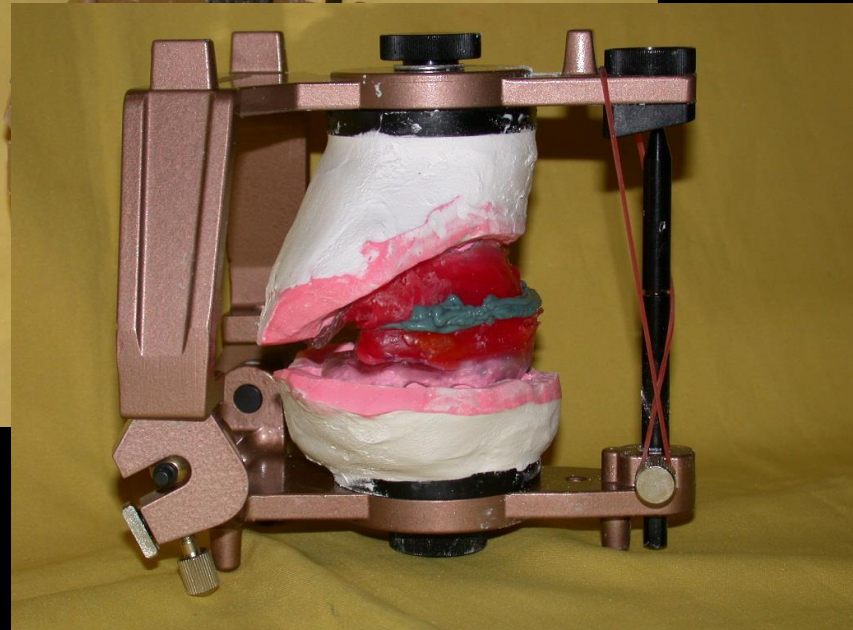


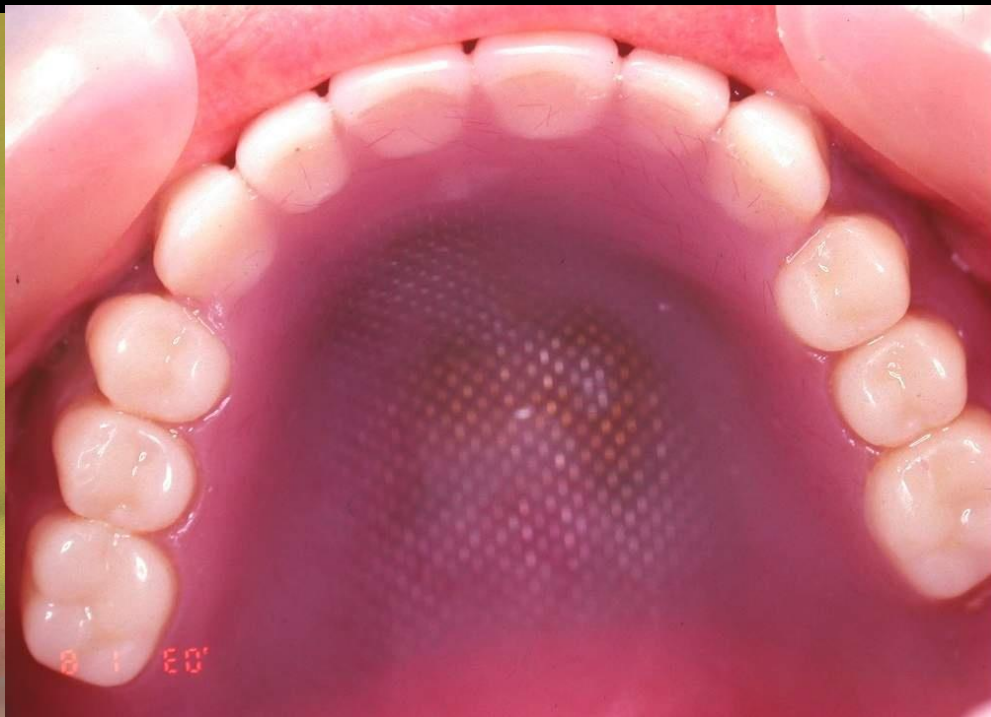


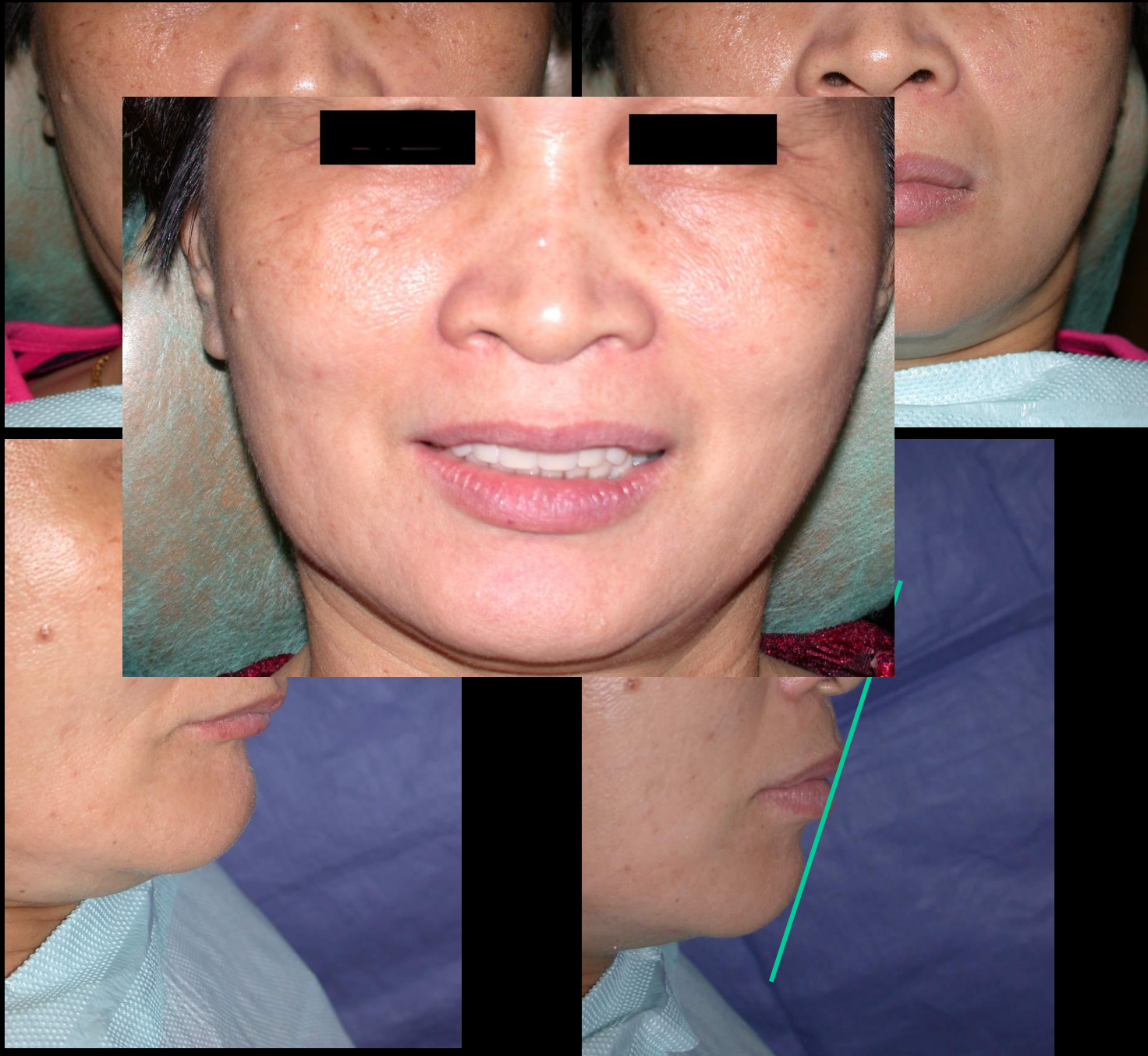


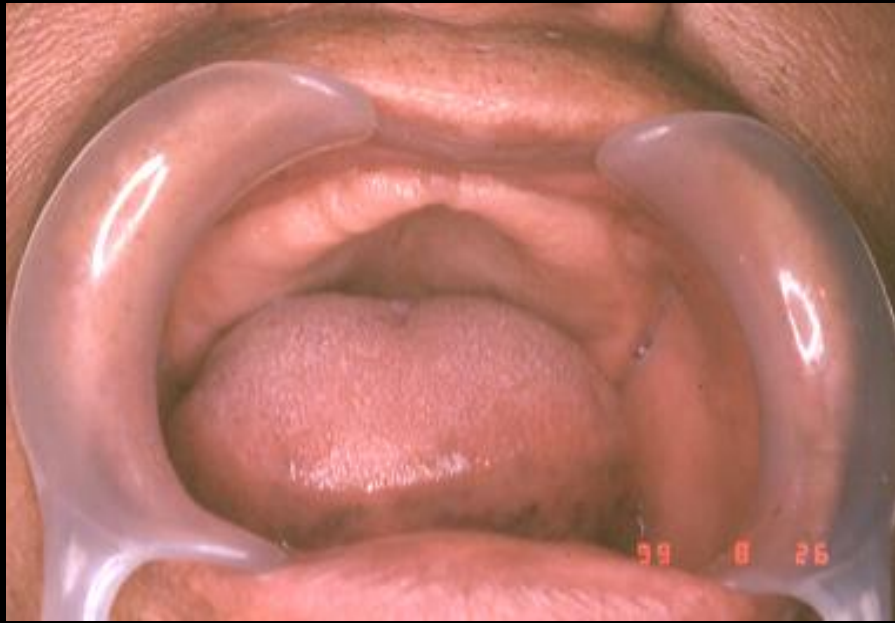




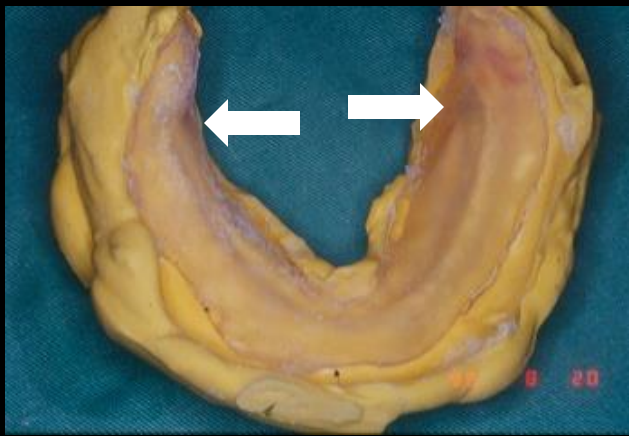


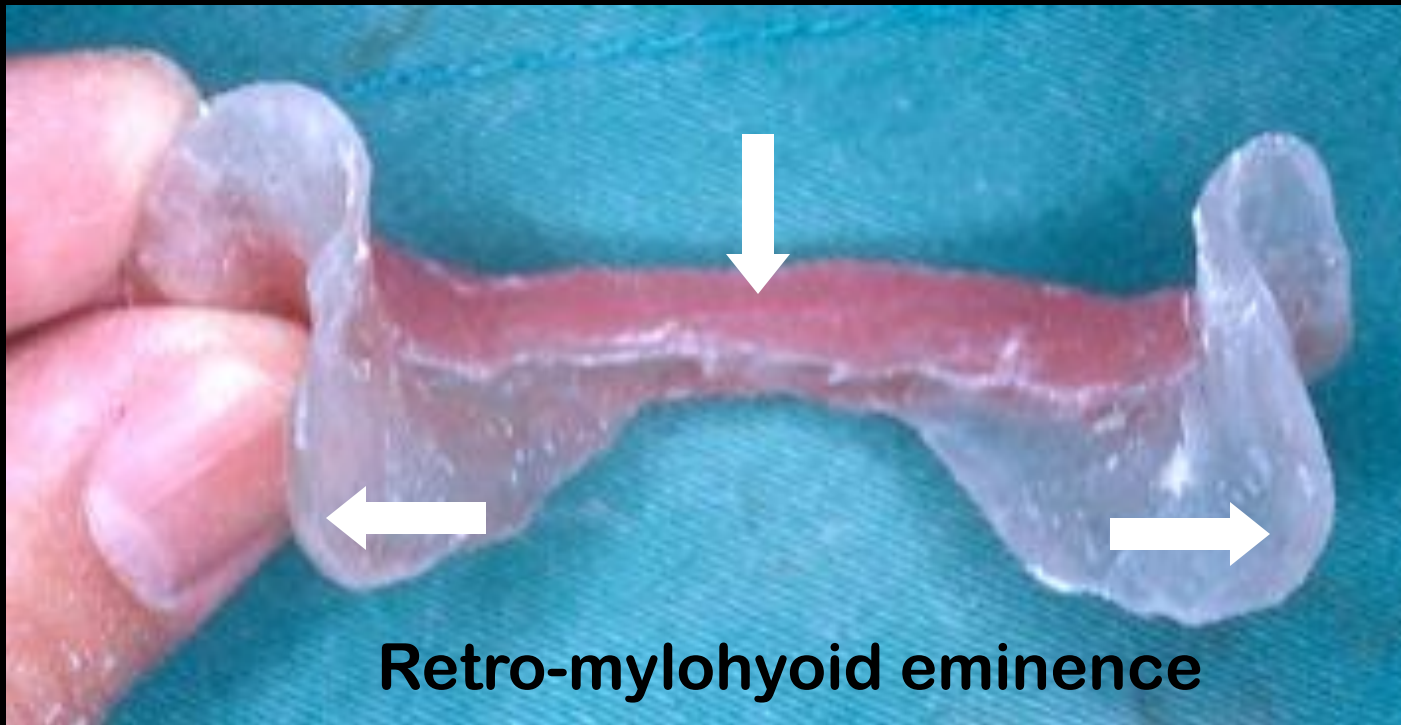


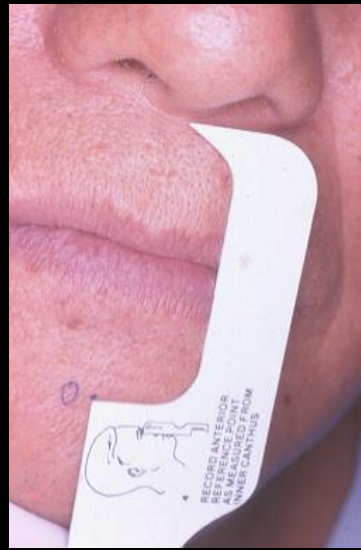


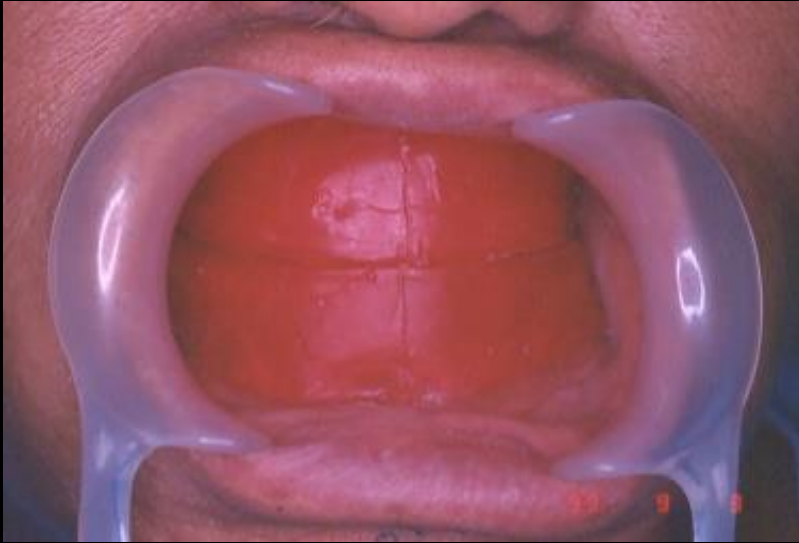












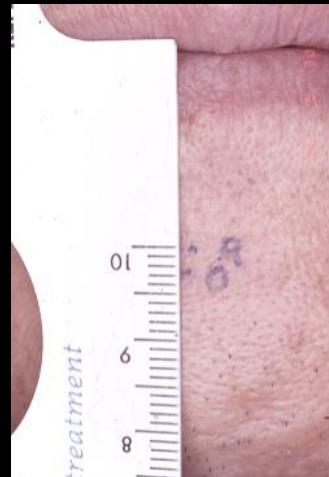
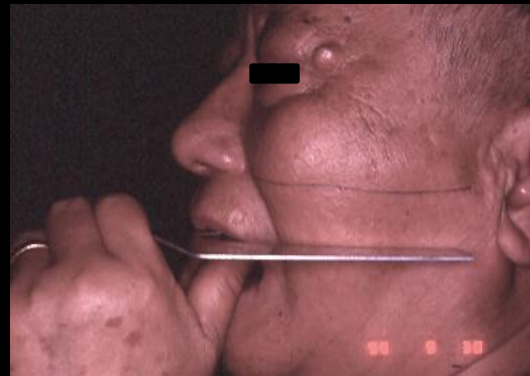


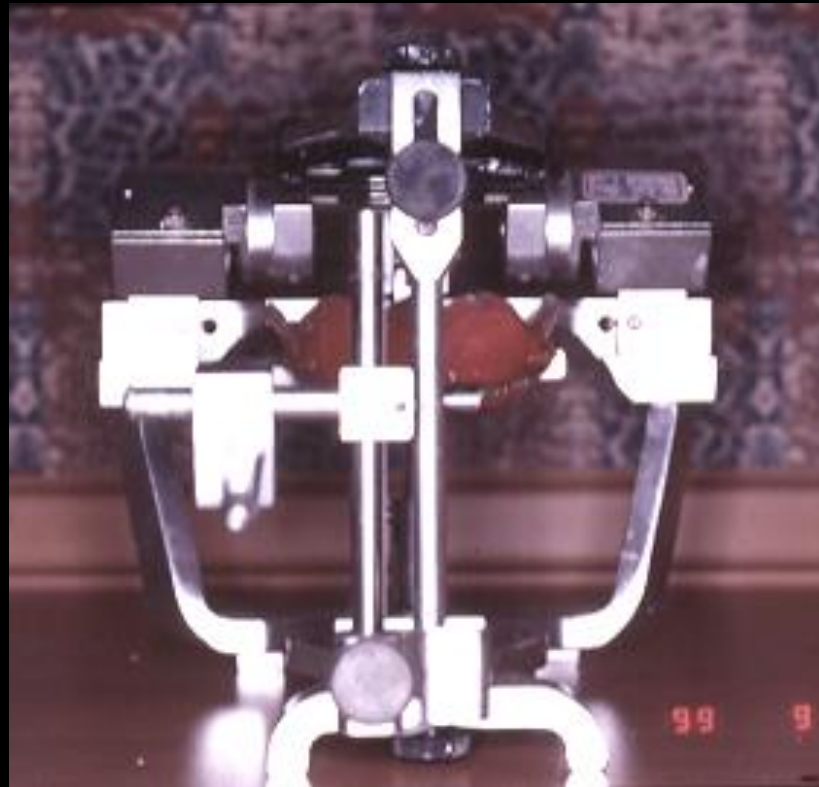
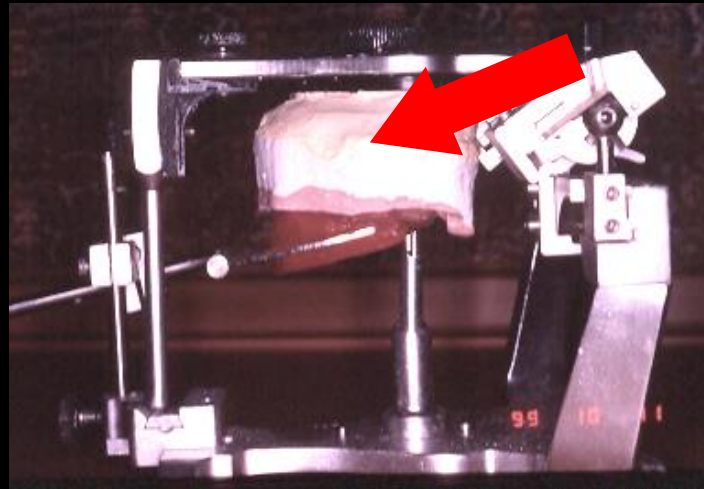
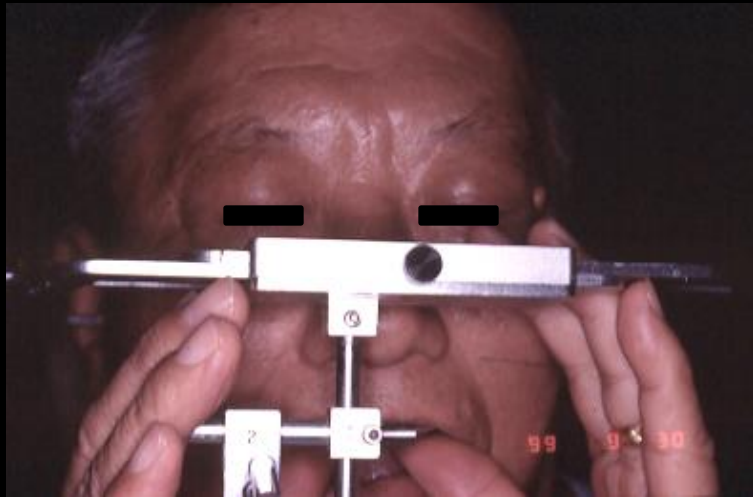


Alginate Boxing
Darunee P. Nabadalung et al.
JPD 1998;80(2): 262~264



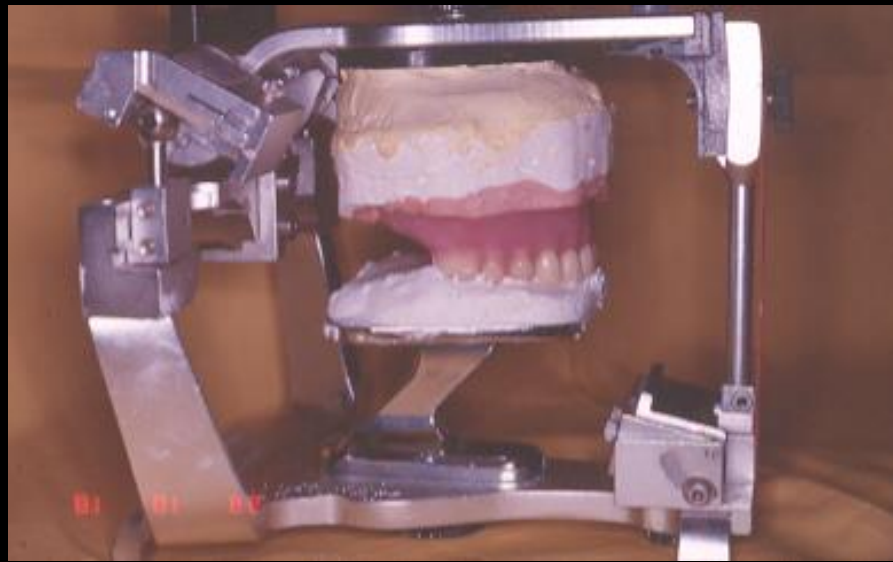


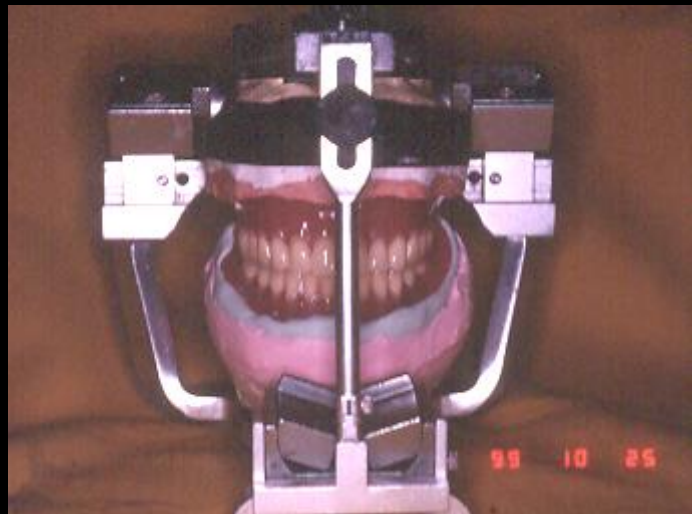






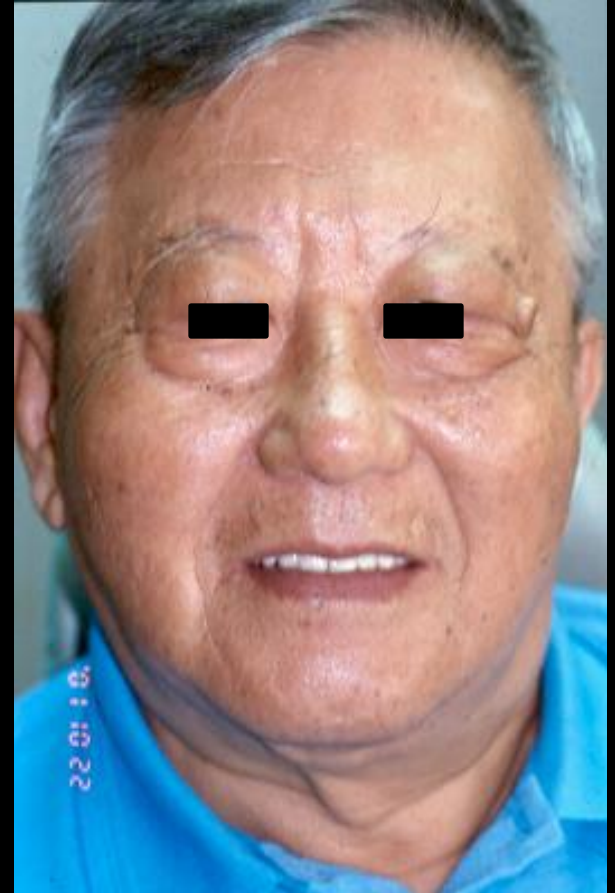
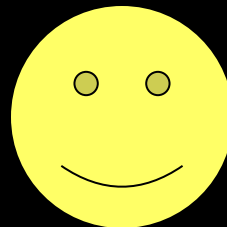








Happy smile!



Primary impression

Base plate + Wax rim (BW)



(BW)OP preliminary decision(Horizontal)
VD preliminary decision(Vertical)



Soft plate Wax border molding(One step)



Final impression



Working casts fabrication

(BW)OP secondary decision(Horizontal)
VD secondary final decision(Vertical)



Bite record



Face-bow transfer
Working casts mounting



Artificial teeth arrangement

Trial denture OP/VD Esthetic final decision



Final denture delivery







Y醫師，下一屆不送 Implant 的，我不會選他當市長



○
我也好想！

同樣的！下一屆沒有鋼管舞的
理事長我也不會選

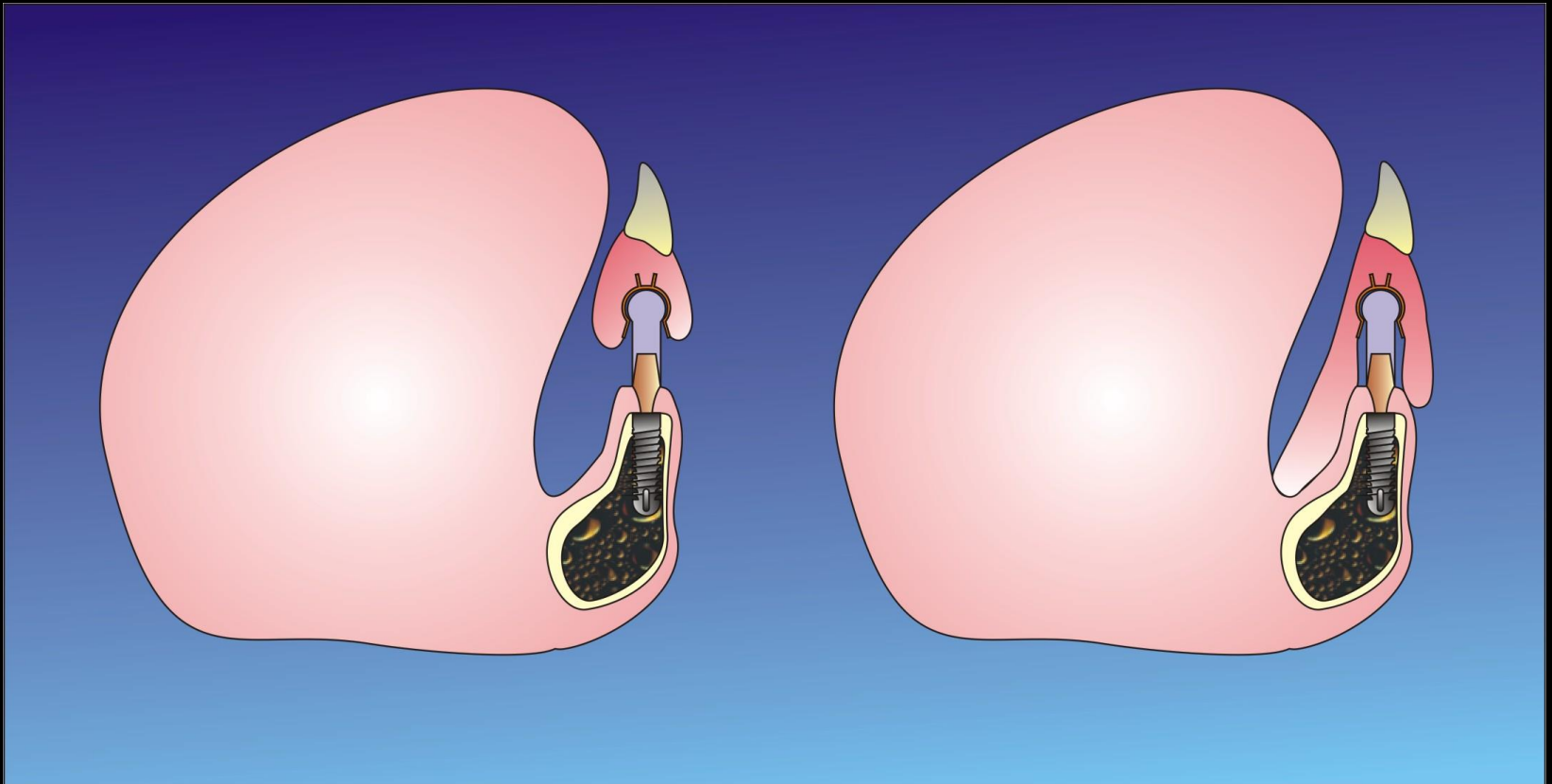


Conclusion

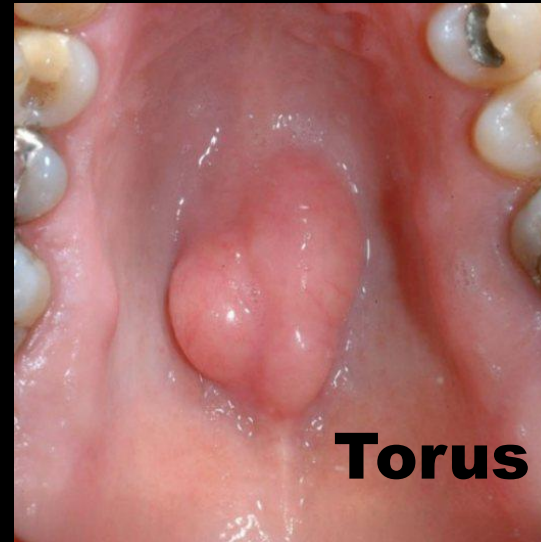
- Quick & effective.
- Retrievable.
- Relatively non-expensive.

Respect to the soft tissue

- Support, retention, **Peripheral seal**

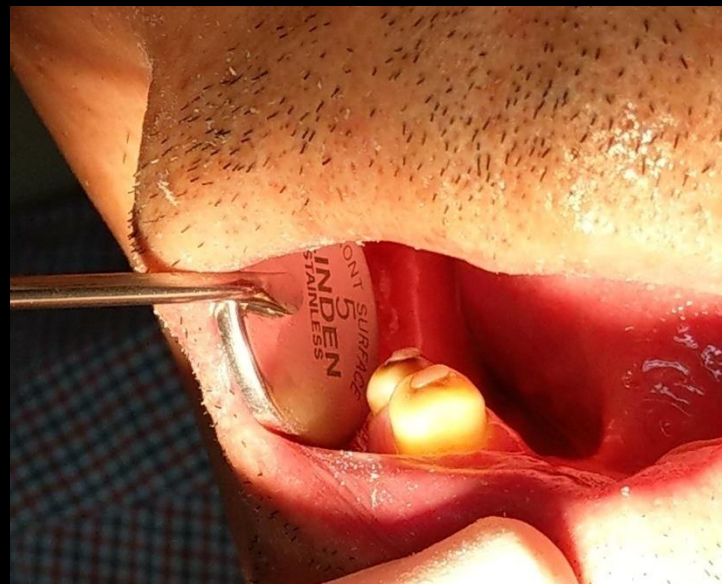
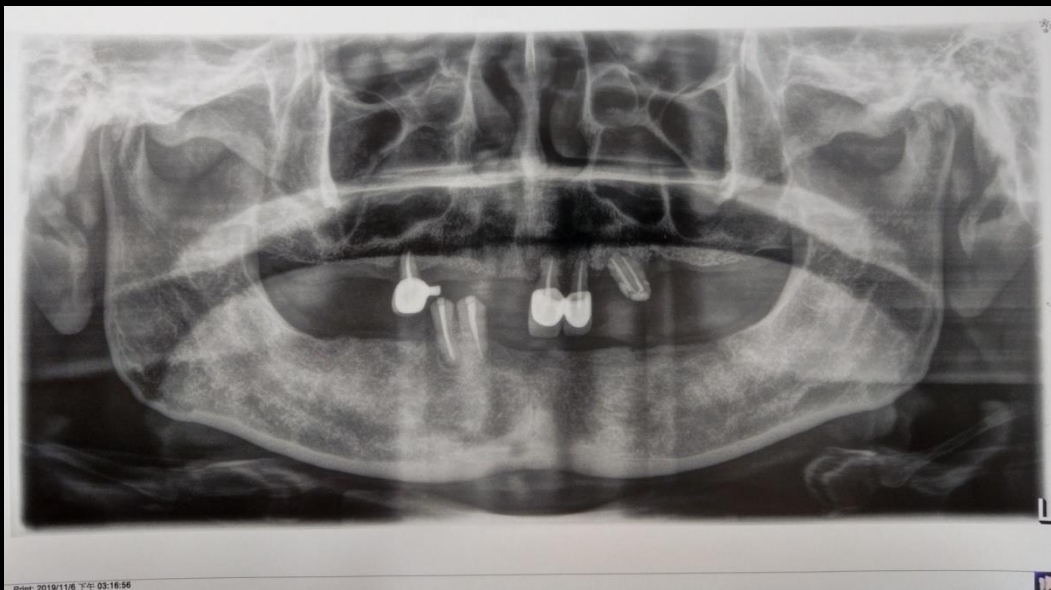


什麼地雷不要碰？



解剖型態不利者不接！

資訊不明者不接！



vincent.prostho@gmail.com

謝謝您的參予



並
祝君健康！

