







OCCUSAL
REDUCTION



BUCCAL
REDUCTION



LINGUAL
REDUCTION



PROXIMAL
REDUCTION



PROXIMAL
GROOVES



OCCUSAL
REDUCTION

BUCCAL
REDUCTION

LINGUAL
REDUCTION

PROXIMAL
REDUCTION

PROXIMAL
GROOVES

7/8th

TOOTH PREPARATION

PREPARED BY :-
SHAH KANAL
SHAH SETU
SHAH SHRADDHA
SHAH SHREY
TYAGI PAYAL



Occlusal
Reduction



Buccal
Reduction



Lingual
Reduction



Proximal
Reduction



Proximal
Grooves





OCCUSAL
REDUCTION

BUCCAL
REDUCTION

LINGUAL
REDUCTION

PROXIMAL
REDUCTION

PROXIMAL
GROOVES

7/8th TOOTH PREPARATION.

PREPARED BY:-

SHAH DIPAK	PATEL NIMESH
SHAH VIDHI	PATEL VANDIL
SHAH GIMMY	PATHAK DEEP
SHAH DEVARSH	PATEL JATNEEL
PATEL PARTH	PATEL VISHAL





STEP BY STEP PREPARATION
OF
ANTERIOR TOOTH
FOR
JACKET CROWN



DEPARTMENT OF PROSTHODONTIA

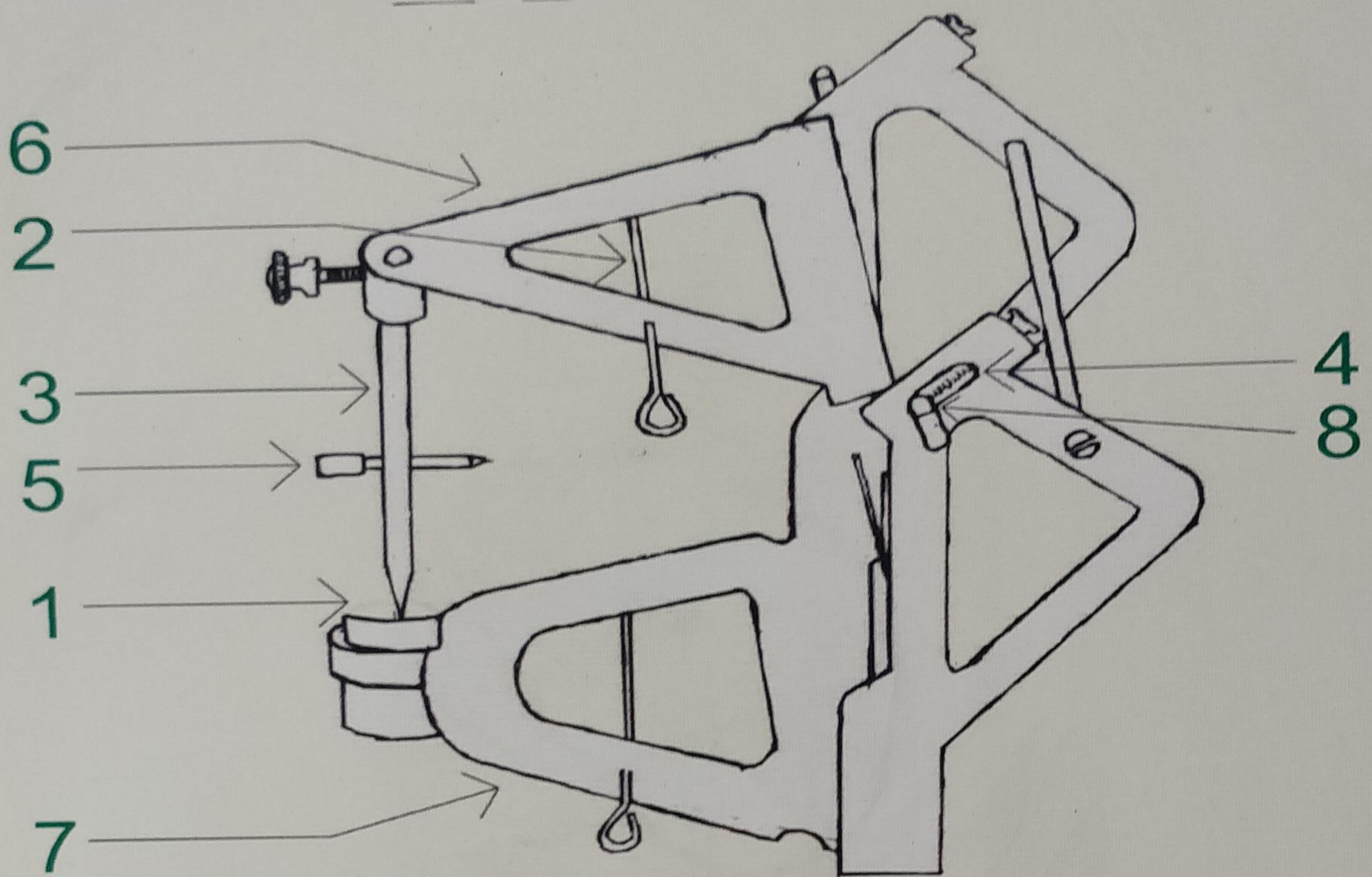
GUIDED BY :
DR. SHRUTI MEHTA
DR. DIPTI KOHLI
DR. KINJAL SOLANKI
DR. PRIYANKA MAKWANA

PREPARED BY :
RATHI ARCHITA
SATHALIYA SAKINA
SHAH ANKIL
SHAH FAIRY
SHAH FORAM
INTERNS 2010-2011

STEP BY STEP PREPARATION
OF
ANTERIOR TOOTH
FOR
JACKET CROWN



FREE PLANE ARTICULATOR



1. Fixed Incisal Guidance
2. Retentive Rod
3. Vertical Rod
4. Condylar Guidance
5. Incisal Pin
6. Upper Member
7. Lower Member
8. Condylar Element (Analogues)

Department of Prosthodontics

Prepared by. :-

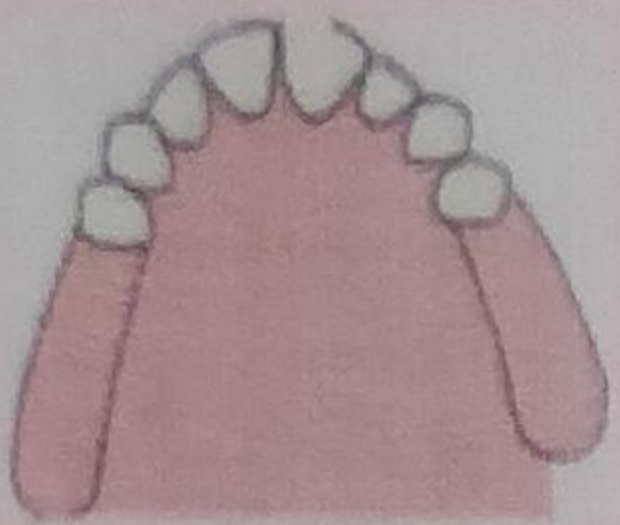
1. Devar Nirmala
2. Hirapara Juhi
3. Jani Jina
4. Gohil Krunali
5. Kothari Vishal

Bach F.Y. 2008-09

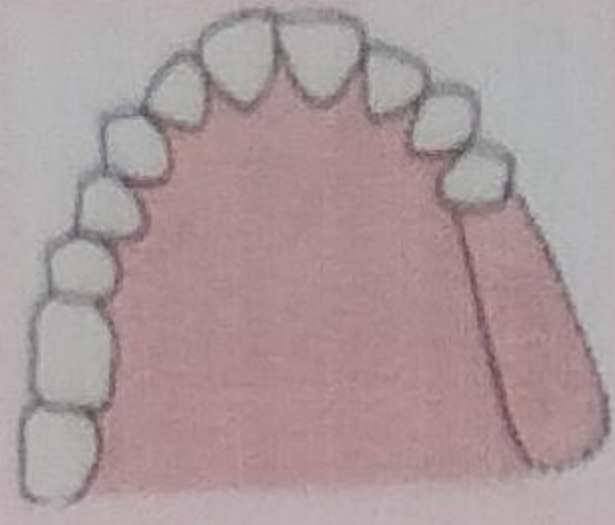
CLASSIFICATION OF REMOVABLE PARTIAL DENTURE

● KENNEDY-APPLEGATE'S CLASSIFICATION

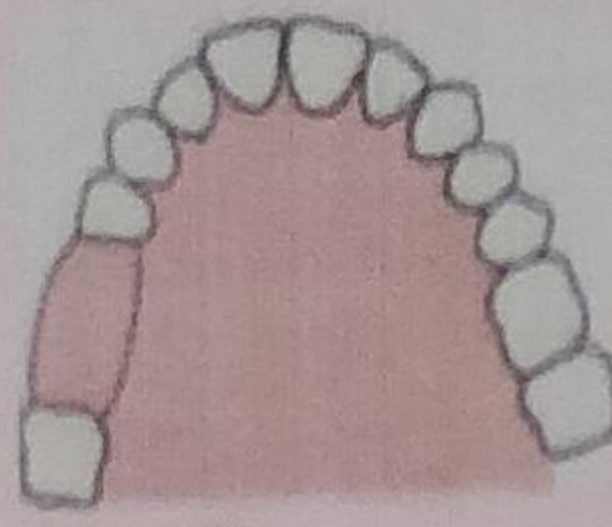
It is the most popular classification based on partially edentulous arches



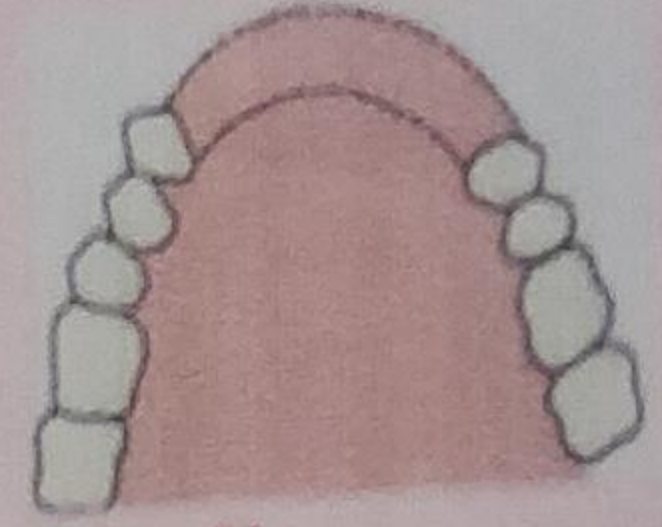
Class - I
Bilateral edentulous area present posterior to the remaining natural teeth.



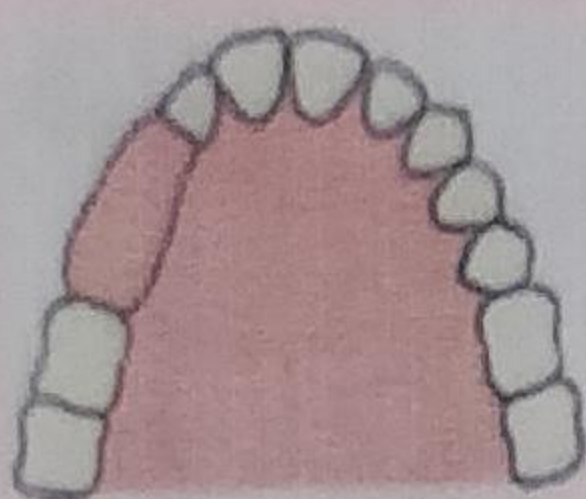
Class - II
Unilateral edentulous area present posterior to the remaining natural teeth.



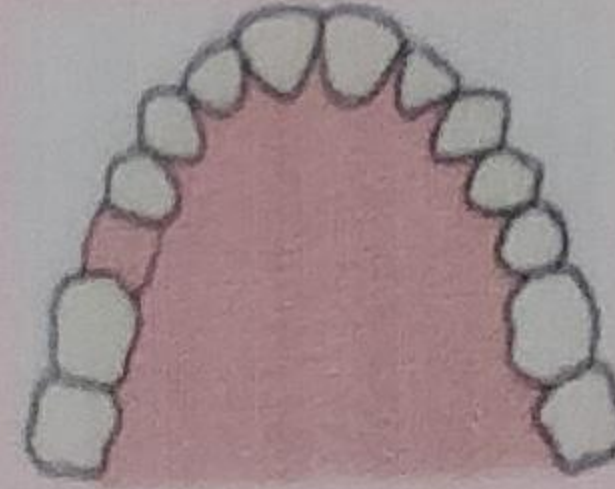
Class - III
A Unilateral edentulous area with natural teeth remaining both anterior and posterior to it.



Class - IV
A Single, but bilateral edentulous area (crossing the mid-line) located anterior to remaining natural teeth.



Class - V
Edentulous area bounded by anterior and posterior teeth where anterior teeth not able to give support.



Class - VI
Edentulous area bounded by anterior and posterior teeth where anterior teeth able to give support.

● CUMMER'S CLASSIFICATION

It is classified according to the position of direct retainer in four types.



Diagonal
Two Direct retainers
Diagonally opposite



Diametric
Two Direct retainers
Diametrically opposite



Unilateral
Two or more direct
retainers present on same side



Multilateral
Three direct retainers in
a triangular relationship

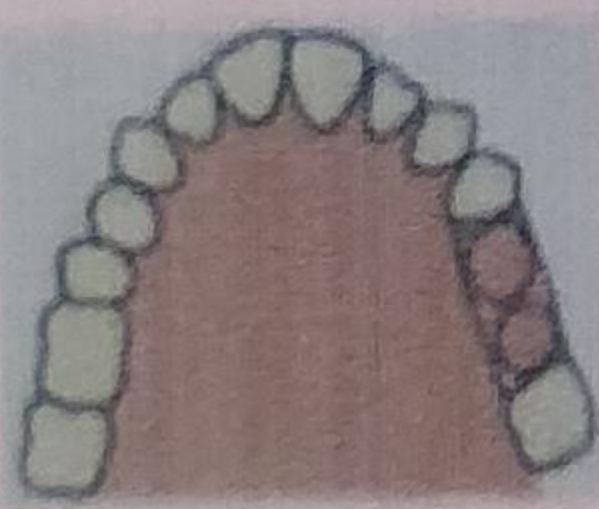
● BAILYN'S CLASSIFICATION

It was the first classification gave importance of support of partial denture by remaining tissues with descriptive letters.

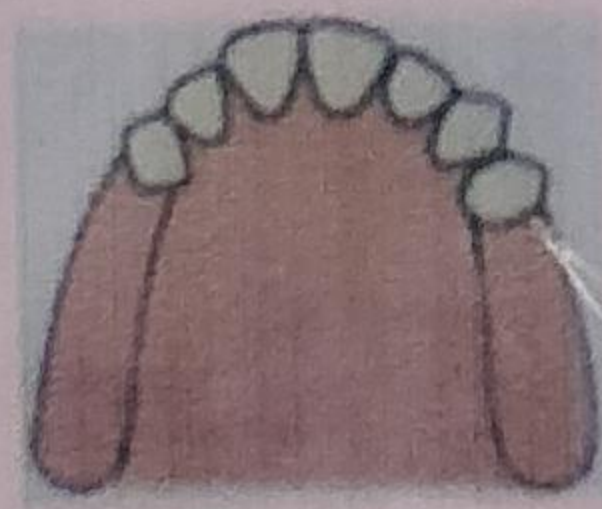
A= Anterior restoration. P= Posterior restoration.

Further classification

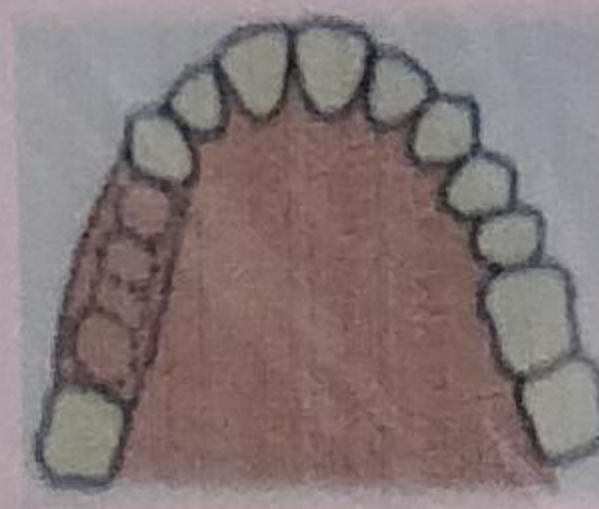
- Class-1 : Bounded saddle (Not more than three teeth missing)
- Class-2 : Free end saddle (There is no distal abutment tooth)
- Class-3 : Bounded saddle (more than three teeth missing)



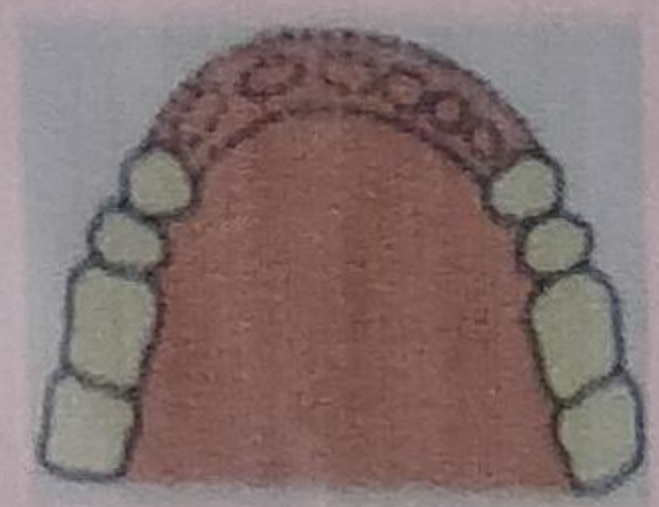
Baily's P1 partially edentulous condition



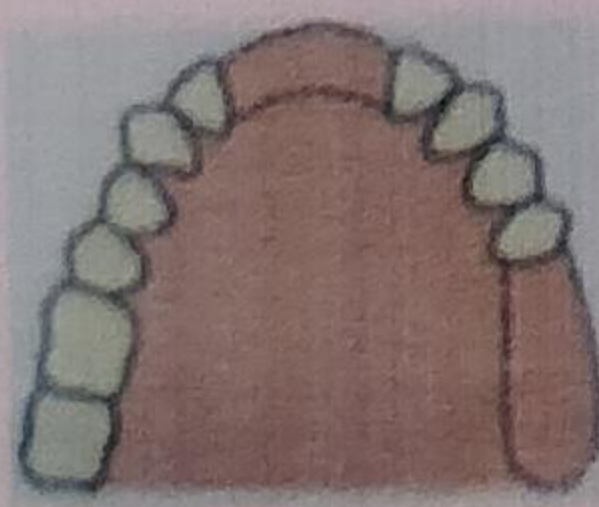
Baily's P2 partially edentulous condition



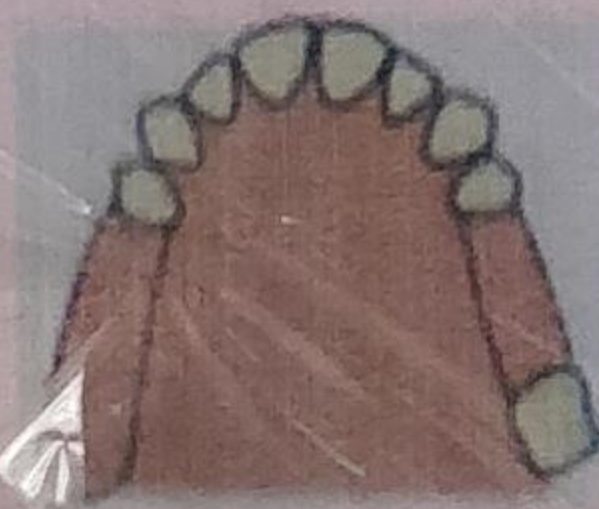
Baily's P3 partially edentulous condition



Baily's A3 partially edentulous condition



Baily's A1P2 partial edentulous condition



Baily's P1P2 partial edentulous condition



Baily's A1P2P3 partial edentulous condition

PREPARED BY :- <1> CHAUHAN DHRUV <2> SUCH KAMYA <3> DHOLAKIA NIYATI <4> JADAV RAJVEER

BATCH - A , 2ND B.D.S

DIFFERENCE BETWEEN ACRYLIC RESIN TEETH AND PORCELAIN TEETH

PROPERTY

RESIN TEETH



PORCELAIN TEETH



* BOND WITH RESIN BASE	CHEMICAL BOND	MECHANICAL BOND RETENTION WITH PINS (ANTERIOR TEETH) AND DIATORIC HOLE (POSTERIOR TEETH)
* MECHANICAL PROPERTY	1. LESS BRITTLE 2. HIGH RESILIENCE 3. ROUGHNESS	1. VERY BRITTLE 2. CHIPING OCCURS ON IMPACT
* SOLUBILITY & DIMENTIONAL CHANGE	INSOLUBLE AND SOME DIMENTIONAL CHANGE WITH WATER ABSORBTION	INSOLUBLE AND NO DIMENTIONAL CHANGE
* MAINTANANCE OF VERTICAL DIMENTION	WEAR CAN RESULT AND LOSS OF VERTICAL DIMENTION	WEAR IS INSIGNIFICANT & MINIMAL LOSS OF VERTICAL DIMENTION
* ABRASION OF OPPOSING TEETH	MINIMAL	ABRADES OPPOSING NATURAL TEETH
* AESTHETICS	LESS AESTHETIC	EXCELLENT
* CLICKING SOUND	NO SOUND ON CONTACT WITH OPPOSING TEETH	NOISY CLICKING SOUND OCCURS WITH OPPOSING TEETH
* GRINDING OF RIDGE LAP AREA	EASY TO GRIND	DIFFICULT TO GRIND,DIFFICULT TO RETAIN OR POSITION IN INTER-ARCH SPACES
* CRAZING	OCCURS IF NOT CROSS LINKED	SUCCEPTIBLE TO CRAZING BY THERMAL SHOCK
* THERMAL SHOCK	MORE RESISTANT	LESS RESISTANT
* MANIPULATION METHOD	BY CURING	BY FIRING
* DENSITY(G.Cm ⁻³)	1.2	2.4
* COEFFICIENT OF THERMAL EXPANSION(ppm.c-1)	80	7
* MODULOUS OF ELASTICITY(GPa)	2.5	80
* HARDNESS(VHN)	20	500

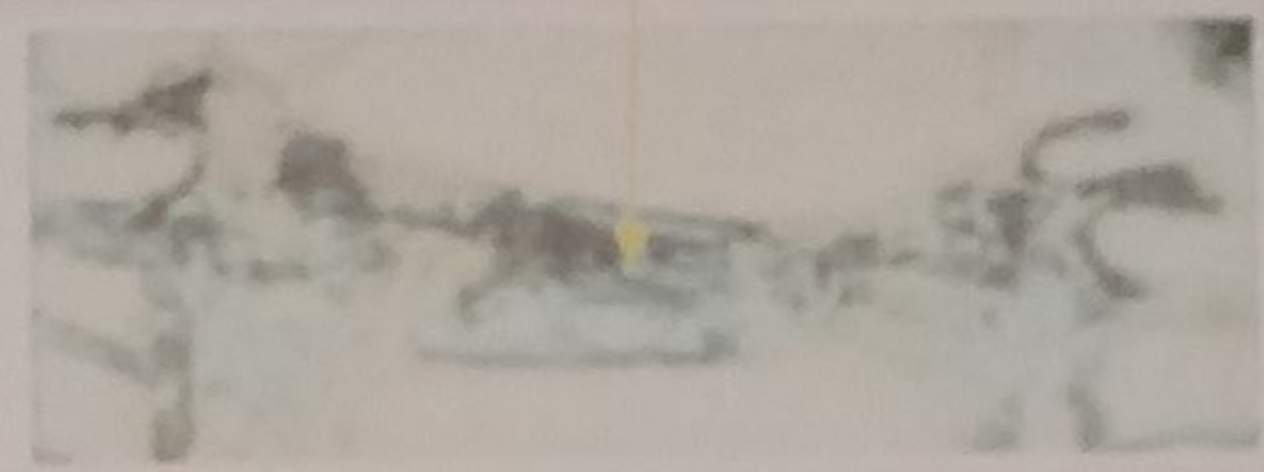
DEPARTMENT OF PROSTHETIC DENTISTRY
COLLEGE OF DENTAL SCIENCE & RESEARCH CENTRE

**SECOND YEAR
BATCH 2008-09**

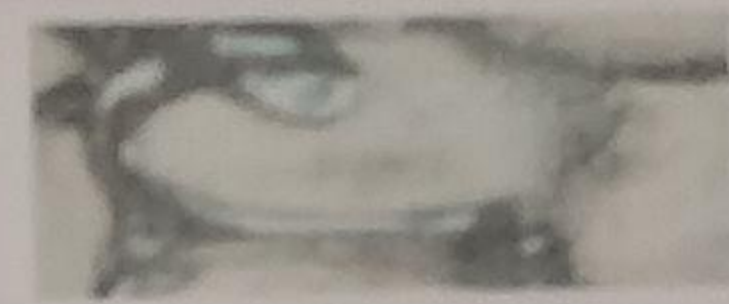
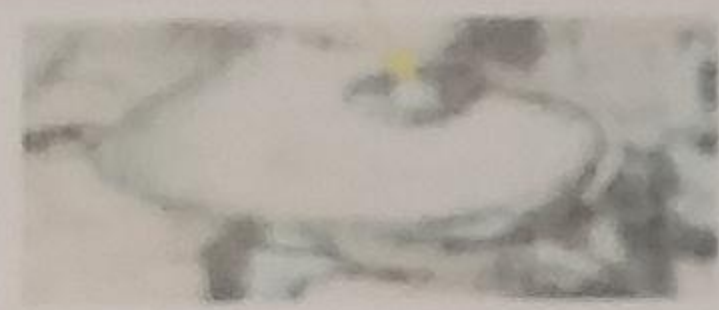
PREPARED BY:
KUSHAN SHAH
JIGAR SHAH
MANSI SHAH
NEELAM SHAIKH

COMPONENTS OF REMOVABLE PARTIAL DENTURE

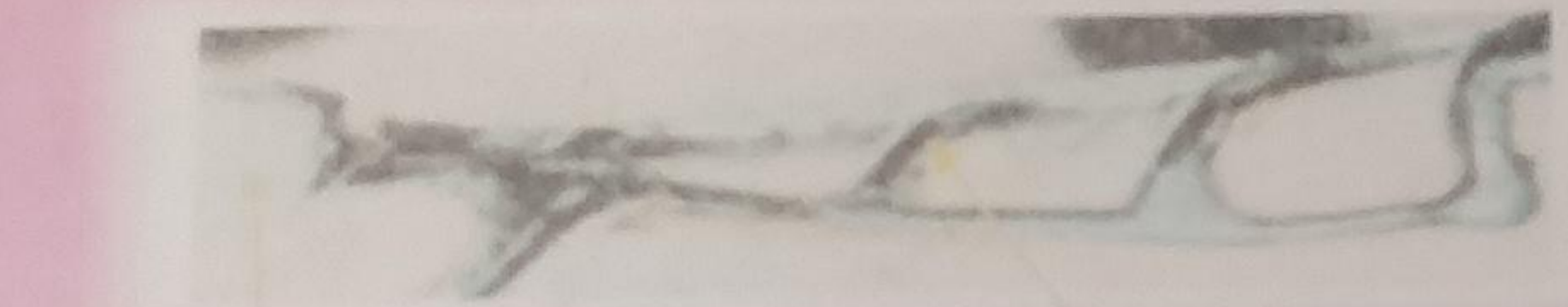
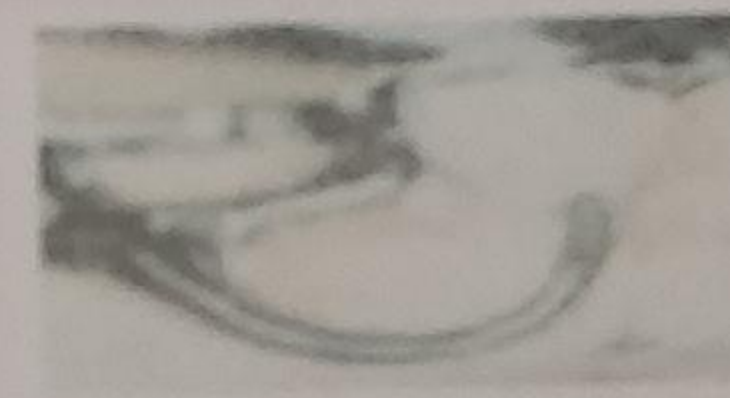
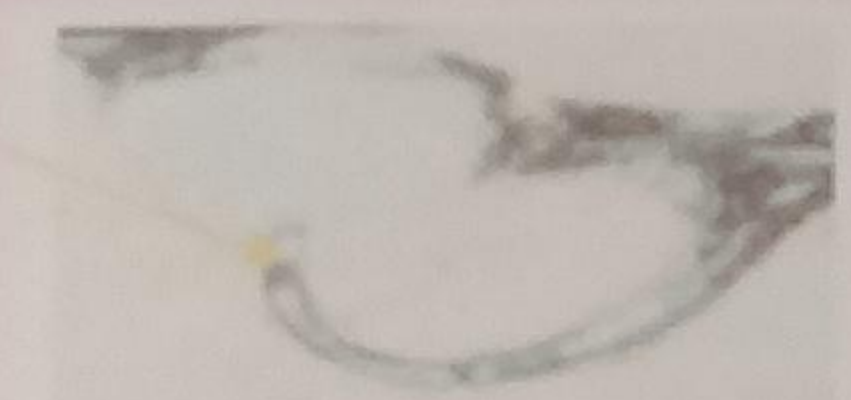
Major Connector



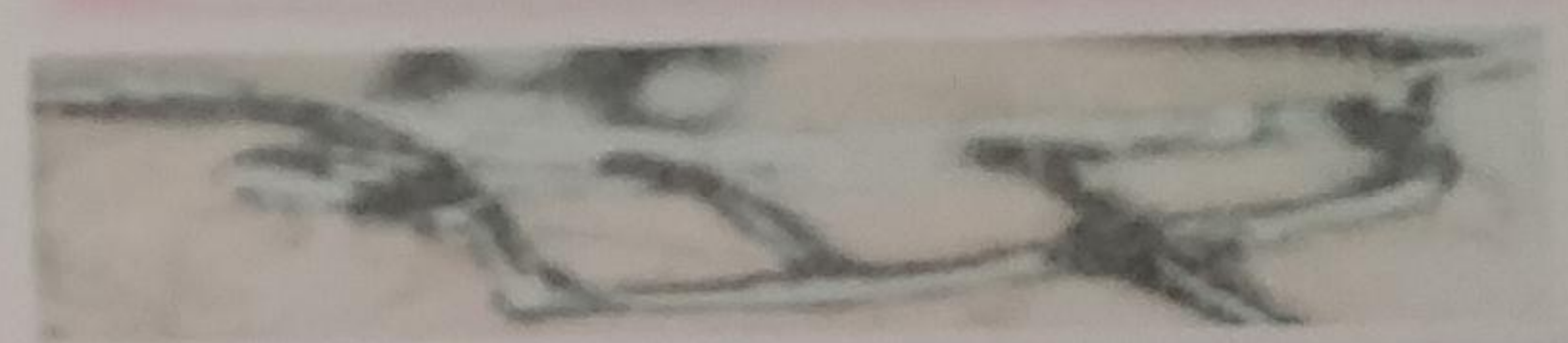
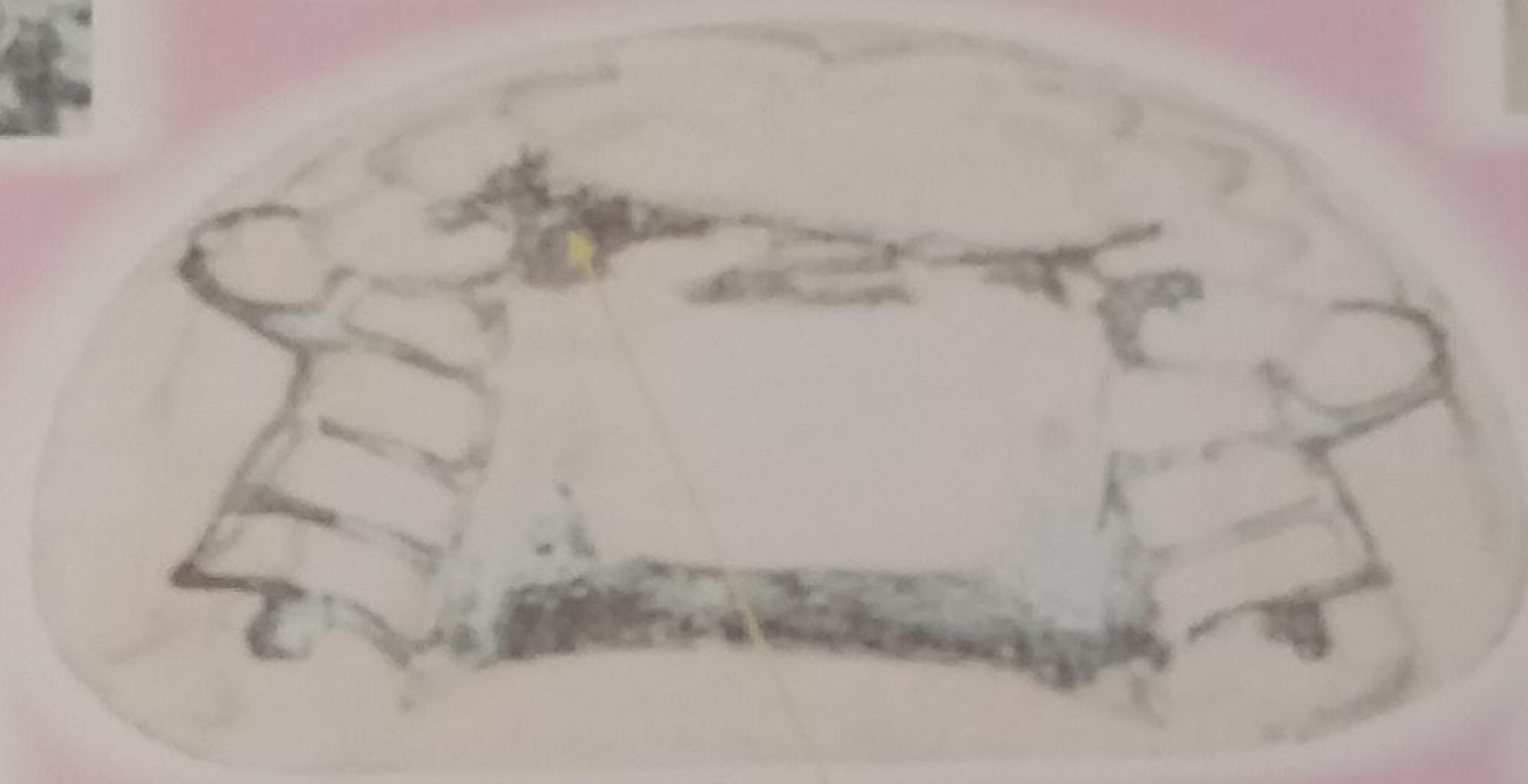
Rest



Direct Retainer

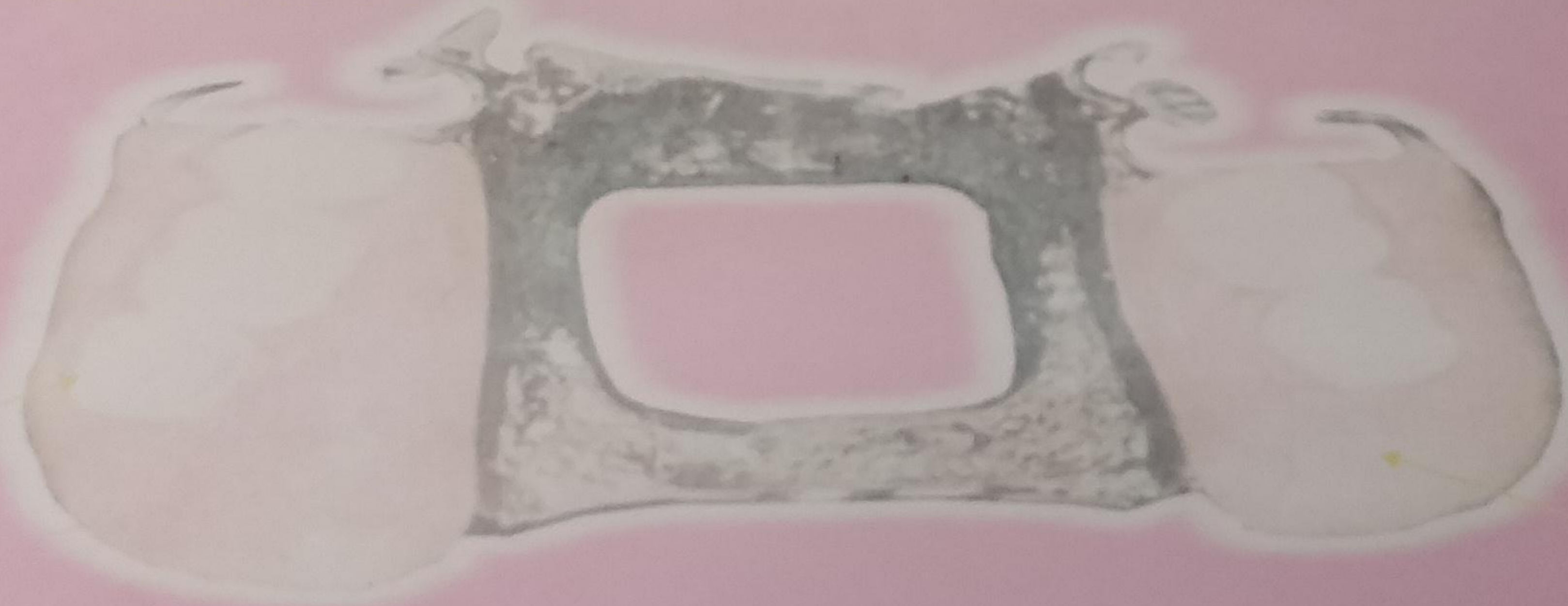


Guide Plane



Indirect Retainer

Minor Connector



Teeth



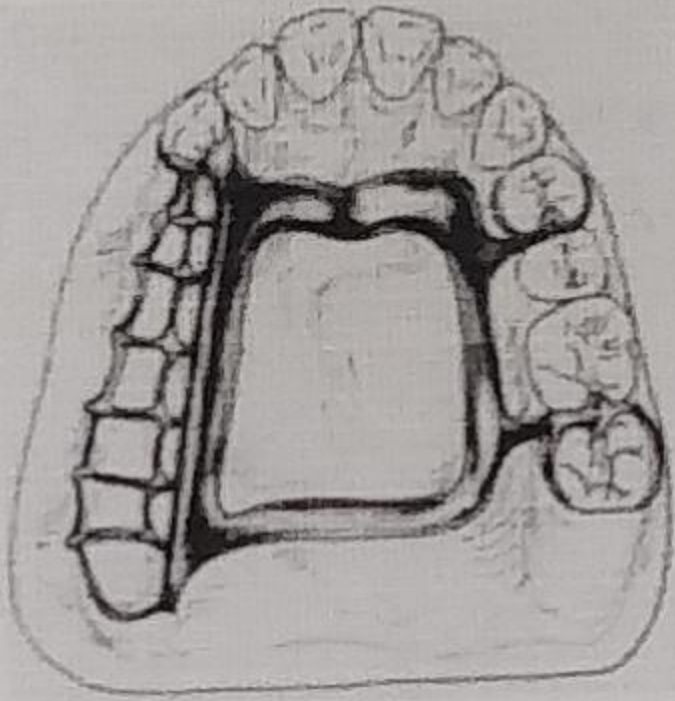


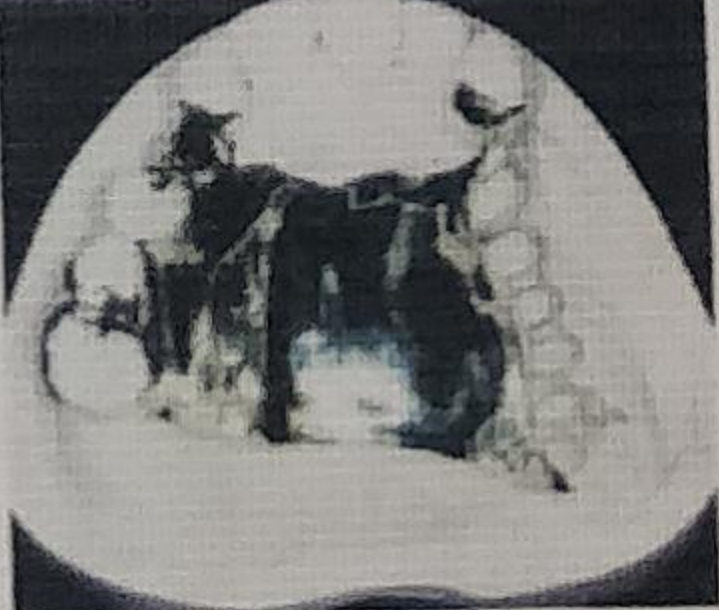
Denture Base

Department of Prosthodontics
2008-09
Second B.D.S.

Smit Desai
Rishikesh Desai
Hardik Doshi
Namrata Gupta

Maxillary Major Connector

Major Connector - It is defined as " a part of R.P.D. which connects the components on one side of the arch to the components on the opposite side of the arch"

Type	Figure	Indications for use
1) Single palatal bar.		1) For interim partial denture.
2) Single Palatal Strap.		1) Bilateral & unilateral edentulous spaces of short span in a tooth supported restoration.
3) Antero-Posterior Palatal bar.		<ol style="list-style-type: none"> 1) When anterior & posterior abutment teeth are widely separated. 2) Class- IV, II. 3) Patient who wants to avoid complete palatal coverage. 4) Cases with large inoperable palatal torus.
4) U-Shaped or horse shoe shaped connector.		<ol style="list-style-type: none"> 1) When many anterior teeth are to be replaced. 2) Used in presence of torus extending to the posterior border of the hard palate.
5) Antero-Posterior Palatal strap or closed horse shoe shaped connector.		<ol style="list-style-type: none"> 1) Class - I & II. 2) Class - IV. 3) Inoperable palatal tori that do not extend posteriorly to the junction of the hard & soft palates.
6) Complete palate type connector.		<ol style="list-style-type: none"> 1) In the absence of a pedunculated torus. 2) Class - II.

DEPARTMENT OF PROSTHODONTICS.
COLLEGE OF DENTAL SCIENCE &
RESEARCH CENTRE, BOPAL, AHMEDABAD.

2ND B.D.S.
2008-09

BY, NIPA CHAUHAN
MANSI MACHHI
HRISHABH JOSHI
POOJA KHUPCHANDANI

DIRECT RETAINER

Definition :

That component of a removable partial denture used to retain and prevent dislodgement consisting of a clasp assembly or precision attachment.

Types of Extracoronal direct Retainer :

CIRCUMFERENTIAL CLASP (Occlusally approaching)

Simple Circlet clasp :

→ It is used when the undercut is located away from the edentulous space.



Reverse circlet clasp :

→ It is used when the undercut is located adjacent to edentulous space.



Embrasure / modified crib :

→ It is used on the side of the arch where there is no edentulous space.



Multiple circlet clasp :

→ It is used when the principle abutment tooth has poor periodontal support.



Onlay clasp :

→ It is used in the occlusal surface of submerged abutment teeth so that the normal occlusal plane can be restored with an onlay.



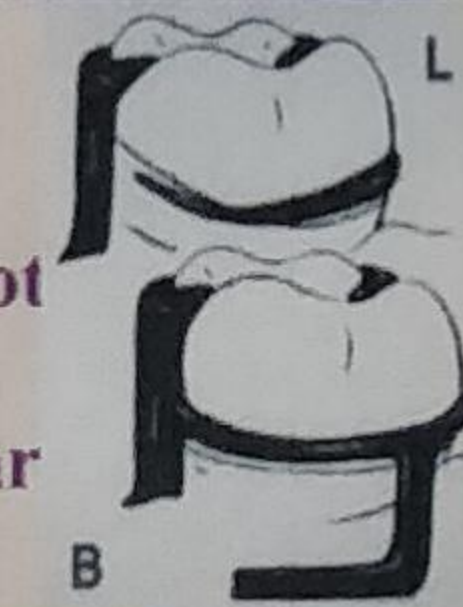
Hairpin / fish hook clasp :

→ It is used when undercut is adjacent to edentulous space and bar clasp is contraindicated due to the presence of tissue undercut.



Ring clasp :

→ It is used when a proximal undercut cannot be approached by other means.
→ It is used in case, with lingually tipped molar abutment.



Half & Half clasp :

→ It is used to provide dual retention.



Back Action clasp :

→ Modification of ring clasp.
→ It has the similar indication as that of circumferential clasp with less tooth coverage & less display of metal.



BAR CLASP (Gingivally approaching)

T Clasp :

→ It is used in Class I & Class II cases.



Modified T Clasp :

→ It is used on canine & premolar for esthetic reason.



Y Clasp :

→ It is used when the height of contour on the facial surface of abutment tooth is high on Mesial & distal line angles but low on the centre of the facial surface.



I Clasp :

→ It is used on disto-buccal surface of maxillary canine for esthetic reason.

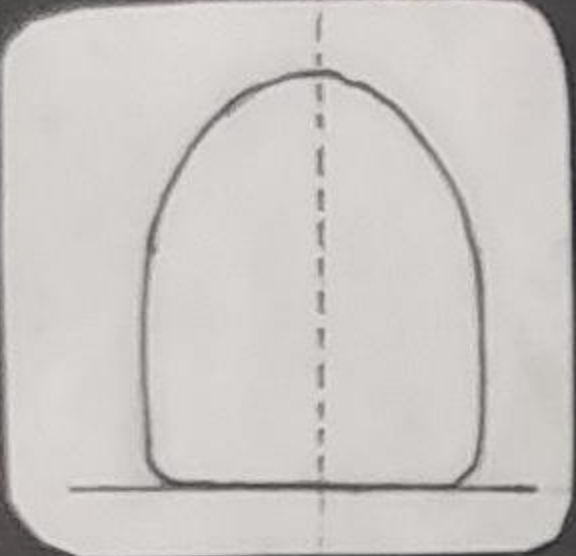

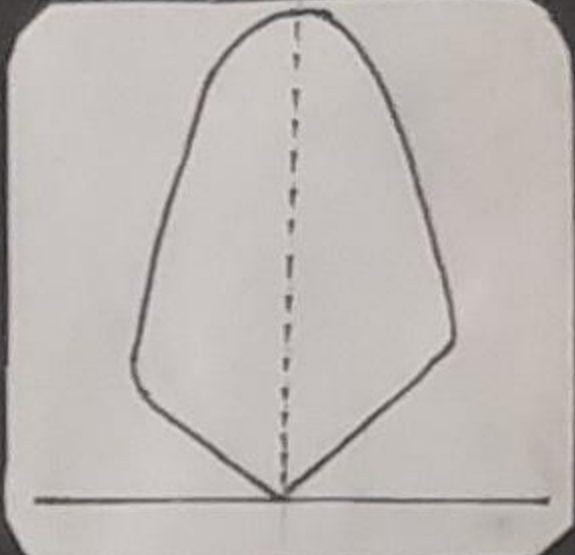
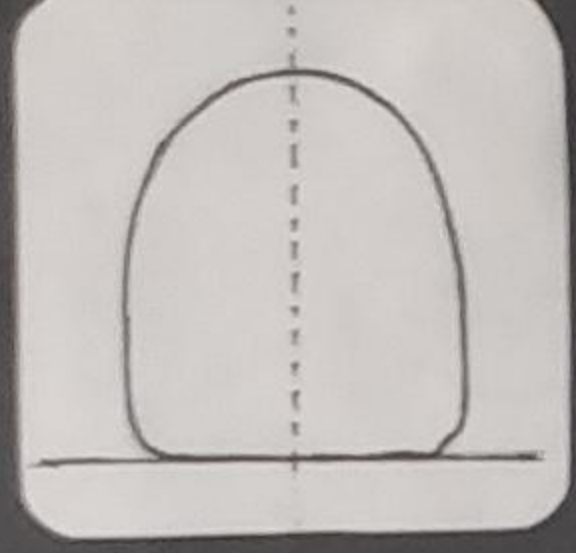

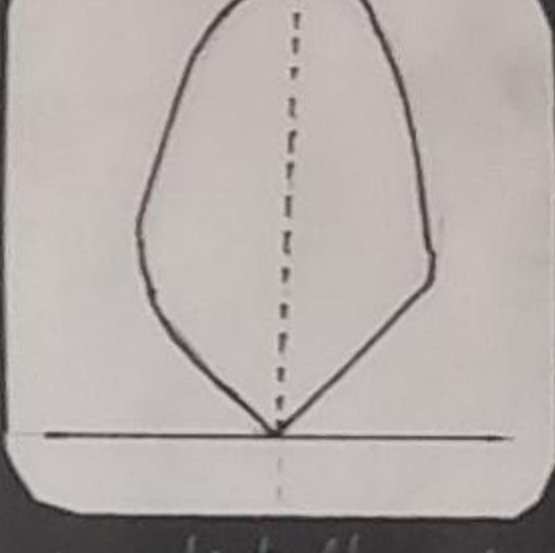


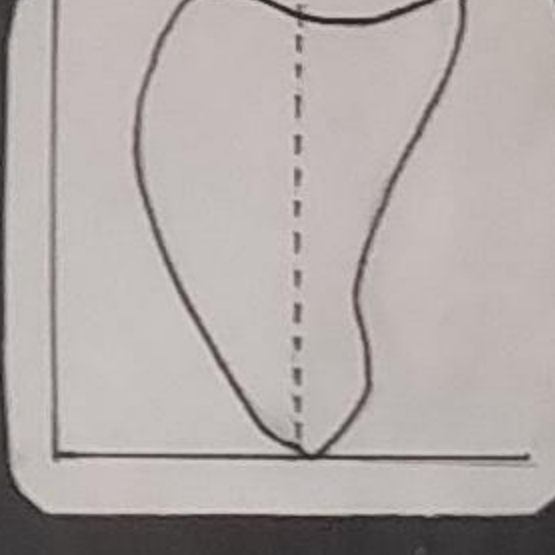

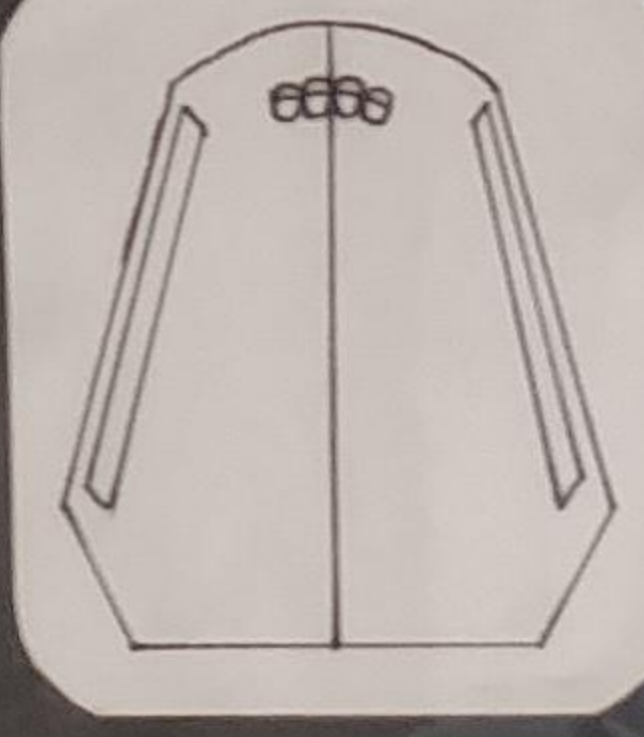
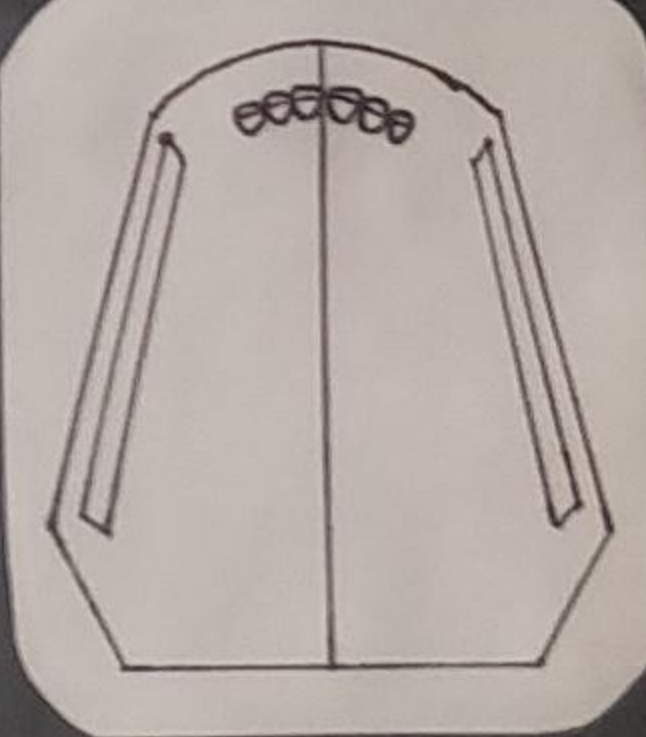


Department of Prosthodontics
College of Dental Sciences & Research Centre
Bopal, Ahmedabad.

2nd Year
B.D.S.

Harshang Patel
Darshil Patel
Mittal Patel
Harita Patel

UPPER ANTERIOR INCLINATION

PALATAL POSITION	CENTRAL INCISOR	LATERAL INCISOR	CANINE
OCCLUSAL PLANE OR HORIZONTAL PLANE	 <p>Incisal edge touches the glass slab.</p>	 <p>Incisal edge should lie above the plane.</p>	 <p>Tip of the Canine should touch the plane.</p>
MESIO-DISTAL DIRECTION OR VERTICAL PLANE	 <p>Perpendicular to the horizontal plane.</p>	 <p>Neck is inclined distally.</p>	 <p>Neck is distally inclined, but less than the lateral incisor.</p>
LABIO-LINGUAL DIRECTION	 <p>Parallel to the profile line of face.</p>	 <p>Neck is depressed palatally.</p>	 <p>Prominent at neck (laterally placed).</p>
LABIO CONTOUR OF OCCLUSAL RIM	 <p>Parallel to the curvature of the arch.</p>	 <p>Slightly related palatally.</p>	 <p>Distal-half palatally related.</p>

Prepared By ANKIL SHAH VISHAL PATEL
 CHINTAN NAYAK KAUSHAL PATEL
 IInd B.D.S

INCLINATION OF LOWER ANTERIORS


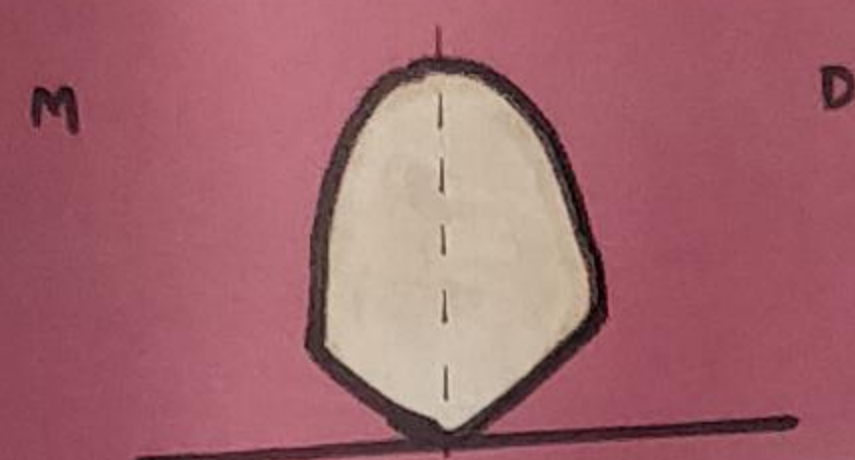
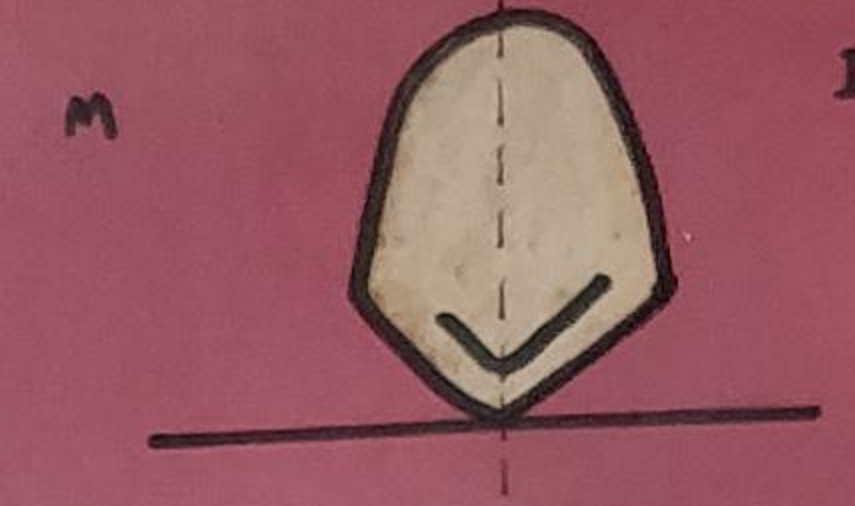
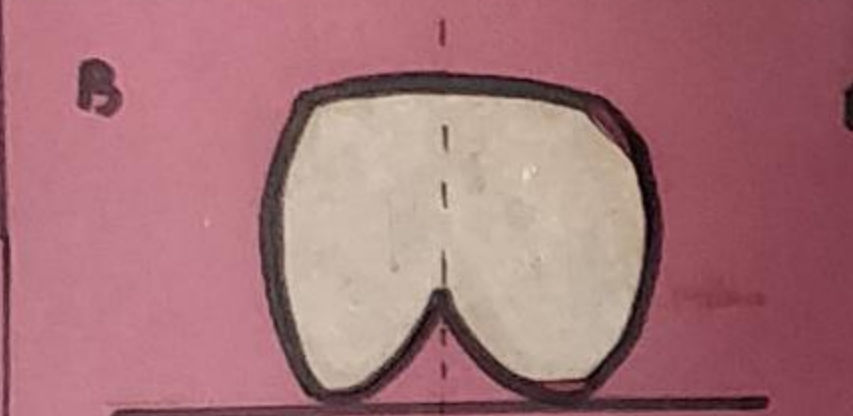
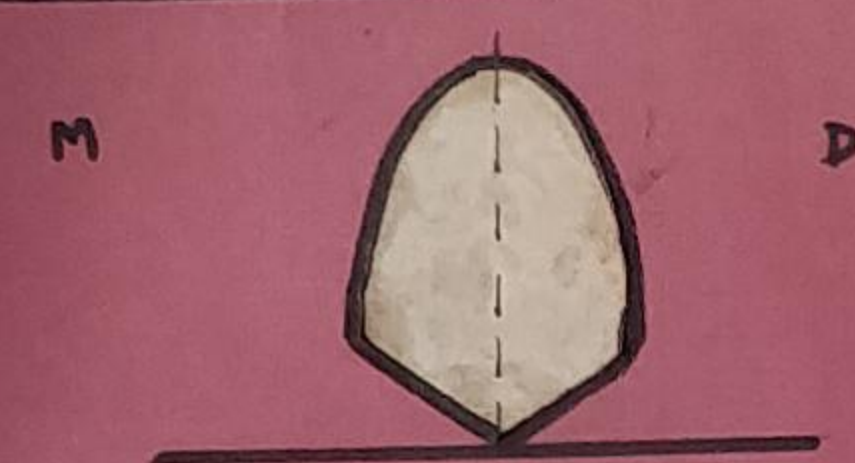



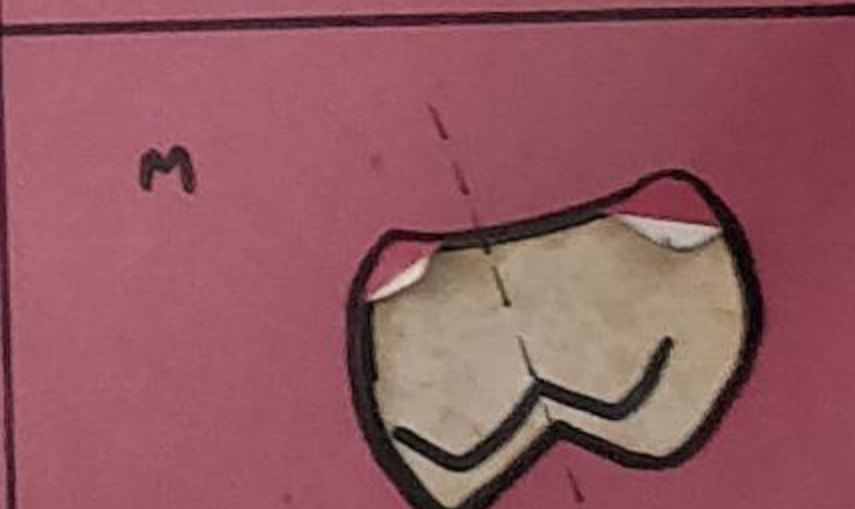
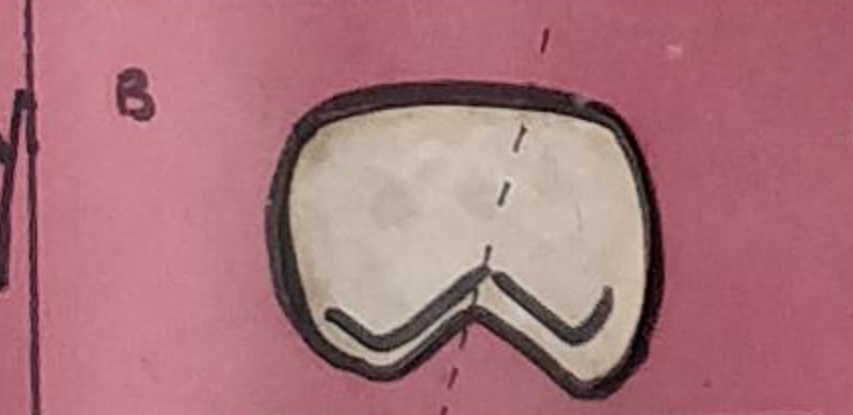

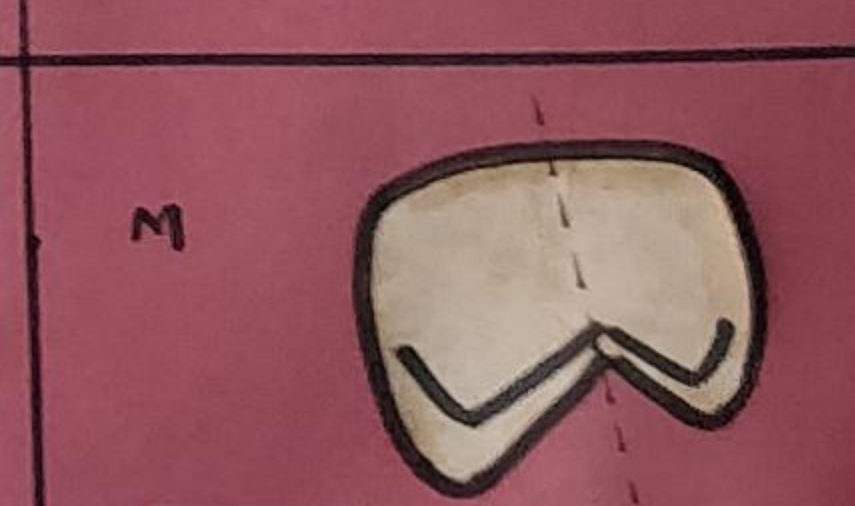
PALATIVE POSITION OF ANT. TEETH	CENTRAL INCISOR	LATERAL INCISOR	CANINE
OCCLUSAL PLANE OR GLASS SLAB OR HORIZONTAL PLANE	 <p>INCISAL EDGE SHOULD BE 1-2mm ABOVE ANT. OCCLUSAL PLANE.</p>	 <p>INCISAL EDGE SHOULD BE 1-2mm ABOVE ANT. OCCLUSAL PLANE.</p>	 <p>INCISAL EDGE SHOULD BE 1-2mm ABOVE ANT. OCCLUSAL PLANE.</p>
MESIO-DISTAL DIRECTION OR VERTICAL PLANE	 <p>PERPENDICULAR TO THE HORIZONTAL PLANE</p>	 <p>DISTALLY INCLINED NECK.</p>	 <p>NECK IS DISTALLY INCLINED BUT THAN LATERAL INCISOR</p>
LABIO-LINGUAL DIRECTION	 <p>NECK IS DEPRESSED LINGUALLY.</p>	 <p>PERPENDICULAR TO THE HORIZONTAL PLANE</p>	 <p>PROMINENT AT NECK LABIALLY PLACED.</p>
LABIAL CONTOUR OF OCCLUSAL RIM	 <p>PARALLEL TO THE CURVATURE OF ARCH.</p>	 <p>DISTAL HALF ROTATED SLIGHTLY LINGUALLY.</p>	 <p>DISTAL HALF ROTATED SLIGHTLY LINGUALLY.</p>

BY:- SATHALIYA SAKINA
PATEL RINAL

TYAGI PAYAL
MISTRY EKTA

2nd B.D.S. (2007-08)

INCLINATION OF UPPER POSTERIOURS

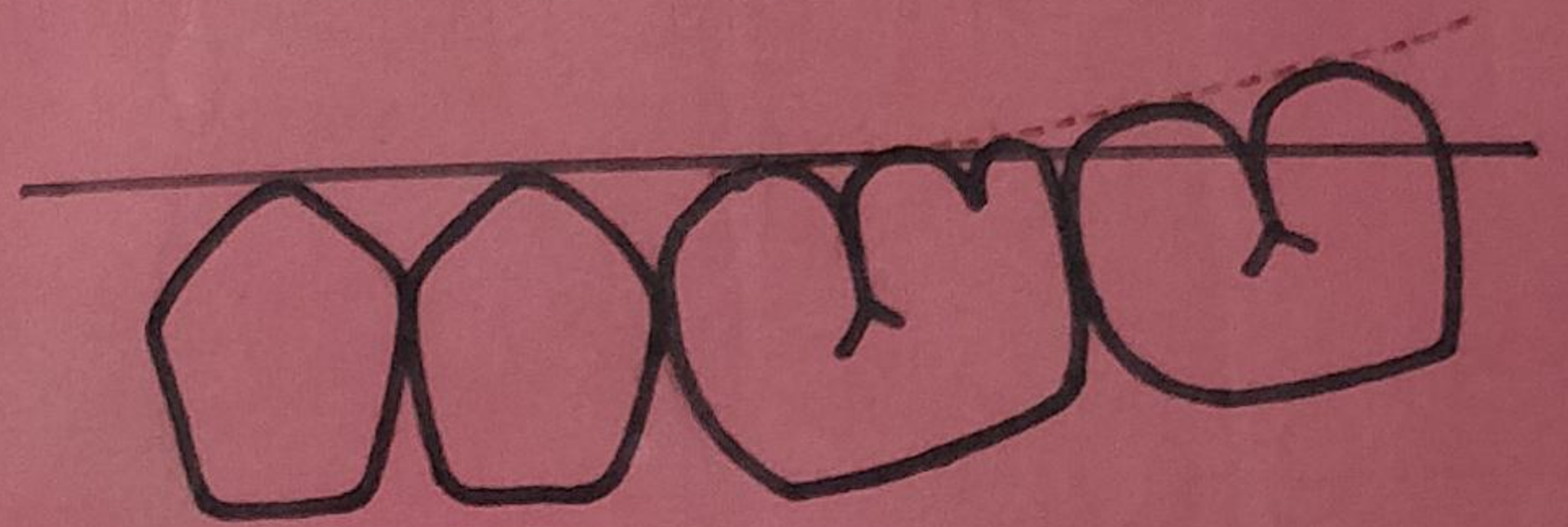
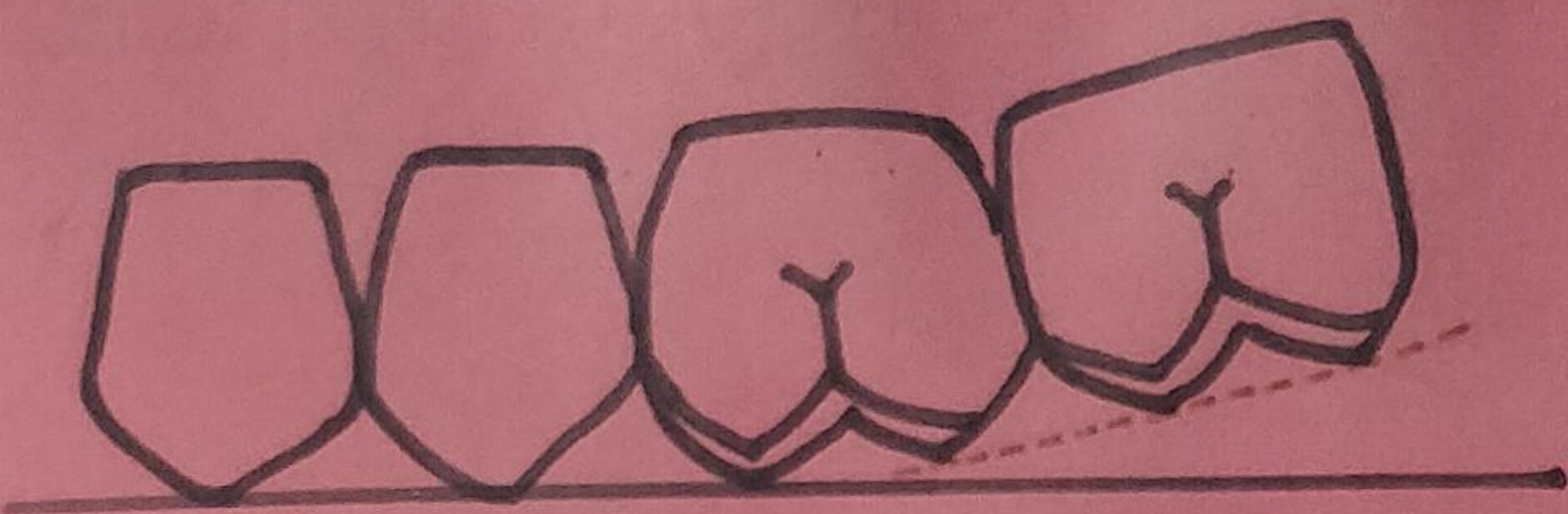
TOOTH	BUCCO-PALATAL INCLINATION PROXIMAL VIEW	MESIO-DISTAL INCLINATION BUCCAL-VIEW	MESIO-DISTAL INCLINATION PALATAL-VIEW
MAXILLARY FIRST PREMOLAR	 <p>BUCCAL CUSP TOUCHING THE GLASS SLAB. PALATAL CUSP 0.5mm AWAY FROM THE GLASS SLAB.</p>	 <p>PERPENDICULAR TO THE PLANE.</p>	 <p>PERPENDICULAR TO THE PLANE.</p>
MAXILLARY SECOND PREMOLAR	 <p>BUCCAL AND PALATAL CUSPS ARE BOTH TOUCHING THE GLASS SLAB.</p>	 <p>PERPENDICULAR TO THE PLANE.</p>	 <p>PERPENDICULAR TO THE PLANE.</p>
MAXILLARY FIRST MOLAR	 <p>MESIO-PALATAL CUSP TOUCHING THE GLASS SLAB; DISTO-PALATAL CUSP 0.5mm AWAY; MESIO-BUCCAL CUSP 0.5mm AWAY; DISTO-BUCCAL CUSP 1.0mm AWAY FROM THE GLASS SLAB.</p>	 <p>NECK IS INCLINED MESIALLY.</p>	 <p>NECK IS INCLINED MESIALLY.</p>
MAXILLARY SECOND MOLAR	 <p>MESIO-PALATAL CUSP 0.5mm AWAY; DISTO-PALATAL CUSP 1.0mm AWAY; MESIO-BUCCAL CUSP 1.0mm AWAY; DISTO-BUCCAL CUSP 1.5mm AWAY FROM THE GLASS SLAB.</p>	 <p>NECK IS INCLINED MESIALLY.</p>	 <p>NECK IS INCLINED MESIALLY.</p>

COMPENSATING CURVES

ANTEROPOSTERIOR CURVE IN MAXILLARY TEETH

CURVE (CURVE OF SPEE)

CURVE IN MANDIBULAR TEETH



These are compensating curves running in an anteroposterior direction. They compensate for the curve of Spee seen in natural dentition.

CURVE OF SPEE IS DEFINED AS "Anatomic curvature of occlusal alignment of teeth beginning at the tip of lower canine and following the buccal cusps of natural premolars and molars, continuing to anterior border of ramus as described by Graf von Spee" - GPT.

It is an imaginary curve joining buccal cusps of mandibular posterior teeth starting from canine passing through head of condyle. It is seen in natural dentition and should be reproduced in CO.

The significance of this curve is that, when the patient moves his mandible forward, posterior teeth set on this curve will continue to remain in contact. If teeth are not arranged according to this curve, there will be disocclusion during protrusion of mandible.

LATERAL CURVE

MONSOON CURVE

ANTI-MONSOON OR WILSON'S CURVE



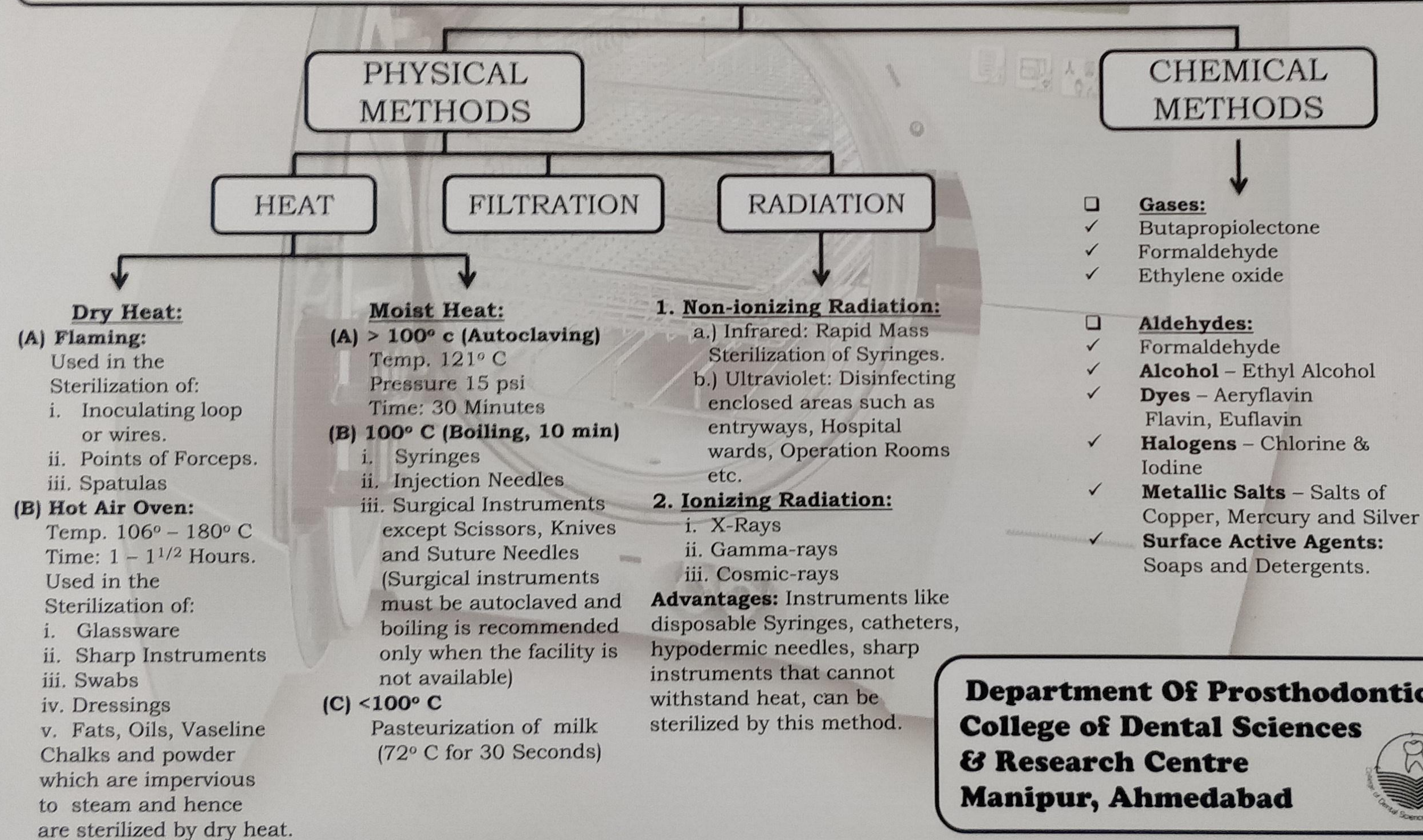
MONSOON CURVE IS DEFINED AS "The curve of occlusion in which each cusp and incisal edge touches or conforms to a segment of a sphere of 3 inches in diameter with its center in the region of glabella" - GPT. This curve runs across palatal and buccal cusps of maxillary molars.

WILSON'S CURVE IS DEFINED AS "A curve of occlusion which is convex upwards" - GPT. This curve runs opposite to direction of monsoon's curve. This curve is followed when first premolars are arranged so that they don't produce lateral movements.

- UMANGI PARIKH
- RONAK ADAIJA

STERILIZATION

Definition: It is a process of freeing of an article, a surface or a medium from all microorganisms, both in vegetative and sporing state, by removing or killing them.



**Department Of Prosthodontics
College of Dental Sciences
& Research Centre
Manipur, Ahmedabad**





ચોકડુ પહેરતા



દર્દીઓ માટે ની સુચના

ચોકડુ કઈ રીતે પહેરશો?

- ★ ચોકડુ પહેરતા પહેલા પાણીથી ભીનું કરવું.
- ★ ચોકડુ પહેરતી વખતે પહેલા નીચેનું અને પછી ઉપરનું ચોકડુ પહેરવું અને કાઢતી વખતે પહેલા ઉપરનું અને પછી નીચેનું બહાર કાઢવું.

ચોકડુ કેવી રીતે વાપરશો?

- ★ શરૂઆતમાં થોડા દિવસ (એક અઠવાડિયા સુધી) ચોકડુ આખો દિવસ પહેરી રાખવું, રાતે સુતા પહેલા કાઢી નાખવું.
- ★ દિવસ દરમિયાન ચોકડુ પહેરીને બોલવાની આદત પાડવી.
- ★ શરૂઆતમાં થોડા દિવસ (એક અઠવાડિયા સુધી) ચોકડાથી જમવું નહીં, જમતી વખતે ચોકડુ કાઢીને જમવું, બાકીના સમયમાં પહેરી રાખવું.

ચોકડાથી કઈ રીતે જમશો?

- ★ શરૂઆતમાં (એક અઠવાડિયા પછી) પોચો અને નરમ ખોરાક લેવો.
- ★ જમતા પહેલા ખોરાકના નાના કોળીયા બનાવી બંને બાજુ મુકીને ચાવવું. એક બાજુએ ચાવવાથી બીજી બાજુએથી ચોકડું ઉચકાઈ જશે અને ટીલા પડી જશે.
- ★ શરૂઆતમાં થોડા દિવસ (એક અઠવાડિયા સુધી) કઠણ અને ચીકણો ખોરાક લેવો નહીં. ભાત અને ખીચડી લેવાની.
- ★ આગળના દાંતથી કઈ તોડવાનો કે કાપવાનો પ્રયત્ન કરવો નહીં.

ચોકડુ કઈ રીતે સાચવશો?

- ★ ચોકડુ નિયમિત સાફ કરવું જરૂરી છે.
- ★ ચોકડુ જમ્યા પછી જરૂર સાફ કરવું.
- ★ ચોકડુ પાણી, નાહવાના સાબુ (એન્ટીસેપ્ટિક લિક્વિડ સાબુ) અને નરમ દાંતાવાળા બ્રશથી સાફ કરવું.
- ★ સાફ કરવી વખતે નીચે રૂમાલ અથવા પાણી ભરેલું વાસણ રાખવું.
- ★ ચોકડુ પહેર્યું ન હોય ત્યારે પ્લાસ્ટીક અથવા સ્ટીલના ડબ્બામાં ચોકડુ ડૂબે તેટલું પાણી ભરીને મુકી રાખવું.
- ★ ગરમ પાણી નો ઉપયોગ ચોકડુ મુકવા કે સાફ કરવા માટે કરવો નહિ.

ખાસ સુચનાઓ

- ★ જ્યારે મોઢામાં ચાંદા પડે અથવા બીજું કોઈ પણ તકલીફ થાય ત્યારે ચોકડું પહેરવાનું બંધ કરી ડૉક્ટરનો સંપર્ક કરવો. જાતે ઘસીને ચોકડુ બરાબર કરવાનો પ્રયત્ન કરવો નહીં, નહીંતર ચોકડાનું ફીટીંગ બદલાઈ જશે.
- ★ છીક ઉધરસ કે બગાસુ આવે ત્યારે મોઢા આગળ હાથ રાખવો.
- ★ જો કોઈ કાસણસર ચોકડુ તુટી જાય તો બધા ટુકડા સાચવીને રાખવા, ધરગથ્થુ ઘલાજથી ચોટાડવાનો પ્રયત્ન કરવો નહીં, બધા ટુકડા ડૉક્ટર પાસે લઈ જઈ સંધાવા યોગ્ય છે.

સામાન્ય રીતે થતી તકલીફો

- ★ શરૂઆતમાં ચોકડુ પહેરવાથી વધારે લાળ છુટશે, ઉબકા આવશે, બોલવામાં તકલીફ પડશે, જે નિયમિત રીતે પહેરવાથી દુર થઈ જશે.
- ★ ૨૪ કલાક ચોકડુ પહેરવાથી લોહીનું ભ્રમણ ઘટશે, જેથી ચોકડુ ટીલું પડી શકે છે, માટે રોત્તે ચોકડુ પહેરવું નહીં, જેથી એટલો સમય પેટા ને આરામ મળે.
- ★ ચોકડુ એ કુદરતી દાંતની કુત્રીમ અવેજી છે, માટે કુદરતી દાંત સાથે સરખામણી કરવી નહીં.
- ★ કુદરતી દાંત કરતાં ચોકડા વડે ખુબ જ ઓછું બળ લગાડી શકાય છે.

By:- Pooja Lala, Anjali Mairal, Jay Modi, Roonak Modi, Karthikey Kumar, Maulik Mahera, Ankit Mangukiya

RISE OF IMPLANT SURGICAL GUIDES

"A guide is used to assist in proper surgical placements and angulation of dental implants"

CONVENTIONAL NON LIMITING DESIGN:

VACCUM FORMED GUIDE



RADIOGRAPHIC GUIDES

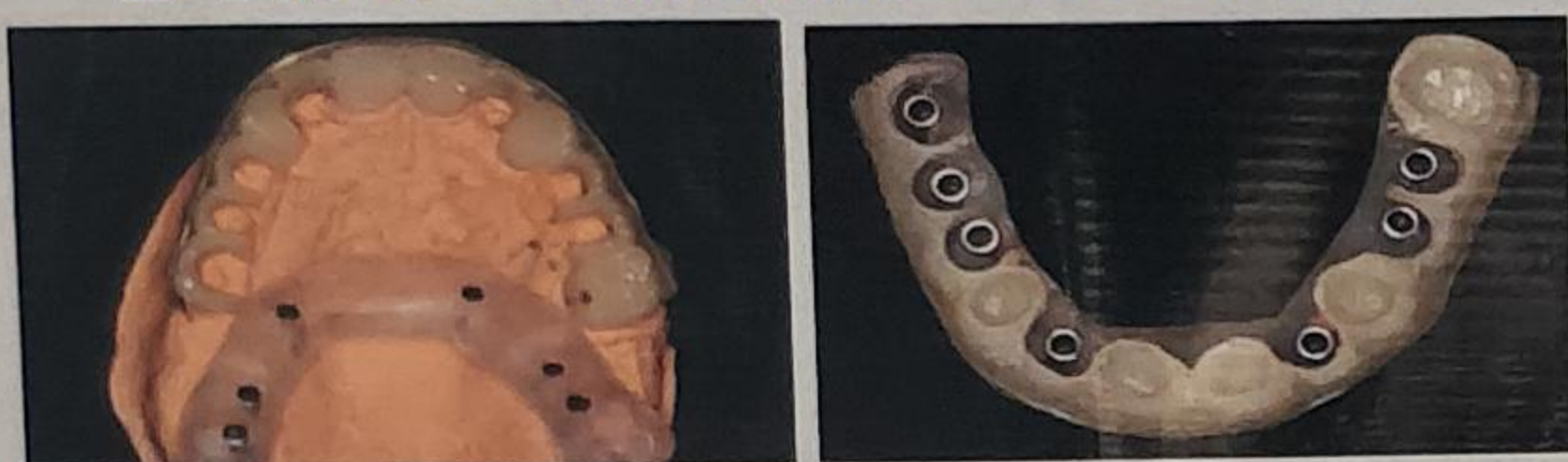


ADVANTAGES: Cost effective, easy to fabricate

LIMITATIONS: 2-dimensional, inadequate information of associated vital structures, compromised angulations of the osteotomy drills

INNOVATIVE CAST BASED GUIDE PARTIALLY LIMITING DESIGNES:

2 PART SURGICAL TEMPLATE



VPS MATERIAL AND GUIDING

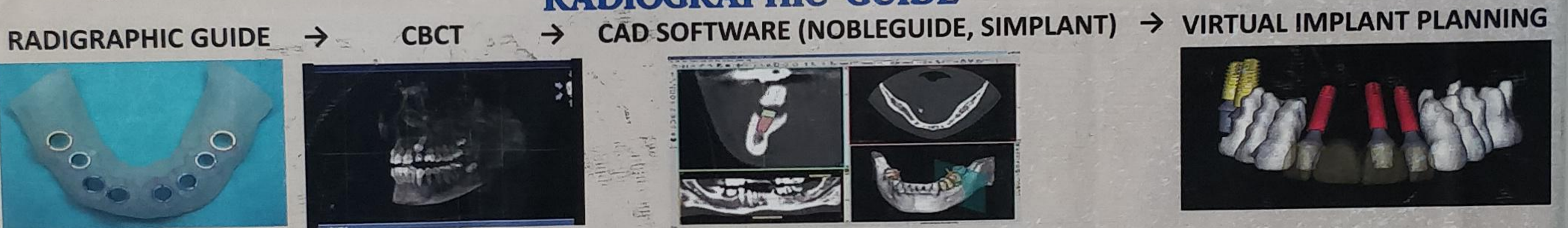


ADVANTAGES: Low cost, guides the initial drill with the aid of a sleeve, flapless technique

LIMITATIONS: Inadequate information of associated vital structures

ADVANCED CAD/CAM BASED FULLY LIMITING GUIDES

RADIOGRAPHIC GUIDE



STEREOLITHOGRAPHIC GUIDES

SOFT TISSUE SUPPORTED



OSSEOUS SUPPORTED



TOOTH SUPPORTED



3-D PRINTING



ADVANTAGES: 3-dimensional, precision in implant placement in association to vital structures, sequential drill sleeves that aid in guiding all the osteotomy drills, precisely replicate the desired soft/hard tissue contours at the implant site, flapless and flap designs can be proceed according to design

LIMITATIONS: Expensive, radiation exposure for tomography, no changes can be done in the angulations during osteotomy after the fabrication of the guide

IMAGE GUIDED SURGERY

Computer displays real-time positioning of the drill in the mesiodistal, buccolingual and coronapical planes. Hand piece is equipped with 3-D positioning device such as electromagnetic digitalizer or light emitting diode. Extra oral marker attached to surgical guide for computer to analyze position of jaw to hand piece.

References:

- Ganz SD. Presurgical planning with CT-derived fabrication of surgical guides. *J Oral Maxillofac Surg.* 2005;63:59-71
- Misch CE, Dietsh-Misch F. *Diagnostic casts, preimplant prosthodontics, treatment prostheses*, 2nd ed.
- Cast-based surgical guide. *J prosthet dent.* 2008
- Fabrication of a guide for radiographic evaluation & surgical procedures. *J prosthet dent.* 1995

SPA - FACTOR

SEX

female



The incisal angles are more rounded



The incisal edges of central & lateral incisor follow the curve of lower lip



A flat; thin; narrow teeth fits delicate women

male



The incisal angles are less rounded



The incisal edges of central incisor is parallel to the lips



A thick bony, big sized tooth heavily caved on its labial face is used for men

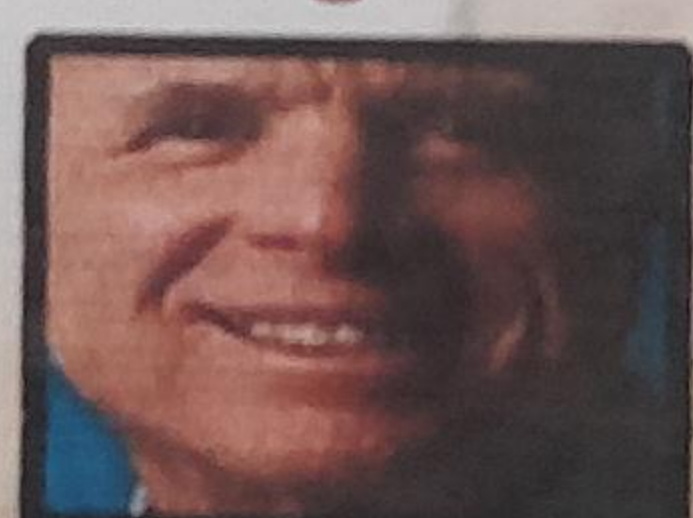
PERSONALITY

delicate



Pale & rounded feminine looking teeth

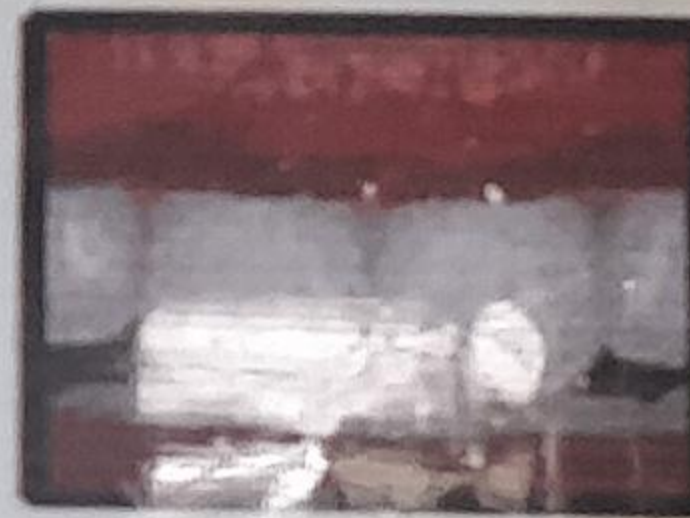
vigorous



Having wider central, worn canines, darker color, sharp line angles & point angles

AGE

younger



The rhamelion formation is on incisal edges of permanent incisors, light shade & has sharp tip of cuspid

older



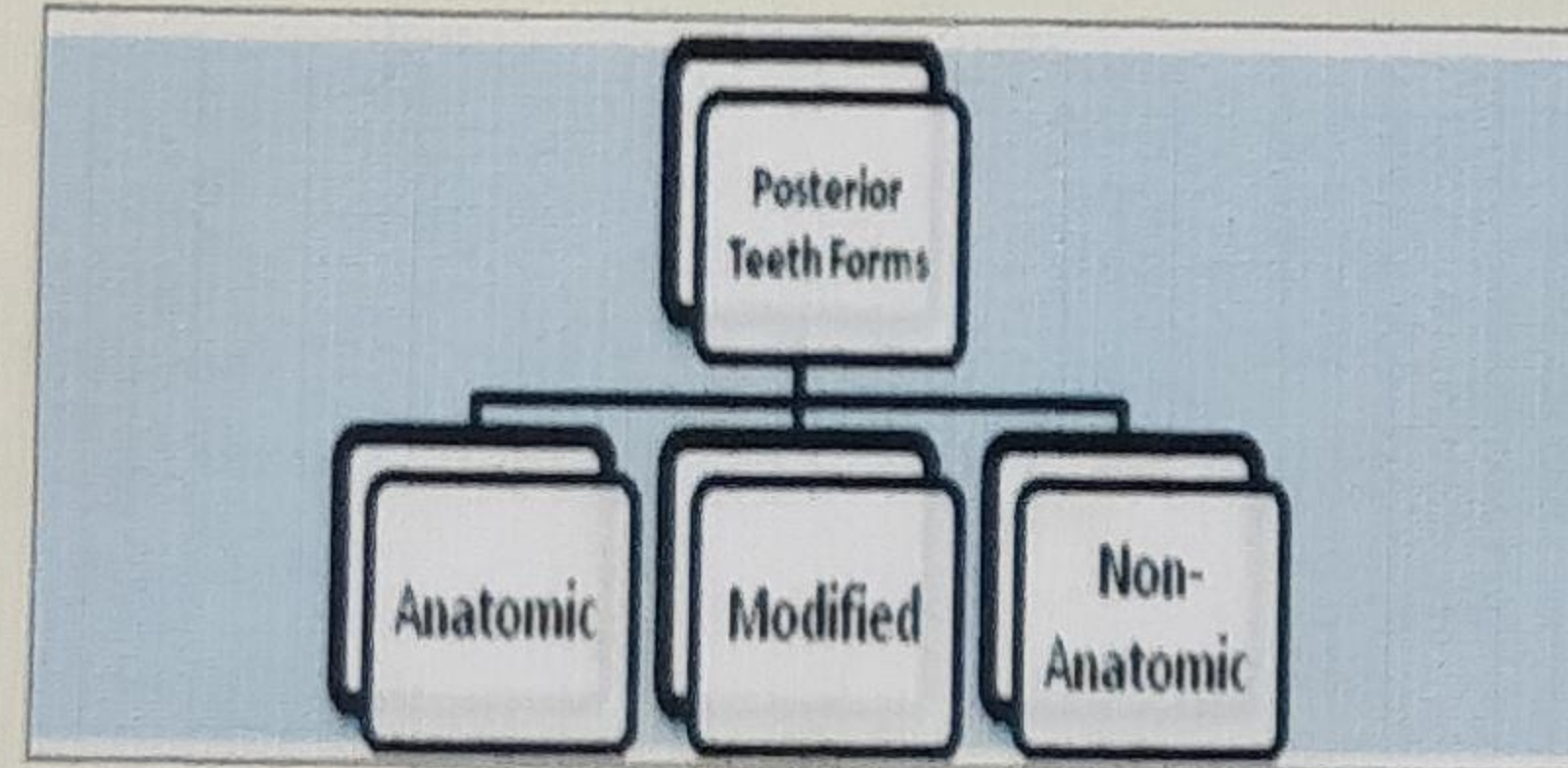
Teeth having grinding of the edges of incisors. As the teeth ages deposition of secondary dentin making the tooth more opaque & saturated

POSTERIOR TOOTH FORMS

HISTORY

- Hundreds of years ago teeth were carved from
- ✓ Stone
- ✓ Wood
- ✓ Ivory
- ✓ Metal
- ✓ Human teeth were also used for denture.

CLASSIFICATION

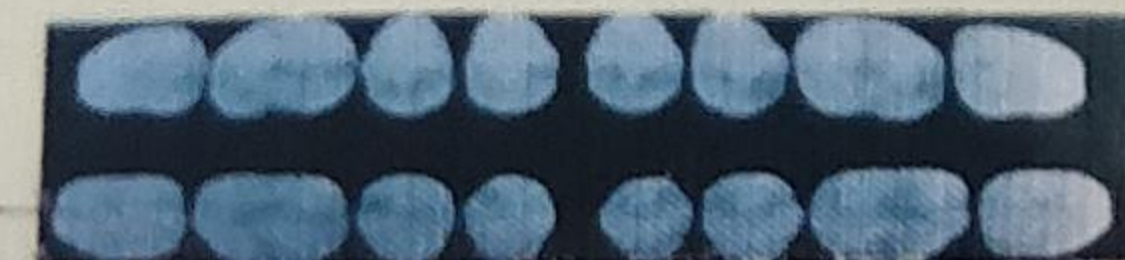


ANATOMIC

- **Trubyte :-**
- 1st anatomic porcelain teeth.
- Used in angle class I occlusion.



- **Pilkington & Turner:-**
- Slightly shallower cusp of 30



MODIFIED

- **Gysi Crossbite:-**
- Maxillary buccal cusp eliminated
- Called "Mortar and pestle action"



- **Sear's channel:-**
- Maxillary occlusal surfaces had deep channel running mesiodistally in all posterior teeth.



- **McGrane Curved Cusp:-**
- used to shear food in harmony with lateral condyle guidance.



- **John's Vincent's metal insert:-**
- Used metal inserts
- Originally gold solder wire & later with stainless steel.



NON-ANATOMIC

- **Hall's Inverted Cusp Teeth:-**
- Tooth was flat with concentric cone shaped depressions on occlusal surface.



- **Meyerson's True Cusp:-**
- It had series of transverse buccal lingual ridges.



- **Cook's metal teeth :-**
- 2nd Premolar & 1st molar were flat stainless steel casting with holes on occlusal surfaces.



College of Dental sciences & Research Centre

Prepared by...


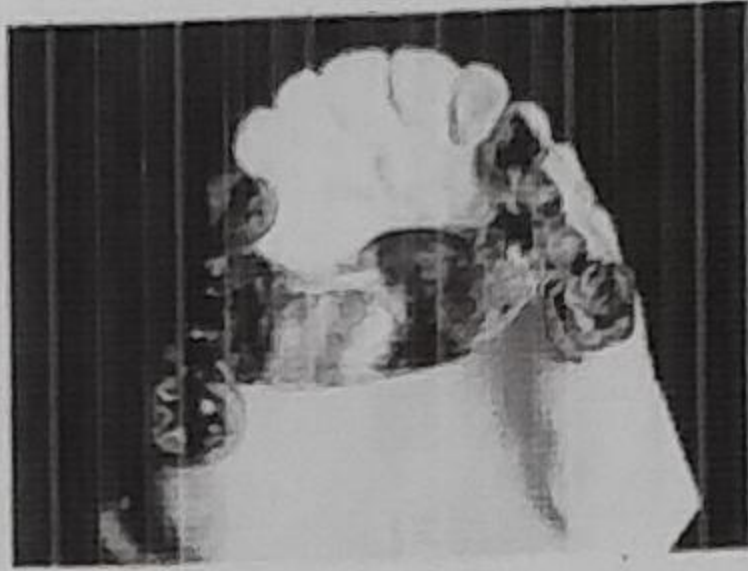
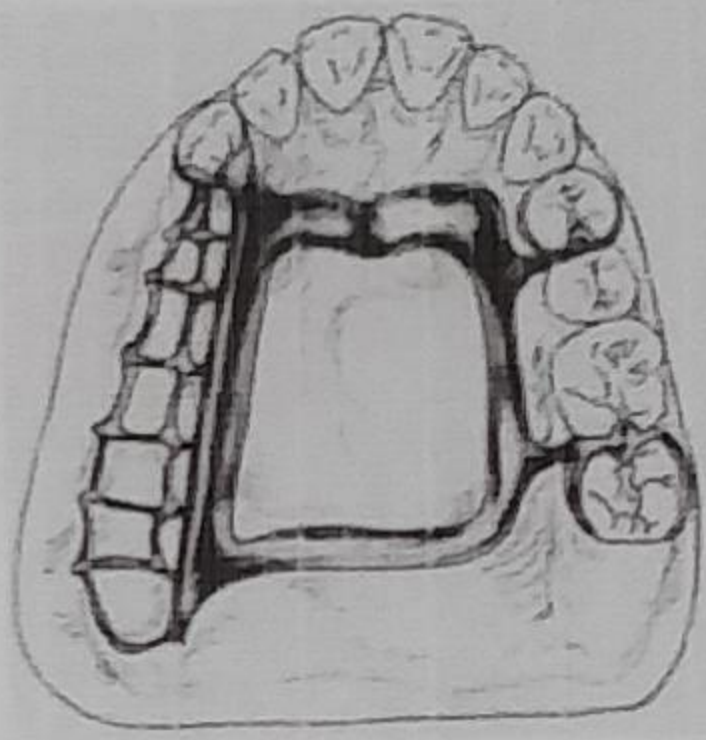
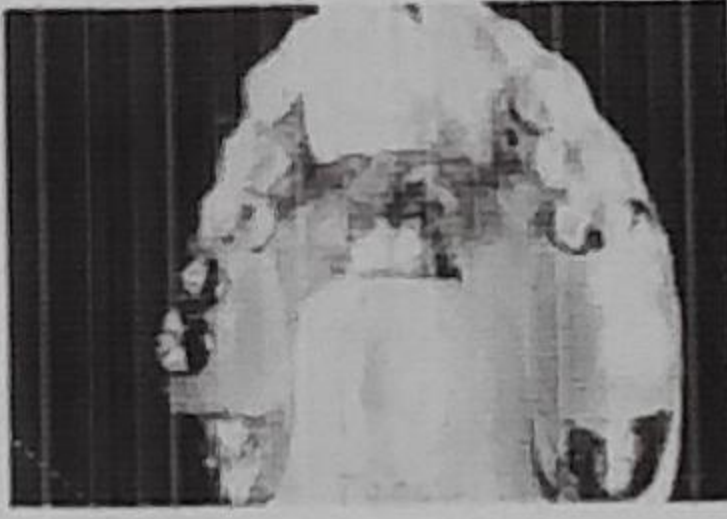
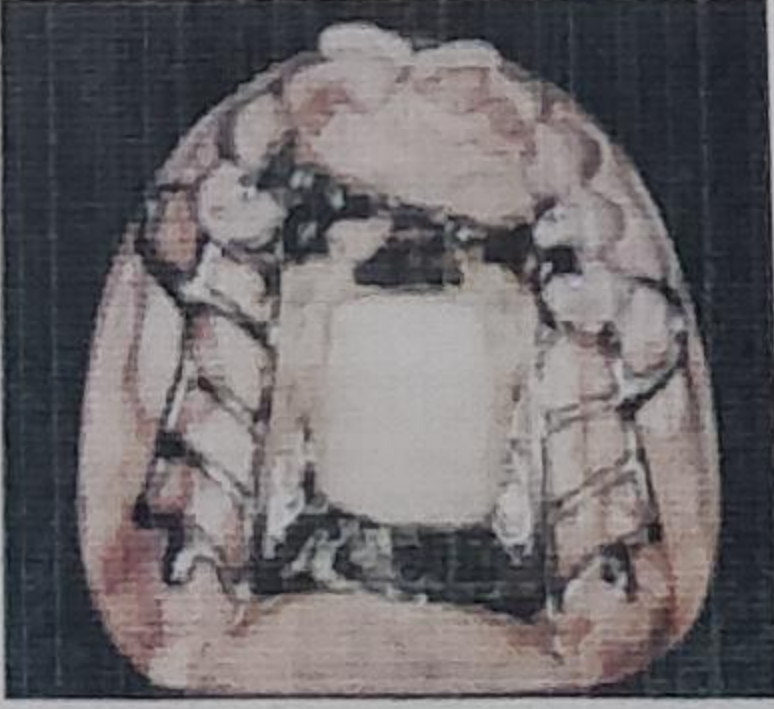
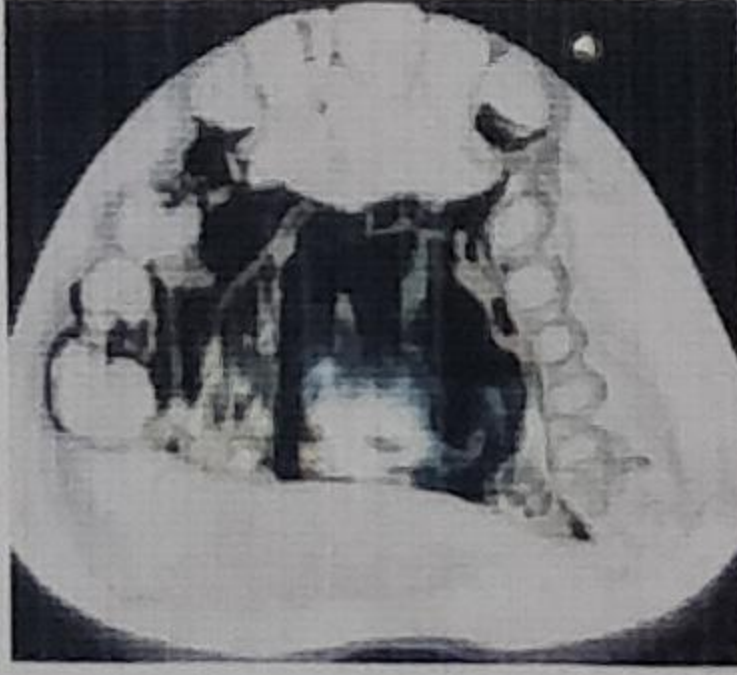
- Tithi Vaid
- Rutu Patel
- Shilpi Patel
- Jalpa Desai
- Shikha Shah
- 2nd B.D.S.

Instructed by...







- Dr. Shruti Mehta
- Dr. Dipti Kohli
- Dr. Manish Mistri
- Dr. Priyanka Makwana
- Dr. Shuchismita Chaudhary

Maxillary Major Connector

Major Connector - It is defined as " a part of R.P.D. which connects the components on one side of the arch to the components on the opposite side of the arch"

Type	Figure	Indications for use
1) Single palatal bar.		1) For interim partial denture.
2) Single Palatal Strap.		1) Bilateral & unilateral edentulous spaces of short span in a tooth supported restoration.
3) Antero-Posterior Palatal bar.		<ol style="list-style-type: none"> 1) When anterior & posterior abutment teeth are widely separated. 2) Class- IV, II. 3) Patient who wants to avoid complete palatal coverage. 4) Cases with large inoperable palatal torus.
4) U-Shaped or horse shoe shaped connector.		<ol style="list-style-type: none"> 1) When many anterior teeth are to be replaced. 2) Used in presence of torus extending to the posterior border of the hard palate.
5) Antero-Posterior Palatal strap or closed horse shoe shaped connector.		<ol style="list-style-type: none"> 1) Class - I & II. 2) Class - IV. 3) Inoperable palatal tori that do not extend posteriorly to the junction of the hard & soft palates.
6) Complete palate type connector.		<ol style="list-style-type: none"> 1) In the absence of a pedunculated torus. 2) Class - II.

MANDIBULAR MAJOR CONNECTOR

Type	Figure	Indications for use
1. Lingual Bar		<ol style="list-style-type: none"> 1. Where sufficient space exists between slightly elevated lingual gingival tissues.
2. Lingual Plate		<ol style="list-style-type: none"> 1. Where alveolar lingual sulcus so closely approximates the lingual gingival crevices. 2. Residual ridges in class I arch have undergone such vertical resorption. 3. For periodontally weakened teeth.
3. Sub Lingual Bar		<ol style="list-style-type: none"> 1. Where the height of the floor of the mouth in relation to gingival free margins will be less than 6mm.
4. Lingual bar with continuous (Cingulum) bar		<ol style="list-style-type: none"> 1. Where the height of the floor of the mouth in relation to gingival free margins will be less than 6mm.
5. Continuous bar		<ol style="list-style-type: none"> 1. When a lingual plate or sublingual bar is otherwise indicated but axial alignment of the anterior teeth is such that the excessive block out of interproximal undercuts would be required.
6. Labial bar		<ol style="list-style-type: none"> 1. When lingual inclinations of remaining mandibular premolar & incisor teeth can't be corrected. 2. When severe lingual tori can't be removed. 3. When severe & abrupt lingual tissue undercuts are present.

DEPARTMENT OF PROTHETIC DENTISTRY

COLLEGE OF DENTAL SCIENCE & RESEARCH CENTRE

2ND BDS - 2008-09

PRATIK PANDYA
KRUPA PANDYA
FARGUN PATEL
ATISH PATEL

APPLEGATE'S RULES

- 1 Classification should follow rather than precede any extractions of teeth that might alter the original classification.
- 2 If a third molar is missing and not to be replaced, it is not considered in the classification.
- 3 If a third molar is present and is to be used as an abutment, it is considered in the classification.
- 4 If a second molar is missing and is not to be replaced, it is not considered in the classification. [For example, if the opposing 2nd molar is likewise missing and is not to be replaced.]
- 5 The most posterior edentulous area always determines the classification.
- 6 Edentulous areas other than those determining the classification are designated by their number.
- 7 The extent of the modification is not considered, only the number of additional edentulous areas.
- 8 There can be no modification areas in class-IV arches. [Another edentulous area lying posterior to the "single bilateral area crossing the midline" would instead determine the classification.]

MADE BY :-

Ankita
Babita
Nimisha
Hetul

2nd B.D.S. 2007-2008

KENNEDY'S CLASSIFICATION OF PARTIALLY EDENTULOUS ARCHES



CLASS-I

A BILATERAL EDENTULOUS AREA LOCATED POSTERIOR TO THE REMAINING NATURAL TEETH.



CLASS-II

A UNILATERAL EDENTULOUS AREA LOCATED POSTERIOR TO THE REMAINING NATURAL TEETH.



CLASS-III

A UNILATERAL EDENTULOUS AREA WITH NATURAL TEETH REMAINING BOTH ANTERIOR AND POSTERIOR TO IT.



CLASS-IV

A SINGLE BUT BILATERAL [CROSSING THE MIDLINE] EDENTULOUS AREA LOCATED ANTERIOR TO REMAINING NATURAL TEETH.



CLASS-I
MODIFICATION

2

† THE MOST POSTERIOR EDENTULOUS AREA OR AREAS ALWAYS DETERMINE THE CLASSIFICATION.
† EDENTULOUS AREAS OTHER THAN THOSE, WHICH DETERMINE THE CLASSIFICATION, ARE REFERRED TO AS MODIFICATION SPACES AND ARE DESIGNATED BY THEIR NUMBER.

Posterior Teeth Selection

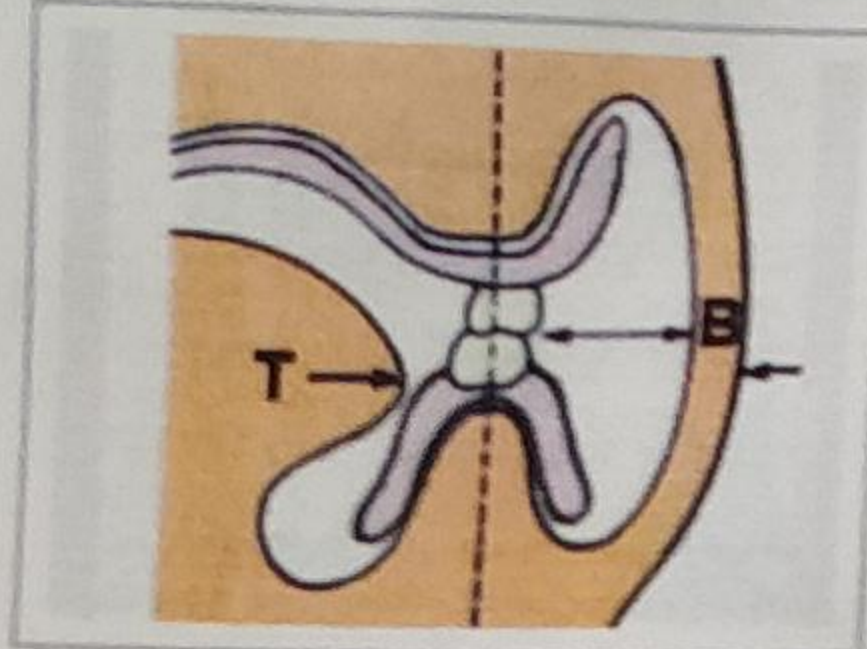
Size

Mesio-Distal Length



Mesio-distal length of each tooth should be selected such that combined length of all posterior teeth on that side of arch doesn't exceed distance between canine & retromolar pad

Bucco-Lingual Width



It should be less so that the buccal & lingual surfaces slope out from the occlusal surface to provide a proper path of escapement for food during mastication

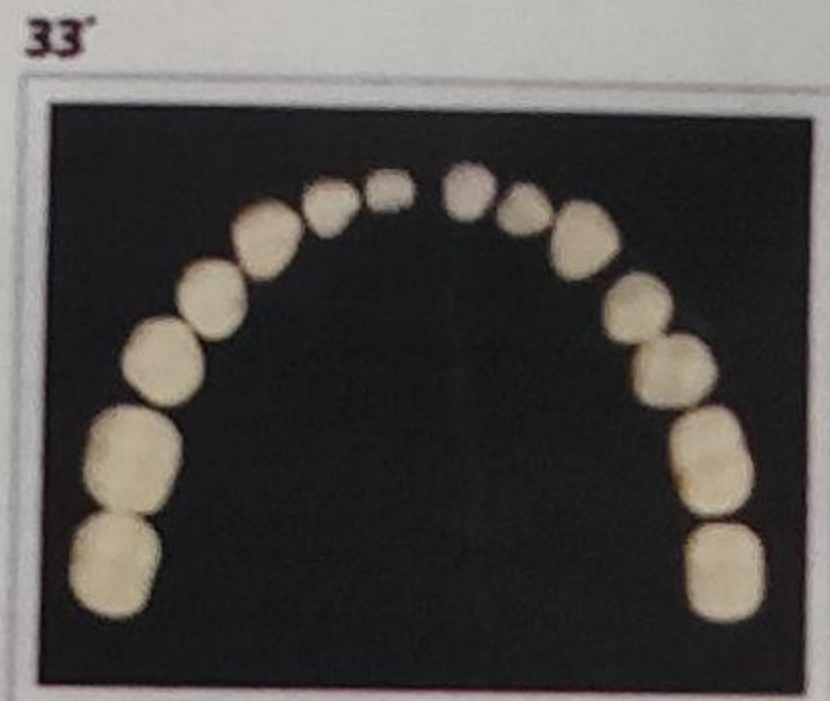
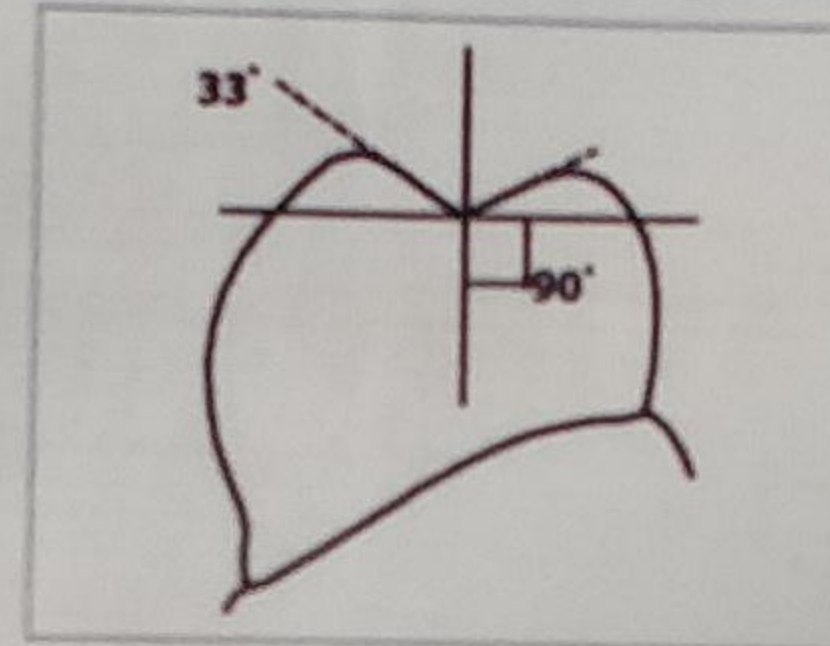
Occluso-Gingival Height



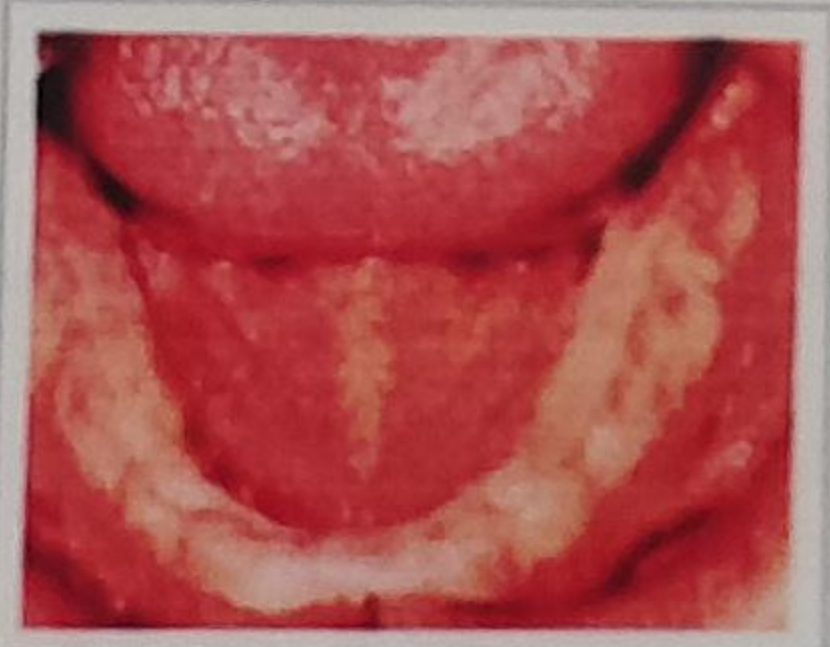
- Determined by available interarch distance
- Thickness of denture base can also be altered

Occlusal Form

Anatomic



Indication: Well formed ridge



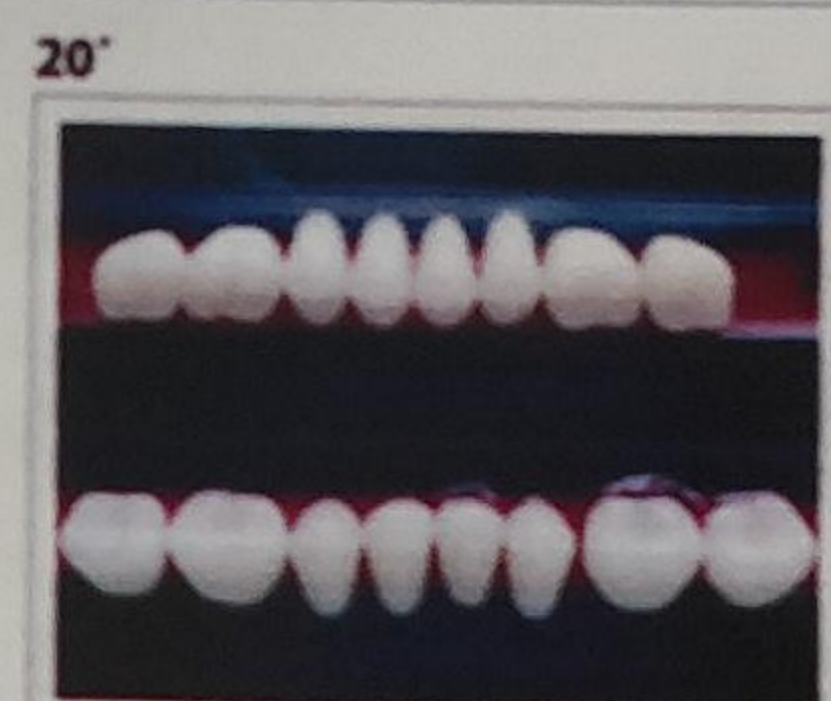
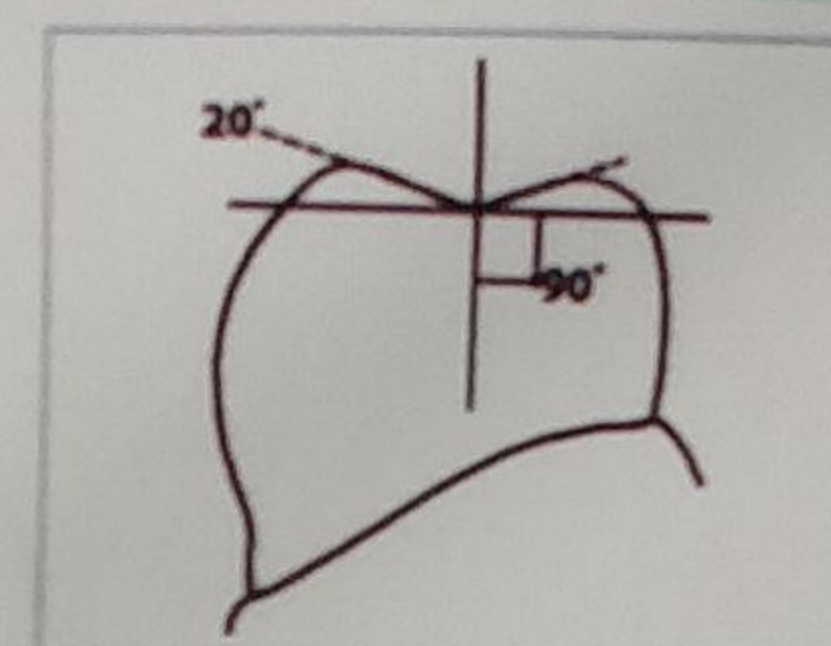
Advantages:

- Resembles natural teeth
- Greater chewing efficiency
- Proper contours for crushing & provides eccentric balance

Disadvantages:

- More difficult & time consuming to obtain balanced occlusion
- Ridge resorption

Semi-Anatomic



Indication: Partially resorbed ridge



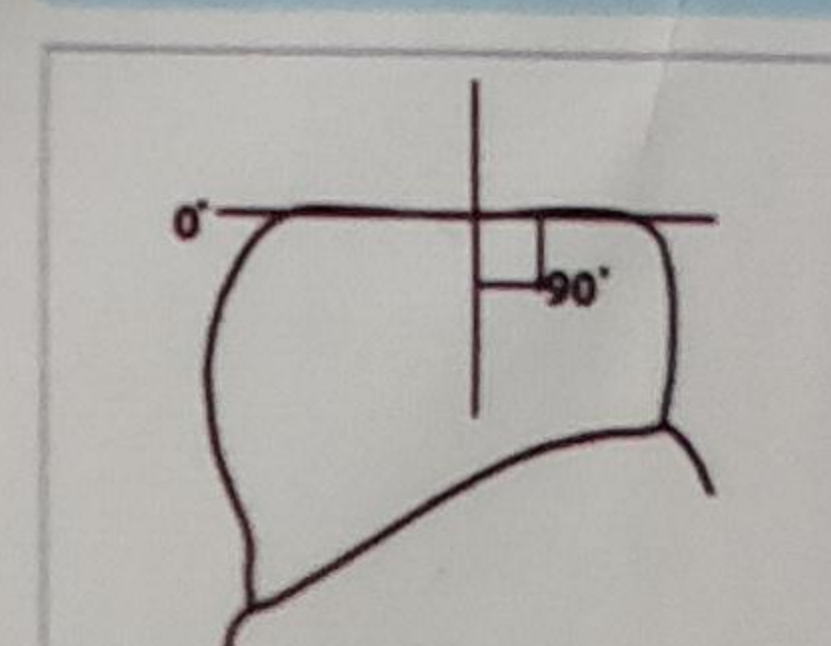
Advantages:

- Easier to arrange & obtain balanced occlusion
- Provides all advantages of cusp teeth

Disadvantages:

- Less esthetic
- Less chewing efficiency

Non-Anatomic



Indication: Completely resorbed ridge



Advantages:

- More tongue room
- Best for patients with poor muscular control & ridge relation

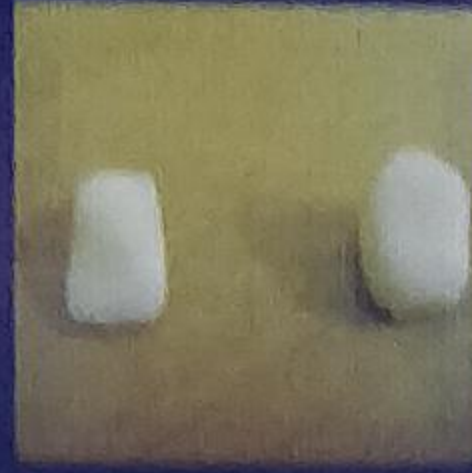
Disadvantages:

- Less chewing efficiency especially for fibrous food
- Less stability to upper denture

DIFFERENCE BETWEEN ACRYLIC RESIN TEETH AND PORCELAIN TEETH

PROPERTY

RESIN TEETH



PORCELAIN TEETH



* BOND WITH RESIN BASE	CHEMICAL BOND	MECHANICAL BOND RETENTION WITH PINS (ANTERIOR TEETH) AND DIATORIC HOLE (POSTERIOR TEETH)
* MECHANICAL PROPERTY	1. LESS BRITTLE 2. HIGH RESILIENCE 3. ROUGHNESS	1. VERY BRITTLE 2. CHIPING OCCURS ON IMPACT
* SOLUBILITY & DIMENSIONAL CHANGE	INSOLUBLE AND SOME DIMENSIONAL CHANGE WITH WATER ABSORPTION	INSOLUBLE AND NO DIMENSIONAL CHANGE
* MAINTANANCE OF VERTICAL DIMENTION	WEAR CAN RESULT AND LOSS OF VERTICAL DIMENTION	WEAR IS INSIGNIFICANT & MINIMAL LOSS OF VERTICAL DIMENTION
* ABRASION OF OPPOSING TEETH	MINIMAL	ABRADES OPPOSING NATURAL TEETH
* AESTHETICS	LESS AESTHETIC	EXCELLENT
* CLICKING SOUND	NO SOUND ON CONTACT WITH OPPOSING TEETH	NOISY CLICKING SOUND OCCURS WITH OPPOSING TEETH
* GRINDING OF RIDGE LAP AREA	EASY TO GRIND	DIFFICULT TO GRIND, DIFFICULT TO RETAIN OR POSITION IN INTER-ARCH SPACES
* CRAZING	OCCURS IF NOT CROSS LINKED	SUCCEPTIBLE TO CRAZING BY THERMAL SHOCK
* THERMAL SHOCK	MORE RESISTANT	LESS RESISTANT
* MANIPULATION METHOD	BY CURING	BY FIRING
* DENSITY(G.Cm ⁻³)	1.2	2.4
* COEFFICIENT OF THERMAL EXPANSION(ppm.c ⁻¹)	80	7
* MODULOUS OF ELASTICITY(GPa)	2.5	80
* HARDNESS(VHN)	20	500

DEPARTMENT OF PROSTHETIC DENTISTRY
COLLEGE OF DENTAL SCIENCE & RESEARCH CENTRE

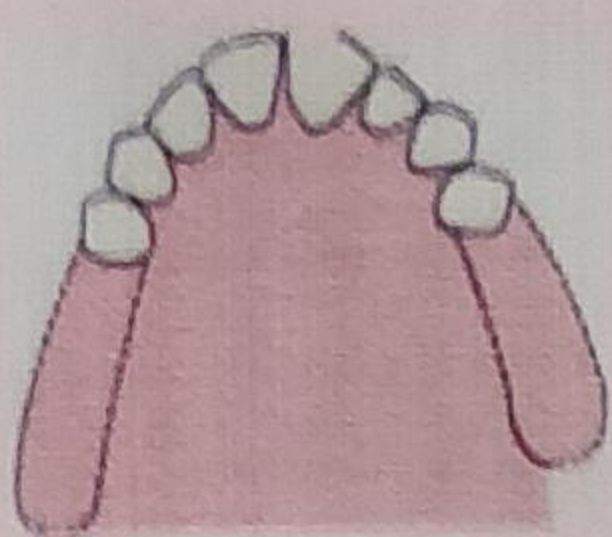
**SECOND YEAR
BATCH 2008-09**

PREPARED BY:
CHIRAGI SHAH
KINJAL SHAH
ANKIT SHAH
MAYUR SAVALIYA

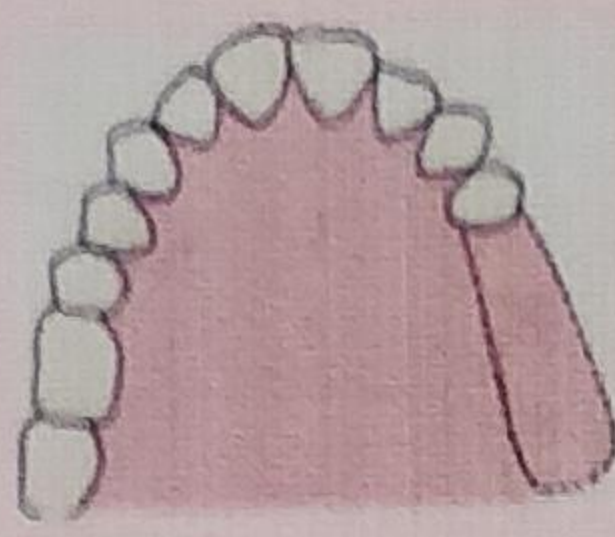
CLASSIFICATION OF REMOVABLE PARTIAL DENTURE

● KENNEDY-APPLEGATE'S CLASSIFICATION

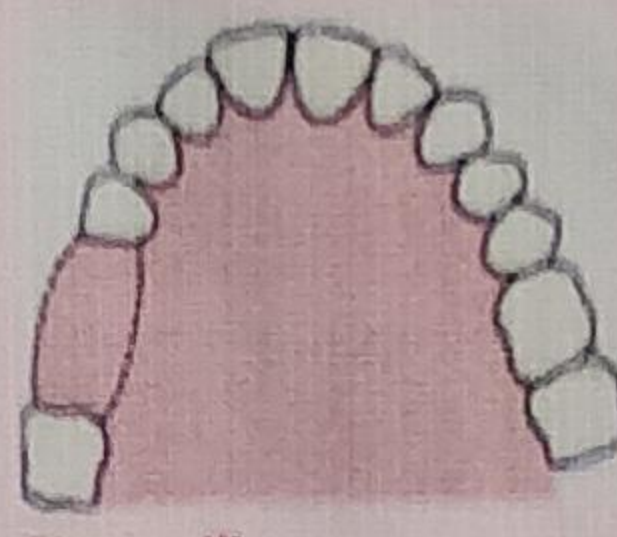
It is the most popular classification based on partially edentulous arches



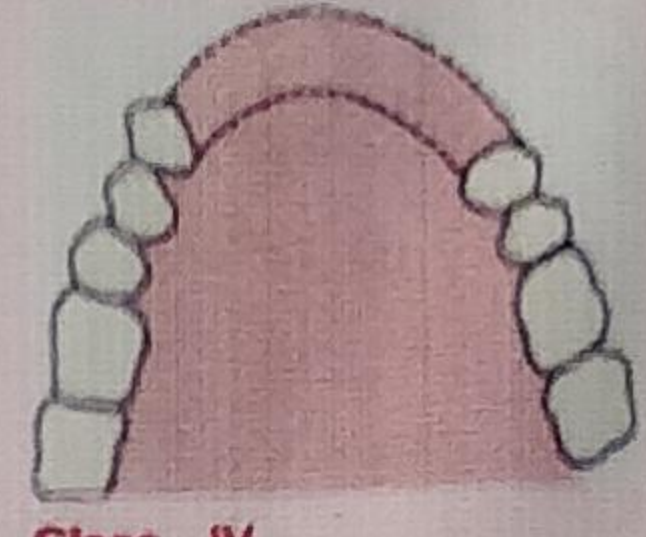
Class - I
Bilateral edentulous area present posterior to the remaining natural teeth.



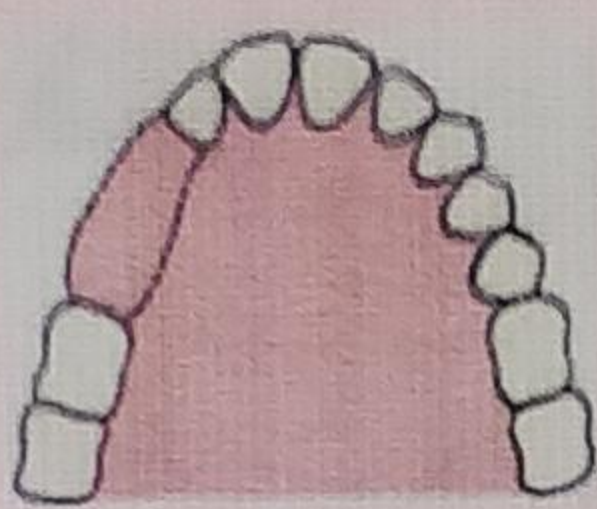
Class - II
Unilateral edentulous area present posterior to the remaining natural teeth.



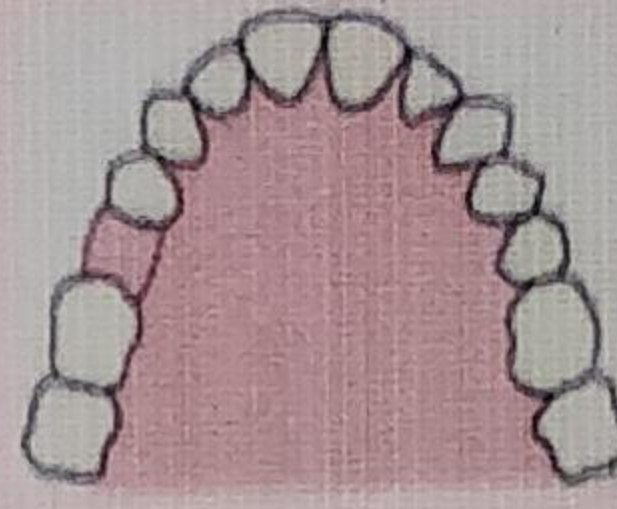
Class - III
A Unilateral edentulous area with natural teeth remaining both anterior and posterior to it.



Class - IV
A Single, but bilateral edentulous area (crossing the mid-line) located anterior to remaining natural teeth.



Class - V
Edentulous area bounded by anterior and posterior teeth where anterior teeth not able to give support.



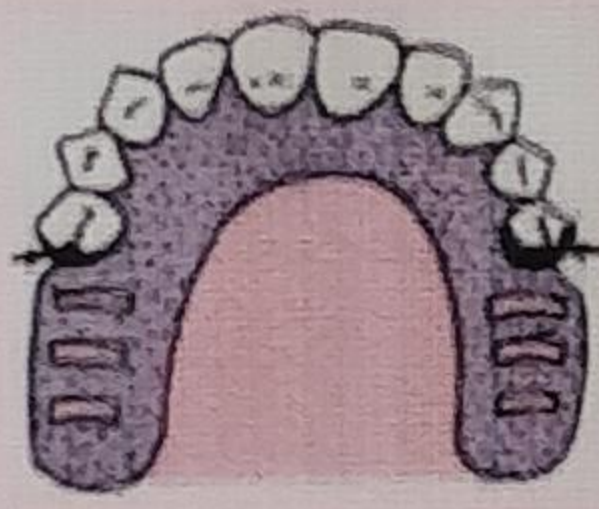
Class - VI
Edentulous area bounded by anterior and posterior teeth where anterior teeth able to give support.

● CUMMER'S CLASSIFICATION

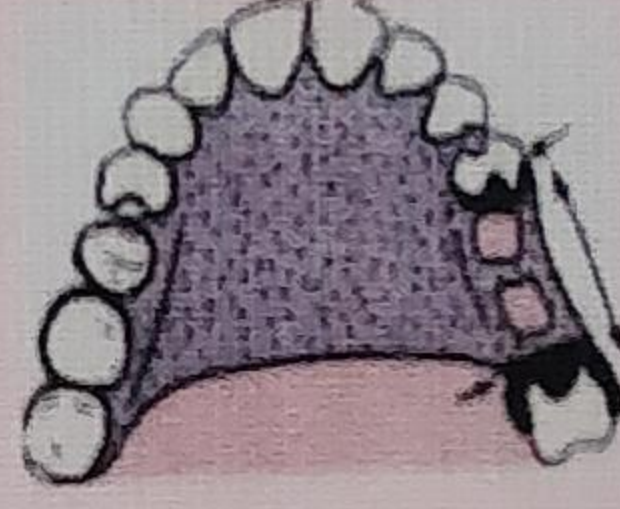
It is classified according to the position of direct retainer in four types.



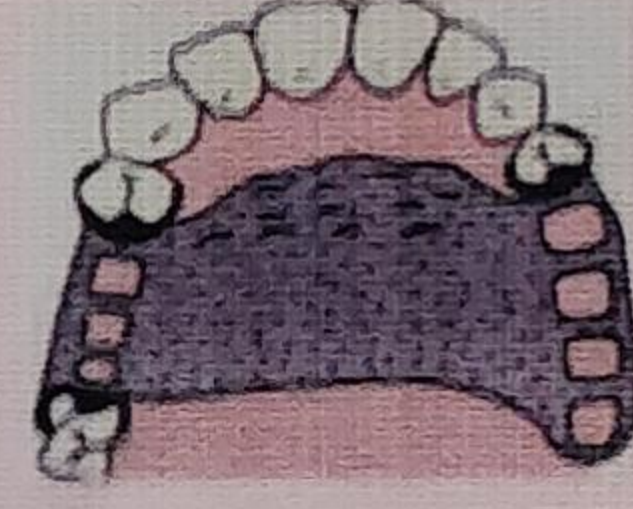
Diagonal
Two Direct retainer
Diagonally opposite



Diametric
Two Direct retainer
Diametrically opposite



Unilateral
Two or more direct
retainer present on same side



Multilateral
Three direct retainers in
a triangular relationship

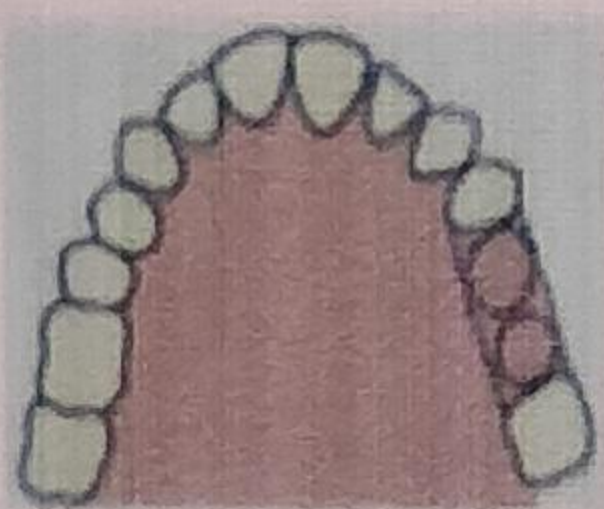
● BAILYN'S CLASSIFICATION

It was the first classification gave importance of support of partial denture by remaining tissues with descriptive letters.

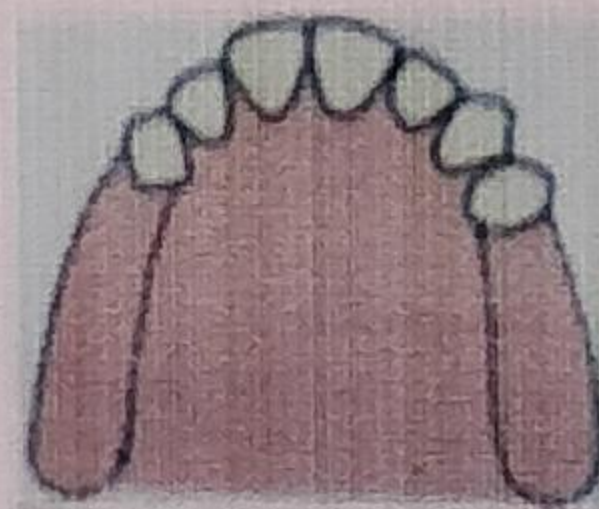
A= Anterior restoration, P= Posterior restoration.

Further classification

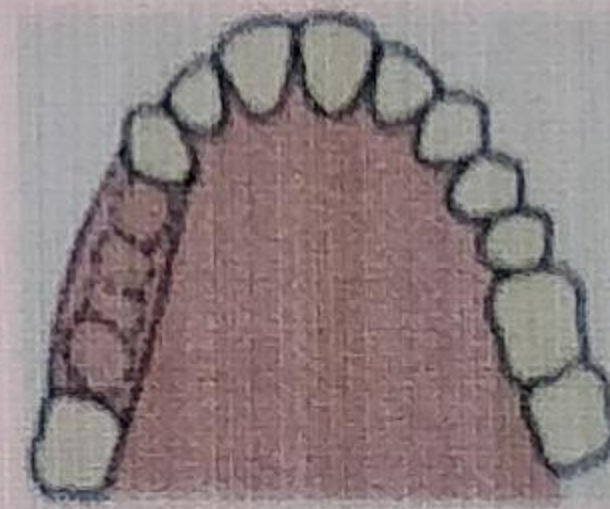
- Class-1 ; Bounded saddle (Not more than three teeth missing)
- Class-2 ; Free end saddle (There is no distal abutment tooth)
- Class-3 ; Bounded saddle (more than three teeth missing)



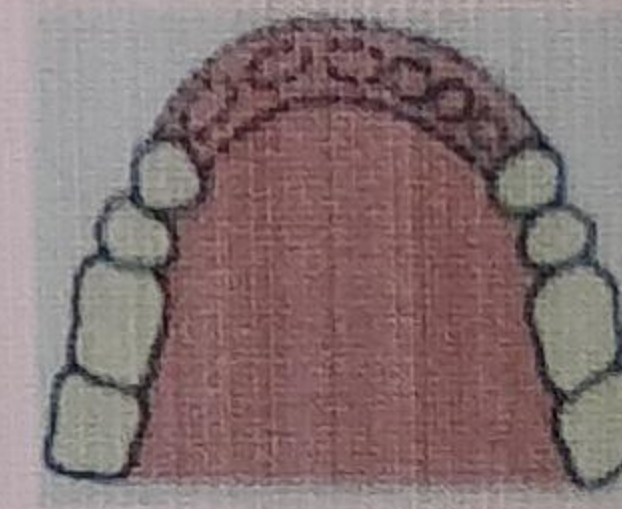
Baily's P1 partially edentulous condition



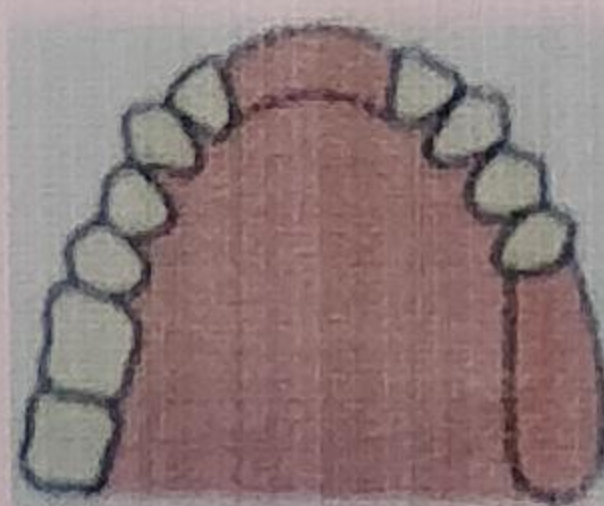
Baily's P2 partially edentulous condition



Baily's P3 partially edentulous condition



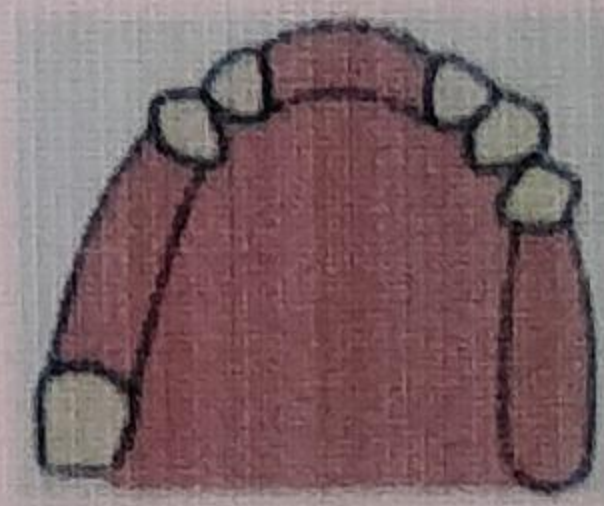
Baily's A3 partially edentulous condition



Baily's A1P2 partial edentulous condition



Baily's P1P2 partial edentulous condition



Baily's A1P2P3 partial edentulous condition

PREPARED BY :- <1> BARAIYA BHOOMI <2> BHADIYADRA CHARLIE <3> AGRAWAL SANJAY <4> BHATT RIDDHI
BATCH - A , 2ND B.D.S

REST AND REST SEAT PREPARATION

DEFINITION OF REST :-

"A Rigid extension of a fixed or removable partial denture which contacts a remaining tooth or teeth to dissipate vertical or horizontal forces"



DEFINITION OF RESTSEAT:-

"Rest seat is that portion of a natural tooth or a cast restoration of a tooth selected or prepared to receive an occlusal, incisal, lingual, internal, or semiprecision rest"

PURPOSE:-

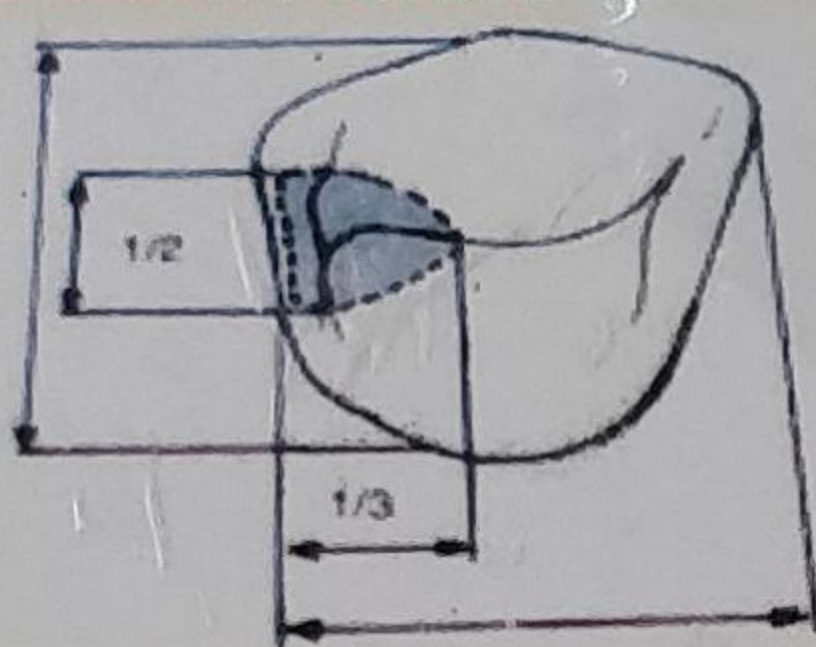
1. Maintain components in Their planned position .
2. Maintain established Occlusal relationship by Preventing settling of the Denture.
3. Prevents impingement Of soft tissue
4. Directs and distributes Occlusal loads to abutment Teeth.

FUNCTION:-

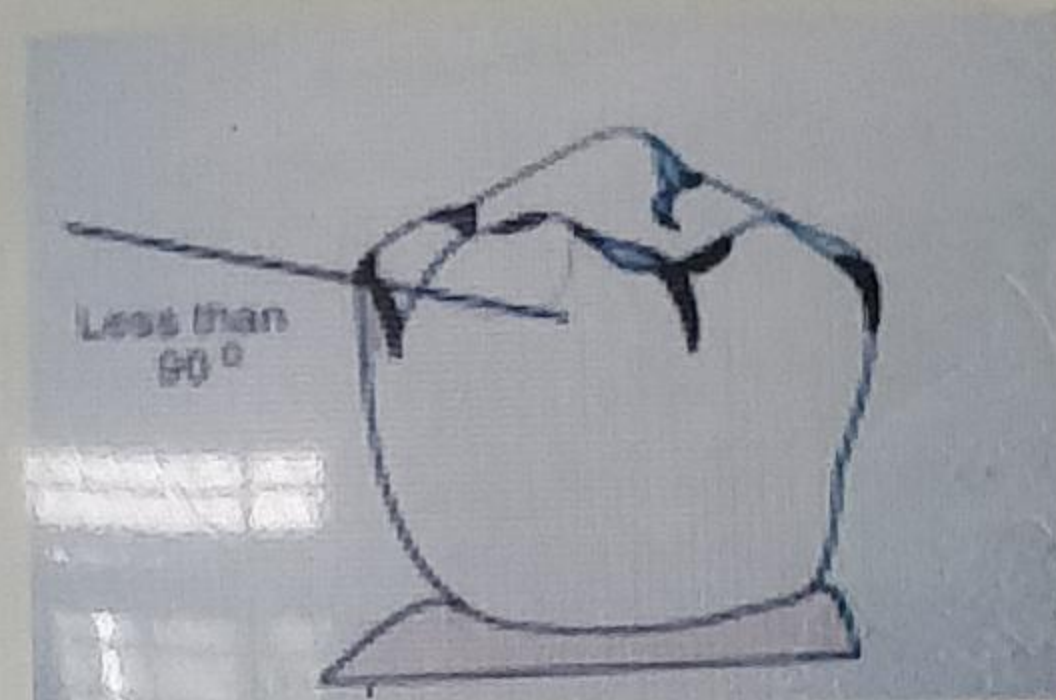
1. Rest serve to support the position of partial denture.
2. It resist movement in a cervical directions.
3. They serve to transmit vertical forces to the abutment teeth .
4. It directs those forces along the long axis of The tooth

DIMENSION OF REST:-

1. OCCLUSAL REST :

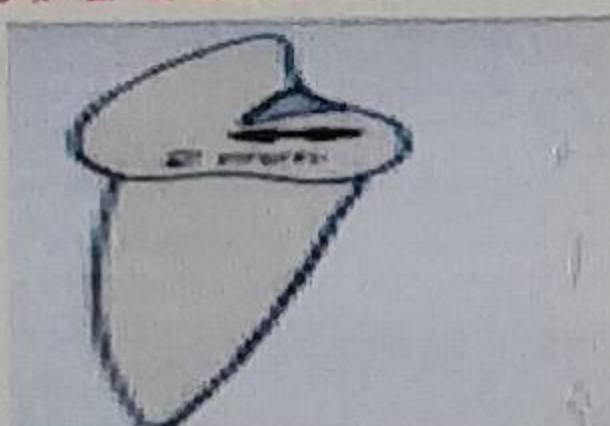


Ideally an occlusal rest Should measure $\frac{1}{2}$ the width of the tooth bucco-lingually And $\frac{1}{3}$ the width of the tooth Mesio-distally.



Any angle < than 90 degree is acceptable as long as preparation of proximal surface and lowering and rounding of marginal ridge Precede completion of rest seat Itself.

2. CINGULUM REST:-

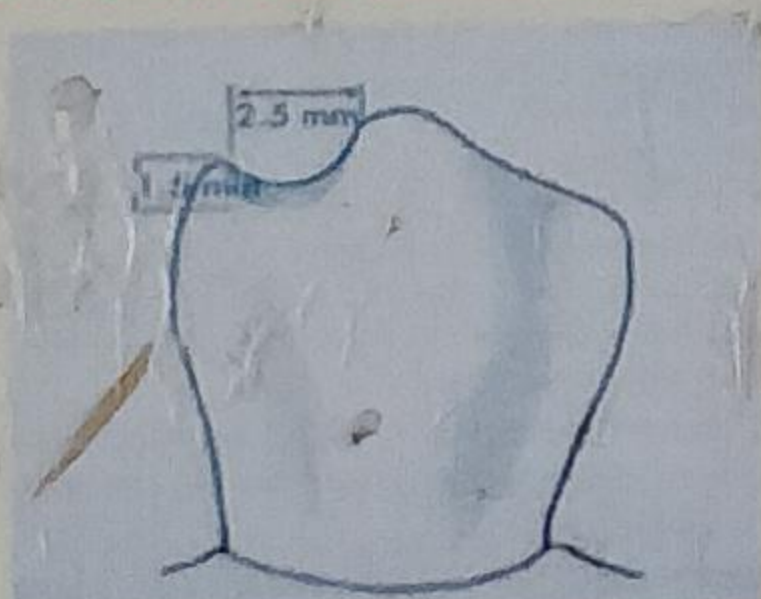


Cingulum rest should be 2mm wide Labio-lingually



Cingulum rest should be 1.5mm deep when measure incisogingivally

3. INCISAL REST:-



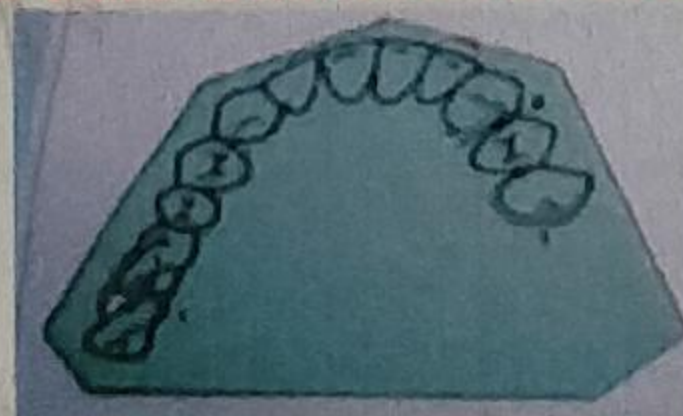
It should be 1.5 to 2mm deep notch and 2-3mm away from the Proximo-incisal angle

CLASSIFICATION OF REST:-

1 BASED ON THE RELATION OF THE REST TO THE DIRECT RETAINER:-

1. PRIMARY REST :-

"Rest that are placed along with the clasp assembly are called primary rest"



1. SECONDARY REST

"Rest that are placed for indirect retention separately away from the clasp are called secondary rest".

2. BASED ON THE POSITION OF THE REST ON THE ABUTMENT

1. OCCLUSAL REST:-



Placed on occlusal surface of posterior tooth

2. CINGULUM REST:-



Placed on the cingulum surface of tooth Especially in a maxillary canine.

3. INCISAL REST:-



Placed on the incisal edge of a tooth, usually in a mandibular canine and incisors.



IMPRESSION MAKING IN COMPROMISED COMPLETELY EDENTULOUS CONDITIONS

AUTHOR : DR. MEHUL GILANI
CO-AUTHORS : DR. BHAGYASHREE DAVE
 DR. YASHPREETSINGH BHATIA
 DR. SHRUTI MEHTA (PROFESSOR AND H.O.D)
GUIDED BY : DR. DIPTI KOHLI (PROFESSOR & GUIDE)
 COLLEGE OF DENTAL SCIENCES AND RESEARCH CENTER,
 AHMEDABAD, GUJARAT.

INTRODUCTION

M.M. De Van said that "Problems can be better solved in practice when they are first resolved in theory."
 We encounter different types of ridges on daily basis and some patients pose a prosthodontic challenge for achievement of Stable and Retentive prosthesis.
 Prosthodontic rehabilitation of a patient with compromised edentulous conditions in a conventional manner is a difficult task.
 Impression techniques, mentioned here, play a crucial role in providing a retentive and stable prosthesis.
 Its role becomes more pivotal when it comes to focusing on restoring Compromised completely edentulous arches.

COMPROMISED COMPLETELY EDENTULOUS CONDITIONS

COMPROMISED CONDITIONS	ETIOLOGY	TECHNIQUES
1 HYPERPLASTIC FLABBY RIDGE	<ul style="list-style-type: none"> PROGRESSIVE RESORPTION AS SEQUELAE TO TOOTH LOSS COMBINATION SYNDROME 	<ul style="list-style-type: none"> SELECTIVE PERFORATION SPECIAL TRAY TECHNIQUE COMBINED IMPRESSION TECH. : MUCOSTATIC & MUCODISPLACIVE SELECTIVE COMPOSITION FLAMING TECHNIQUE OSBORNE'S TWIN PALATAL TRAY TECHNIQUE
2 RESORBED MANDIBULAR RIDGE	<ul style="list-style-type: none"> PROGRESSIVE RESORPTION AS SEQUELAE TO TOOTH LOSS UNEMPLOYED MANDIBULAR RIDGE 	<ul style="list-style-type: none"> GREENE'S TECHNIQUE FLANGE TECHNIQUE NEUTRAL ZONE TECHNIQUE
3 RESTRICTED MOUTH OPENING (MICROSTOMIA)	<ul style="list-style-type: none"> SURGICAL <ul style="list-style-type: none"> OSMF DISEASE INDUCED (SCLEROSIS) 	<ul style="list-style-type: none"> IMPRESSION USING SECTIONAL TRAYS
4 HYPERACTIVE GAG REFLEX	<ul style="list-style-type: none"> FAULTY TECHNIQUES <ul style="list-style-type: none"> PSYCHOLOGICAL PHYSIOLOGICAL PATHOLOGICAL 	<ul style="list-style-type: none"> REDUCTION OF STIMULI <ul style="list-style-type: none"> DESENSITIZATION DISTRACTION MANEUVERS MEDICATION SURGICAL CORRECTION
5 EXCESSIVE SALIVATION	<ul style="list-style-type: none"> PSYCHOLOGICAL PATHOLOGICAL 	<ul style="list-style-type: none"> PRIOR ISOLATION RINSE WITH ASTRINGENT MOUTHWASH/COLD WATER SUCTION <ul style="list-style-type: none"> ANTI-SIALOGOGUES IN EXTREME CASES
6 BEDRIDDEN PATIENTS	<ul style="list-style-type: none"> NEUROMUSCULAR DISEASE HOSPITALIZED PATIENTS 	<ul style="list-style-type: none"> TURNING PATIENT AROUND IN BED TO FACILITATE OPERATOR USING FAST SETTING IMPRESSION MATERIAL
7 UNCOOPERATIVE PATIENTS	<ul style="list-style-type: none"> FEAR/APPREHENSION HYPERIC/INDIFFERENT CLASS OF PATIENTS MISTRUST MENTAL INSTABILITY 	<ul style="list-style-type: none"> DIAGNOSIS AT ONSET / CONSULTATION WITH PHYSICIAN COUNSELLING SHORT APPOINTMENTS / PREMEDICATION IF REQUIRED

IMPRESSION TECHNIQUES

1 HYPERPLASTIC FLABBY RIDGE

DISPLACED MAXILLARY RIDGE	DISPLACED MANDIBULAR RIDGE	COMBINED IMPRESSION TECH. : MUCOSTATIC & MUCODISPLACIVE	OSBORNE'S TWIN PALATAL TRAY TECHNIQUE
SELECTIVE PERFORATION SPECIAL TRAY TECHNIQUE		SELECTIVE COMPOSITION FLAMING TECHNIQUE	

2 RESORBED MANDIBULAR RIDGE

ADMIX IMPRESSION TECH.	FLANGE TECHNIQUE - LOTT & LEVIN
NEUTRAL ZONE IMPRESSION	POLISHED SURFACE IMPRESSION

3 RESTRICTED MOUTH OPENING (MICROSTOMIA)

SECTIONAL TRAY IMPRESSION TECHNIQUE	MAXILLARY SECTIONAL TRAY
MANDIBULAR SECTIONAL TRAY	
IMPRESSIONS	

4 HYPERACTIVE GAG REFLEX

SINGERS'S MARBLE TECHNIQUE (DESENSITIZATION)

CONCLUSION

- The ideal impression must be in the mind of the dentist before it 'is in his hand.
- He must literally make the impression rather than take it.
- This can only become possible with sound knowledge of each compromised condition and also of the methods and techniques to overcome them to provide a functional and satisfactory treatment to patient.

REFERENCES

- Crawford, Walmsley. A review of prosthodontic management of fibrous ridges. Br Dent Jr. 2005 DEC ;199(11) : 715-719
- Lynch, Allen . Management of the flabby ridge: using contemporary materials to solve an old problem. Br Dent Jr. 2006 MAR ; 200(5) : 258-261
- F.Lott , B.Levin . Flange Technique : An Anatomic And Physiologic Approach To Increased Retention, Function, Comfort, and Appearance Of Dentures , J Prosthet Dent. 1966 May-June; 16(3) : 394-413
- Singer. The Marble Technique : A method for treating the "Hopeless Gagger" for complete dentures. J Prosthet Dent. 1973 FEB; 25(2) : 146-150.
- Cure, Cotter, User . Fabrication of a sectional impression tray and sectional complete denture for a patient with microstomia and trismus. J Prosthet Dent. 2003 JUN ; 89(6) : 540-543

ALL CERAMIC MATERIALS

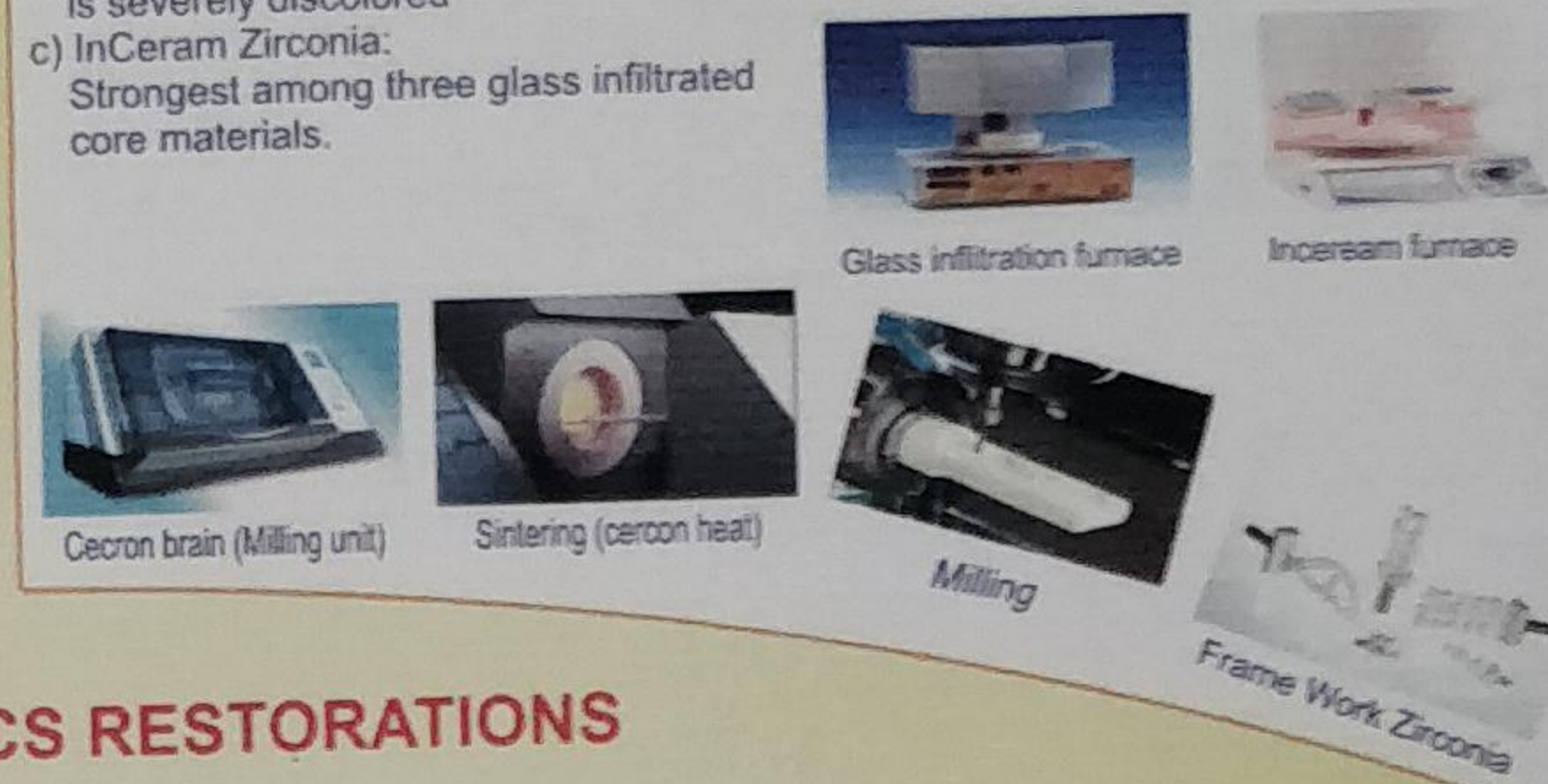
1) CONDENSED SINTERED :

- a) Traditional Porcelain Jacket Crown :- Used around early 1900 made from conventional high fusing feldspathic porcelain.
Disadvantage : Poor Marginal adaptation. Very Brittle & Fracture easily.
- b) Porcelain Jacket Crown with Aluminous Core : Developed by Mclean & Hughes in 1965. Strength was increased by addition of Aluminium.
Disadvantage : They were still brittle. Not indicated in posterior teeth
- c) Leucite reinforced Porcelain Jacket Crown : Feldspathic Porcelain with a higher Leucite crystal content.
Uses : Inlays, Onlays, Veneers & low stress crown
Advantage : Core is less opaque, so it is more esthetic. Higher Strength. No need of special laboratory equipment
Disadvantage : Fit is not as good as metal ceramic crown, Marginal inaccuracy



2) SLIP CAST GLASS INFILTRATED CERAMICS :

- a) Glass Infiltrated Alumina Core (Inceram Alumina) :
Advantage : Good fit & marginal adaptation. Strong enough for posterior single crown & FPD
Disadvantage : Less Esthetic because of opacity of alumina core. Quite tedious to fabricate. Few FPD'S were successful
- b) Spinell (InCeram) Core :
Indication : Higher translucency so used for crown & restoration in esthetic & stress free zone.
Contraindication : Not indicated when underlying tooth structure is severely discolored
- c) InCeram Zirconia:
Strongest among three glass infiltrated core materials.



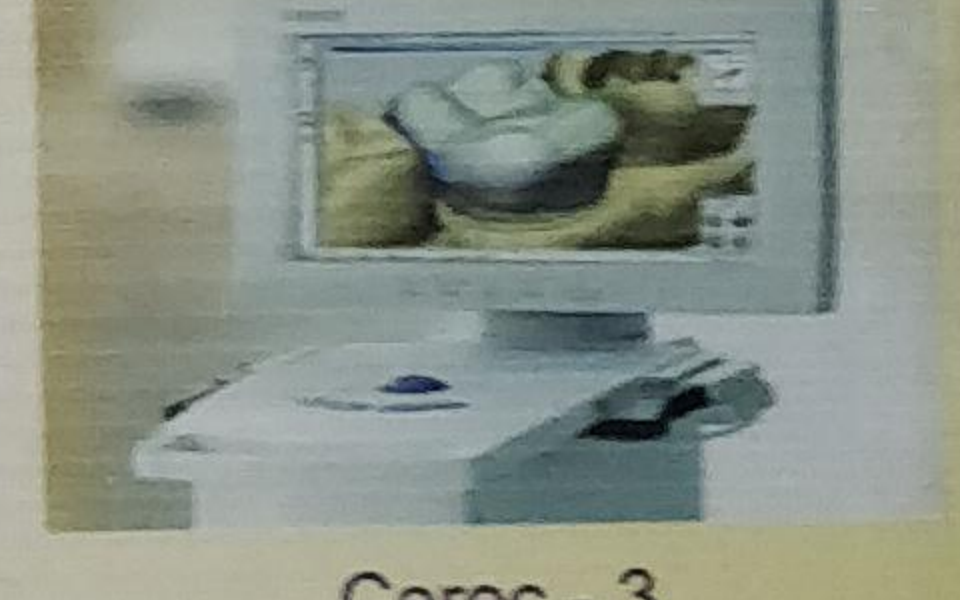
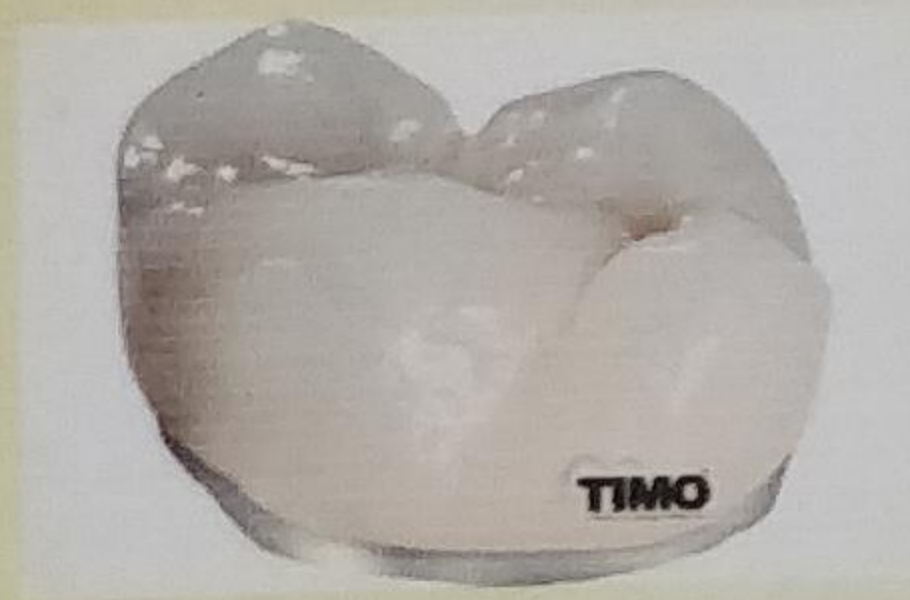
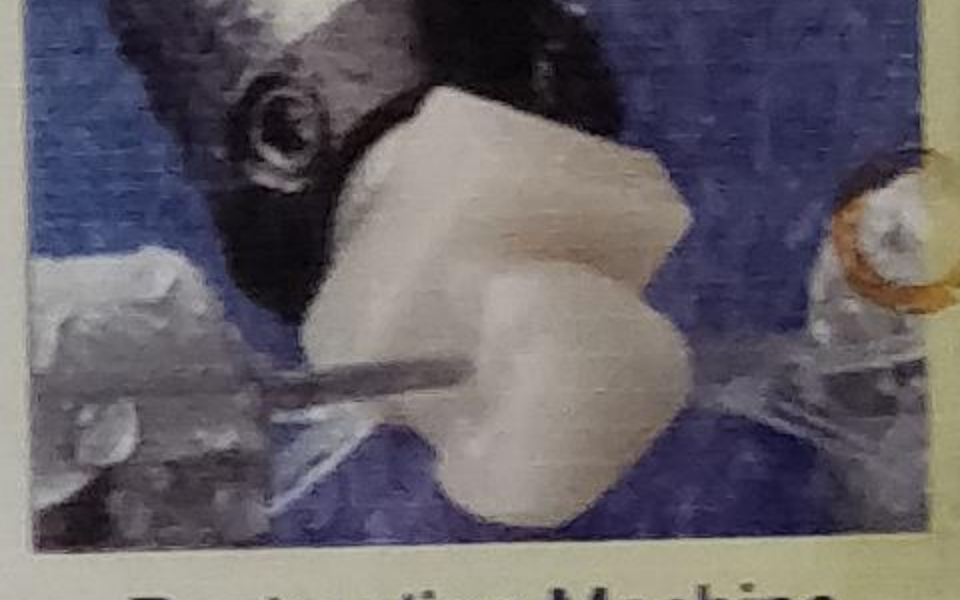
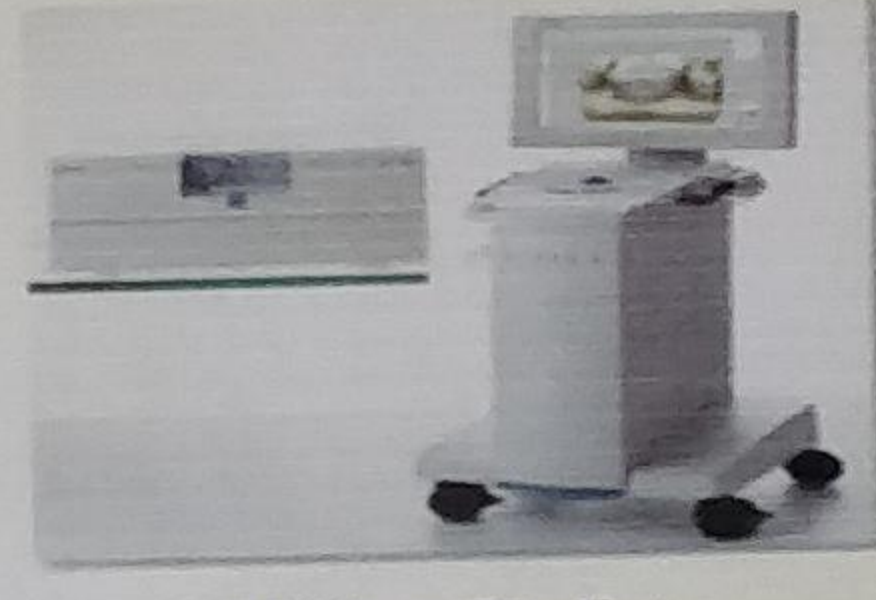
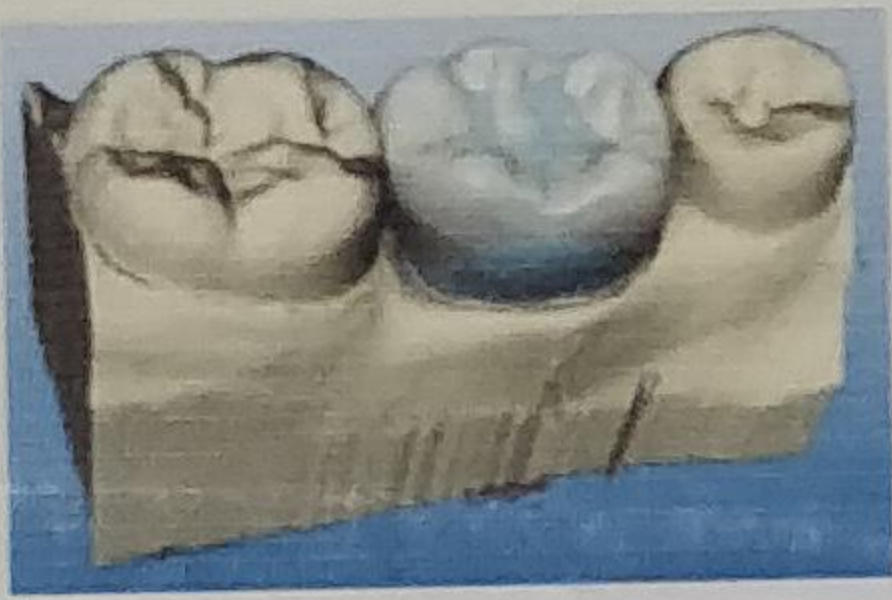
5) MILLED CERAMICS RESTORATIONS

CAD-CAM :

These are systems that can design & produce restoration of block of ceramics with the aid of computer.

Advantage : Reduced chain time. Stronger porcelain & greater strength. Scanning is done directly into mouth so no need to take impression. Lab equipment can be minimized

Disadvantage : Costly equipments. Scanning the preparation is technique sensitive



4) INJECTION : MOULDED

- I) Pressable Glass ceramics
- a) Leucite Reinforced, b) lithium Reinforced
- II) Pressable veneering reinforced :

Advantage : Better fit (Because of lower shrinkage), Better Esthetics due to absence of metal

Disadvantage : Need for costly equipments. Potential of fracture in posterior areas



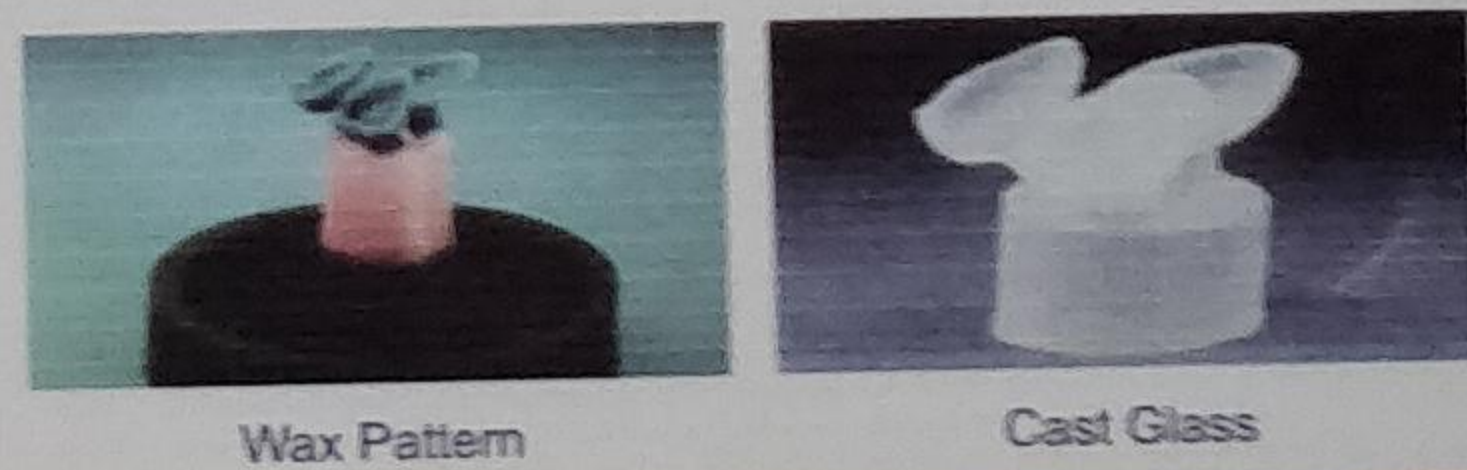
3) CAST GLASS CERAMICS (DICOR)

Porcelain restoration made by a centrifugal casting technique Properties are closer to glass but constructions is quite different first Developed by Corning Glass and Dentsply (Dicor)

Use : Inlay, Onlay veneers, Low stress crown

Advantage : Easy to Fabricate, Good Esthetics & good marginal fit, Very Low processing shrinkage. Low abrasion of opposing teeth

Disadvantage : Inadequate strength for posterior use. Internal characterization is not possible. Has to be stained externally to improve esthetics



Department of Prosthodontics College of Dental Sciences and Research Centre

Dr. Shruti Mehta
Dr. Dipti Kohli
Dr. Priyanka Makwana
Dr. Manish Mistry
Dr. Suchismita Choudhary

Keyusha Patel
Pooja Patel
Richa Patel
Shraddha Patel
Vivek M. Patel

(Year 2011-12)

BONDING AGENTS

ETCHANT: It is an acid which selectively dissolves the tooth structure to provide retention for restoration. Also called conditioner. Most popular etchant is 37% phosphoric acid.

PRIMER: They are hydrophilic monomers usually carried in a solvent. Because of their hydrophilic nature they are able to moist tooth structure specially the Dentin and its collagen mesh thus improving the bond. Thus they serve as a bridge connecting the tooth structure to the adhesive. The solvents used are acetone, ethanol or water, some are used without solvents.

ADHESIVE: They are generally hydrophobic monomers. Being hydrophobic they do not wet the tooth leading to air entrapment, thereby poor bonding. Thus they are used with primers to form an effective bond tooth structure. Adhesive binds resin to primer which penetrates and binds to tooth structure, completing bonding sequence.

GENERATION I

Enamel Etchant:- 37% Phosphoric Acid
Adhesive:- GPDM

GENERATION II

Enamel Etchant:- 37% Phosphoric Acid
Adhesive:- PHENYL-P Bis GMA/TEGDMA MPPA

GENERATION III

Enamel Etchant:- 37% Phosphoric Acid
Primer:- Citric Acid 10% / CaCl 20%, Oxalic Acid/ Aluminium Nitrate, EDTA
Adhesive:- NPG-GMA/BPDM, Bis GMA/TEGDMA, HEMA/BPDM, HEMA/GA

GENERATION IV

Enamel Etchant:- 37% Phosphoric Acid
Primer:- Total Etch Technique
Adhesive:- NPG-GMA/BPDM, Bis GMA/TEGDMA, HEMA/BPDM, HEMA/GPDM



GENERATION V

Enamel Etchant:- 37% Phosphoric Acid
Primer:- Total Etch Technique
Adhesive:- PENTA, METHACRYLATED PHOSPHONATES.



GENERATION VI

Adhesive:- METHACRYLATED PHOSPHATES IN WATER (ACIDIC PRIMER-ADHESIVE)



GENERATION VII

Adhesive:- METHACRYLATED PHOSPHATES IN WATER (ACIDIC PRIMER-ADHESIVE)



GUIDED BY-

Dr. Shruti Mehta
Dr. Manish Mistry
Dr. Dipti Kohli
Dr. Suchismita Choudhary
Dr. Priyanaka Mackwana

COLLEGE OF DENTAL SCIENCES AND RESEARCH CENTRE
DEPARTMENT OF PROSTHODONTICS AND DENTAL MATERIALS

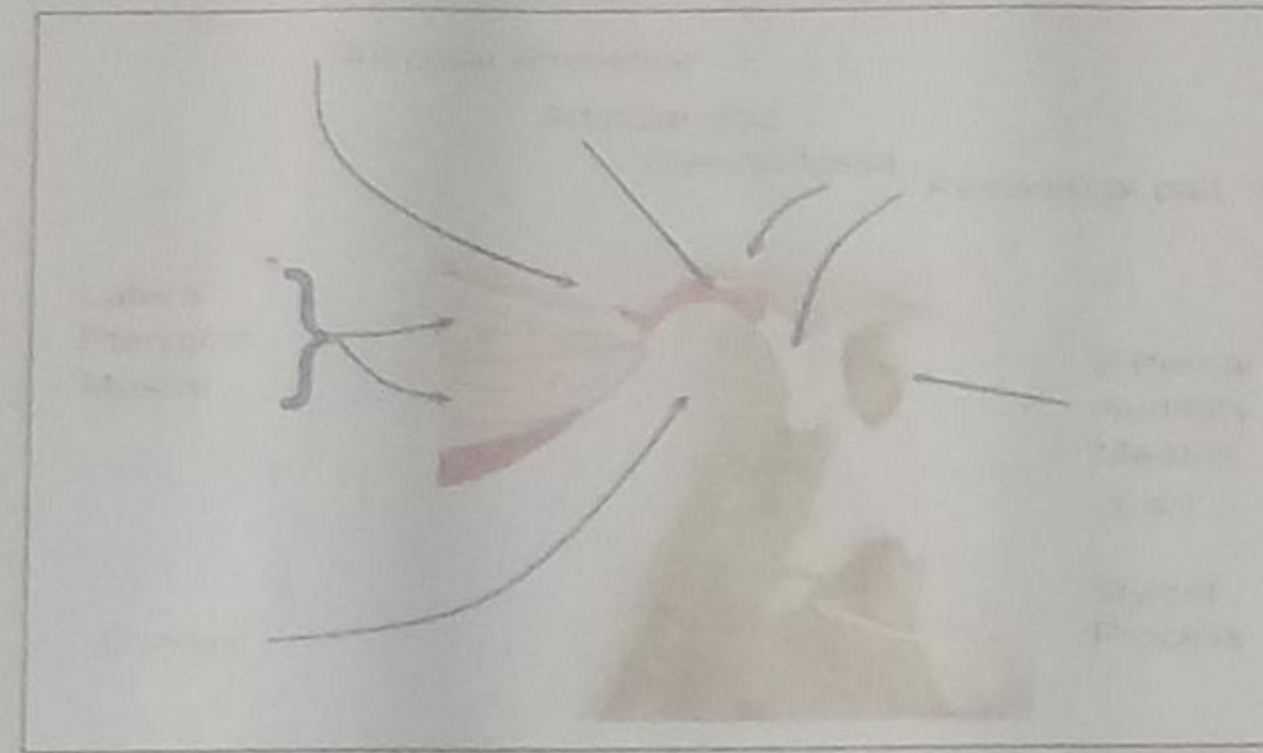
Prepared By :-
Siddhesh Nar
Oshin Verma
Yatharth Gupta
Noopur Shah
Dipal Lahwani
SY BDS(2011-2012)

FACTORS AFFECTING BALANCED OCCLUSION

DEFINITION: A condition in which there are simultaneous contacts of opposing teeth or tooth analogues (i.e. occlusion rims) on both sides of the opposing dental arches during eccentric movements within the functional range. (GPT-8)

Condylar guidance (CG): The mandibular guidance generated by the condyle and articular disc traversing the contour of the glenoid fossae.

- This factor of balanced occlusion cannot be modified.



Incisal guidance (IG): The influence of the contacting surfaces of the mandibular and maxillary anterior teeth on mandibular movements.

- Incisal guidance should be zero degree for maximum stability of complete denture.
- The incisal guidance can be controlled by the dentist by establishing required overjet and overbite.

Significance:

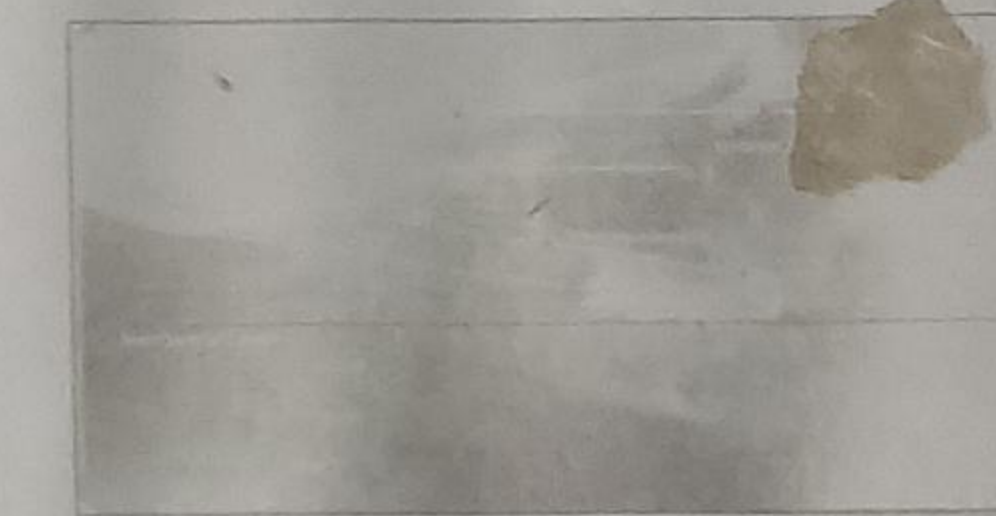
- A common cause of occlusal imbalance of complete denture is excessive incisal guidance angle.
- It causes the upper denture to drop at back during the smallest protrusive movement.



Plane of occlusion (OP): An imaginary surface which is related anatomically to the cranium and which theoretically touches the incisal edges of the incisors and the tips of the occluding surfaces of the posterior teeth. It is not a plane in the true sense of the word but represents the mean curvature of the surface.

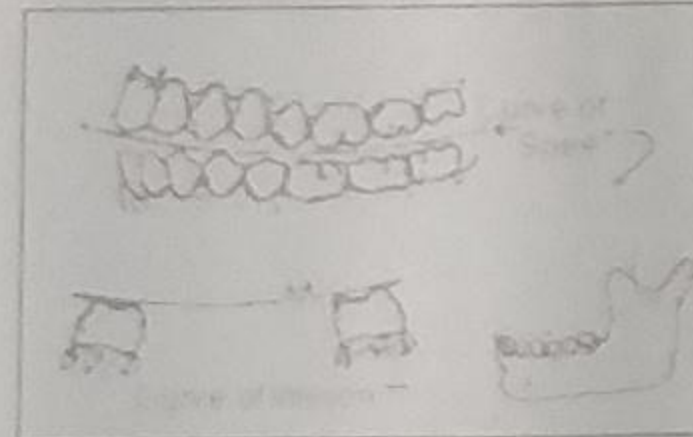
Significance:

- The occlusal plane should be approximately parallel to the crests of the alveolar ridge in the premolar region otherwise occlusal problems may occur due to the meeting of unfavourable inclined planes.
- If the plane is tilted up towards the back, the upper denture will tend to move forward and the lower denture backward.

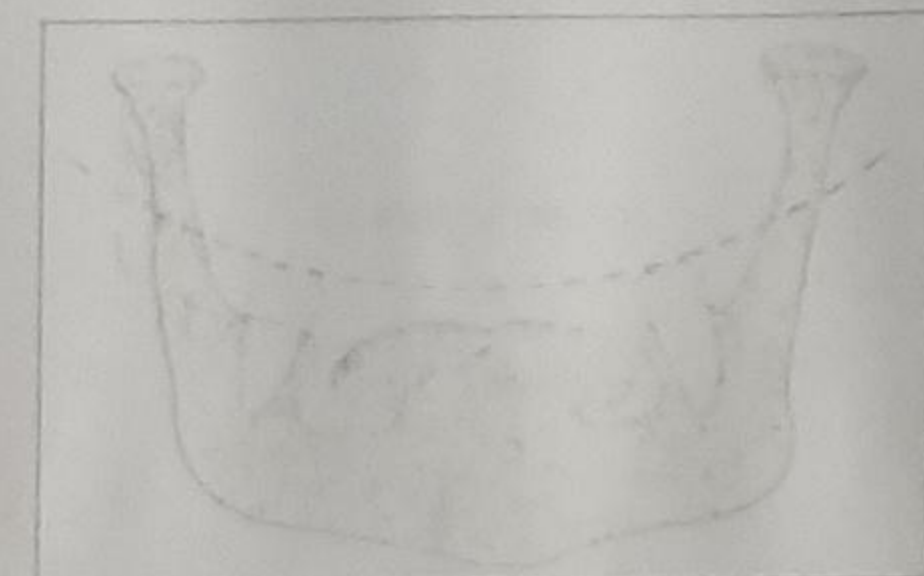
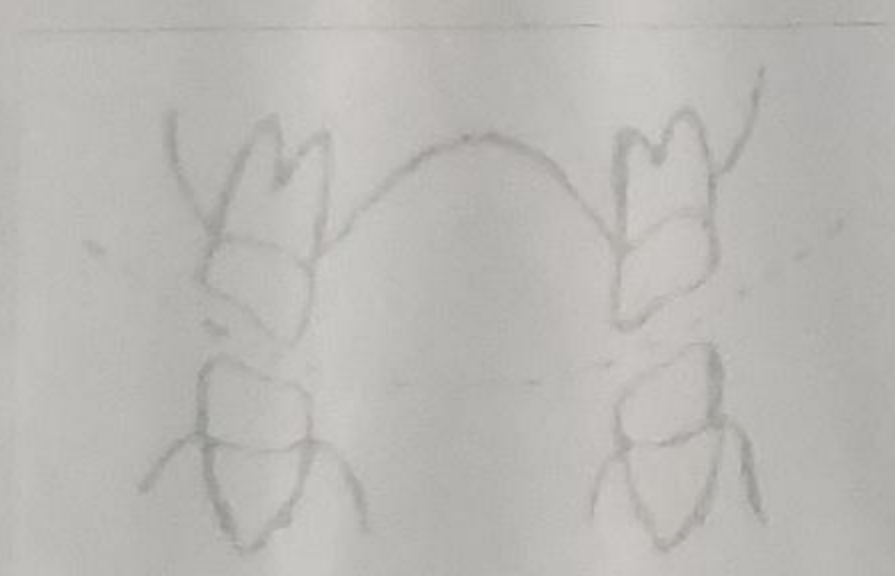


Compensating curves (CC): The anteroposterior and lateral curvatures in the alignment of the occluding surfaces and incisal edges of artificial teeth which are used to develop balanced occlusion.

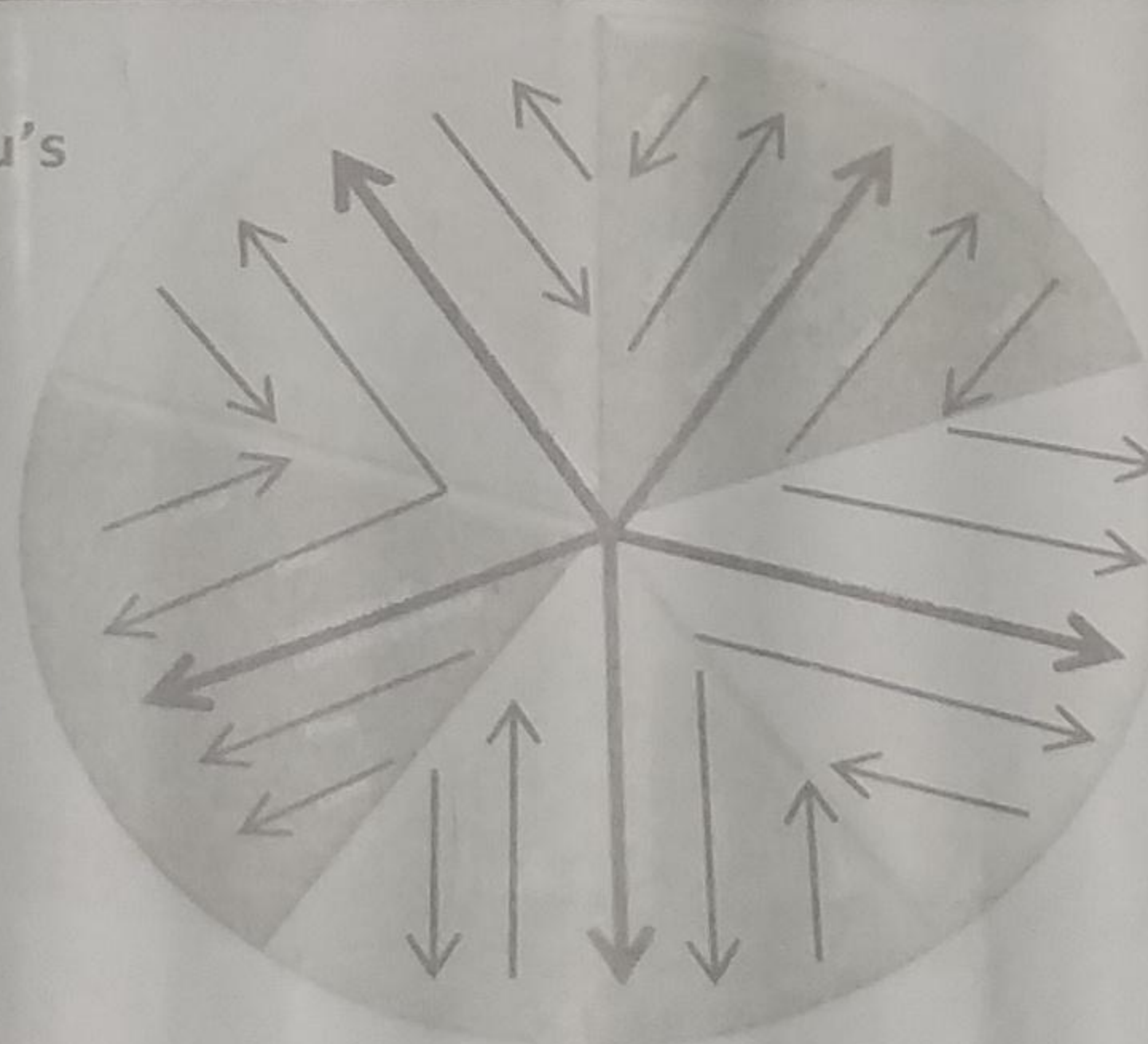
1. Anteroposterior compensating curves
 - Compensating curve for curve of Spee



2. Lateral compensating curves
 - Compensating curve for Monson curve
 - Compensating curve for Anti-Monson curve or Wilson curve



Hanau's Quint

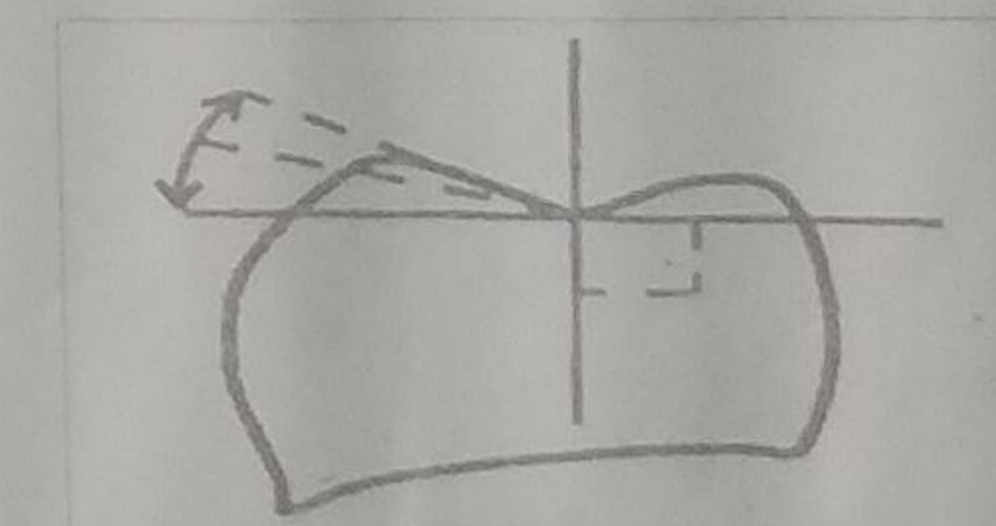


Interrelationship between factors affecting balanced occlusion (THEILMANN'S FORMULA)

$$\text{Balanced Occlusion} = \frac{CG \times IG}{CA \times CC \times OP}$$

Cuspal angulation (CA): The angle made by the average slope of a cusp with the cusp plane measured mesiodistally or buccolingually.

- Various commonly used cuspal inclinations are 33°, 20° and 0°. It can be modified by:
 1. Inclining the occlusal plane up or down
 2. Tipping long axis of the teeth.
 3. Grinding cuspal inclinations.
- In cases with a shallow overbite, the cuspal angle should be reduced to balance the incisal guidance.
- In cases with deep bite, the jaw separation is more during protrusion.



COMPONENTS OF REMOVABLE PARTIAL DENTURE

Major Connector



Rest



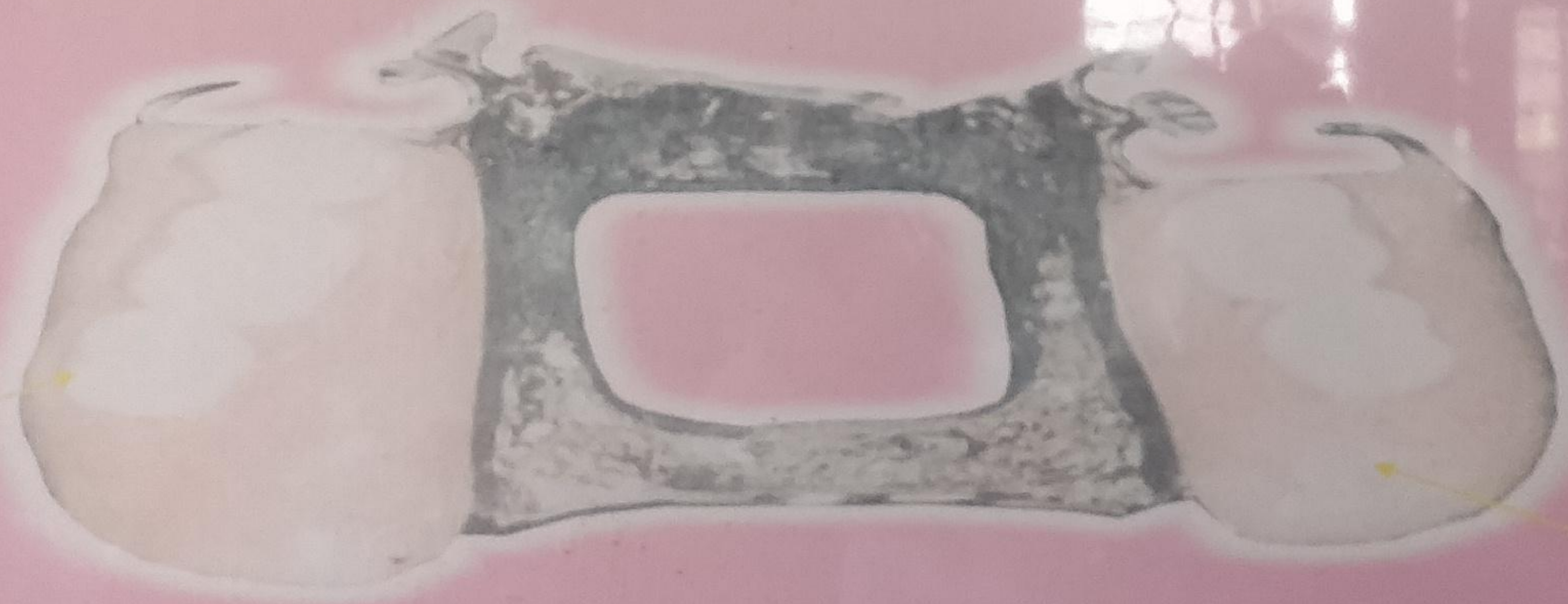
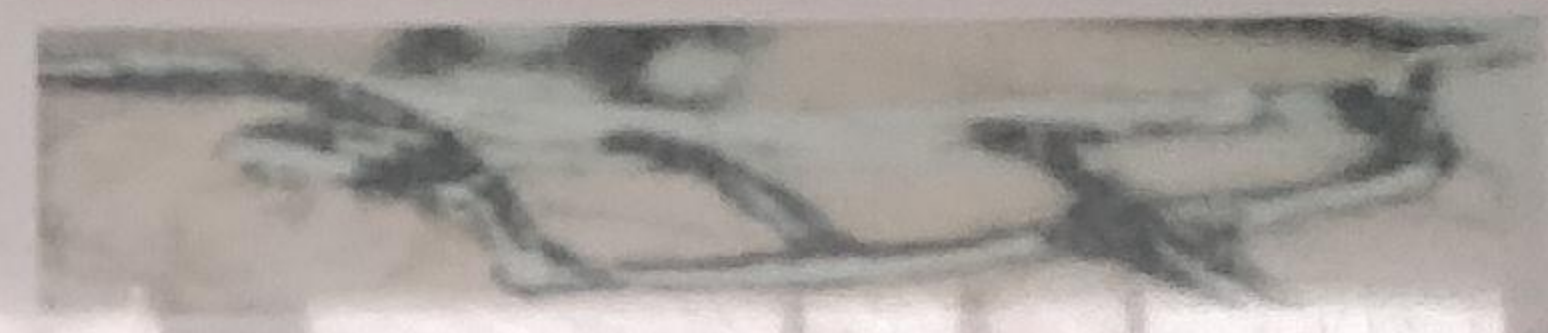
Direct Retainer



Guide Plane

Minor Connector

Indirect Retainer



Teeth

Denture Base

Department of Prosthodontics
2008-09
Second B.D.S.

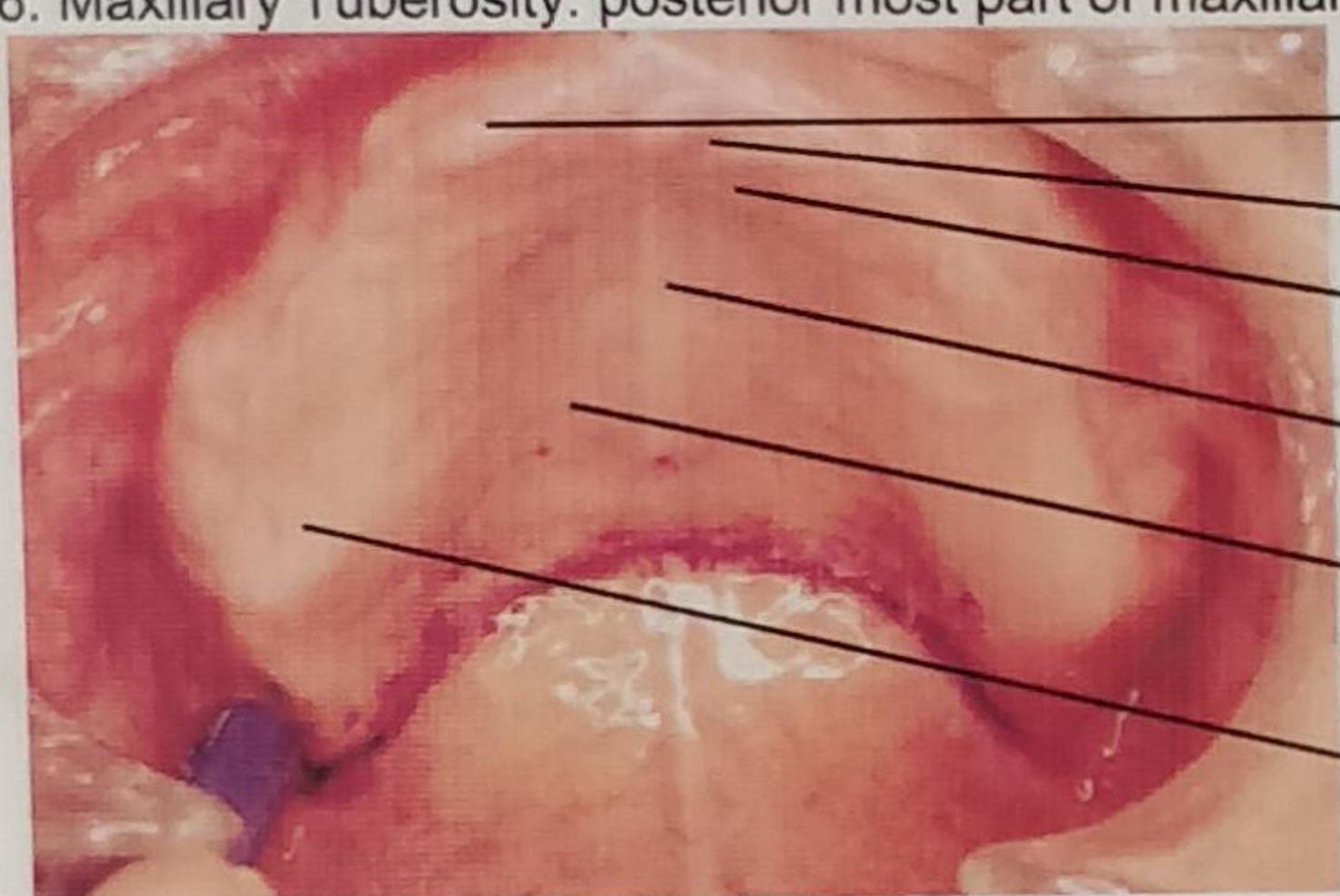
Monika Jani
Pari Jalavadia
Hardik Kachhadiya
Ritu Joshi

CLINICAL IMPORTANCE OF ANATOMICAL LANDMARKS OF MAXILLA

MAXILLARY DENTURE SUPPORTING STRUCTURES



1. Residual ridge: Has compact type of bone covered with a layer of fibrous connective tissue that is firmly attached.
Function: primary stress bearing area.
2. Incisive papilla: small tissue projection located immediately behind and between central incisors; covers incisive foramen through which the nasopalatine nerves and vessels pass.
Function: relief area, as to prevent pressure on emerging nasopalatine nerves and vessels.
3. Rugae area: consists of series of ridges in the anterior part of hard palate.
Function: secondary stress bearing area, it resists the forward movement of the denture.
4. Mid-palatine raphe: slightly raised bony ridge along midline of hard palate
Function: Relief area because- i. Mucosa covering is thin & non-resilient so can cause soreness and severe pain; ii. Can act fulcrum point & can cause rocking of dentures.
5. Hard palate: 1. Anterolateral part (secondary retentive area)
2. Posterolateral part (secondary retentive area, compression leads to interference with function of glands)
6. Maxillary Tuberosity: posterior most part of maxillary edentulous ridges.



MAXILLARY DENTURE LIMITING STRUCTURES



1. Labial frenum: Fold of mucous membrane at median line.
Function: relief area, affects denture seal and retention.
2. Buccal frenum: Fold of mucous membrane found on buccal side
Function: relief area
3. Labial vestibule: Sulcus area between labial and buccal frenum.
Function: Provides valve seal; accommodates labial flange of denture.
4. Buccal vestibule: Extends from the buccal frenum to hamular notch.
Function: Provides peripheral seal; accommodates buccal flange of denture
5. Pterygomaxillary Notch: located distal to the Maxillary Tuberosity.
Function: marks the posterior limit of denture.
6. Palatine fovea: two small indentations found on posterior part of palate near midline.
Function: Serve as a guide for location of the posterior border of denture.
7. Vibrating lines: An imaginary line across the posterior part of the palate marking the division between the movable and immovable tissues of the soft palate. This can be identified when the movable tissues are functioning.

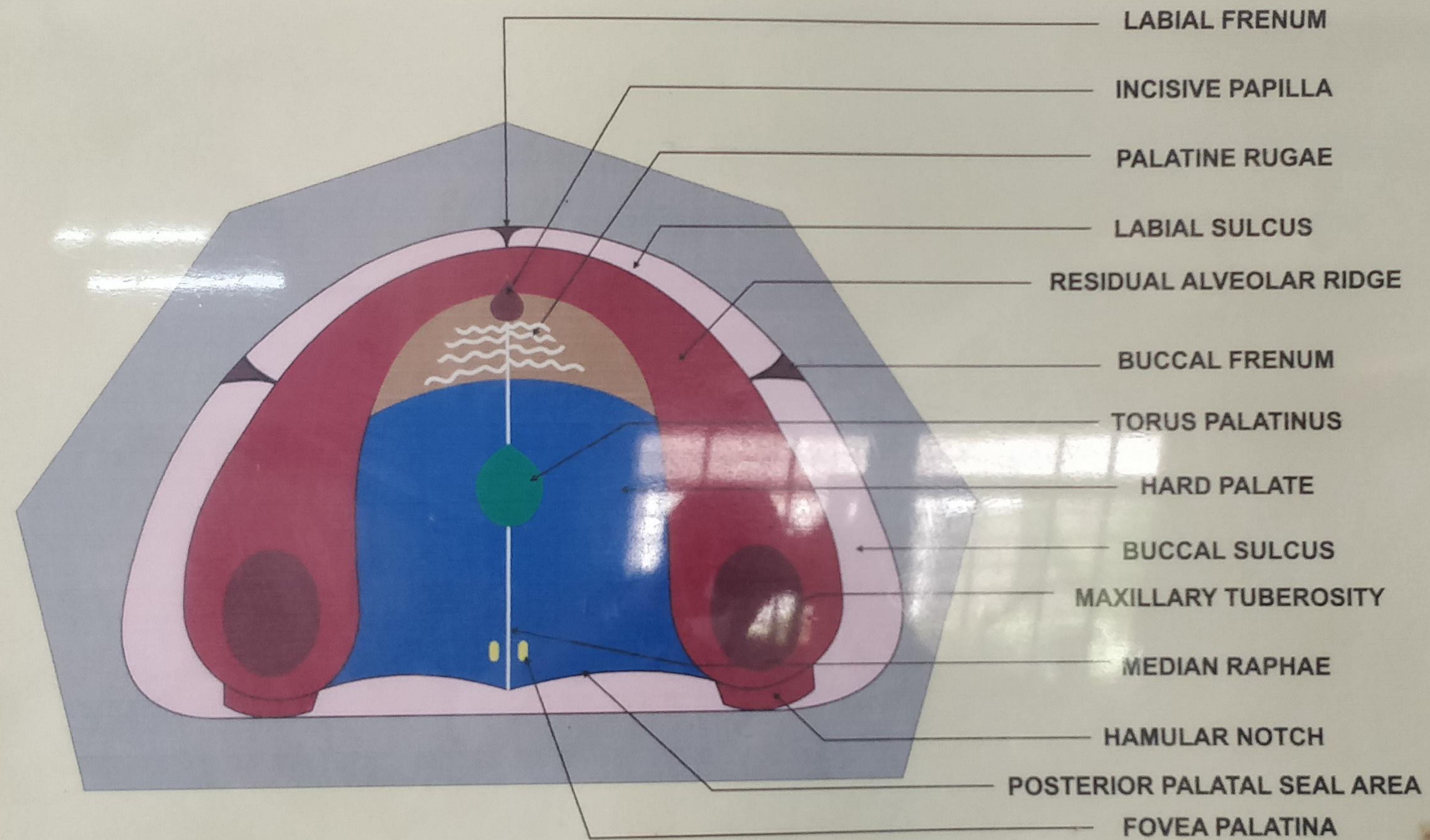
Prepared by: **Vrushali Gupta**
Steffi Jose
Aakruti Dholakia
Shaifali Oza
Twinkle Ravani

Guided by: **Dr. Shruti Mehta**
Dr. Dipti Kohli
Dr. Priyanka Makwana
Dr. Manish Mistri
Dr. Suchismita Choudhary

DEPARTMENT OF PROSTHODONTICS & DENTAL MATERIAL

2nd year Batch 2011-'12

ANATOMICAL LANDMARKS OF UPPER JAW



College of Dental Science & Reserch Centre 1st B.D.S(2008-2009)

Prepared by: Riddhi M., Mayuri, Pinakin, Pooja, Pratik, Reema, Riddhi V.

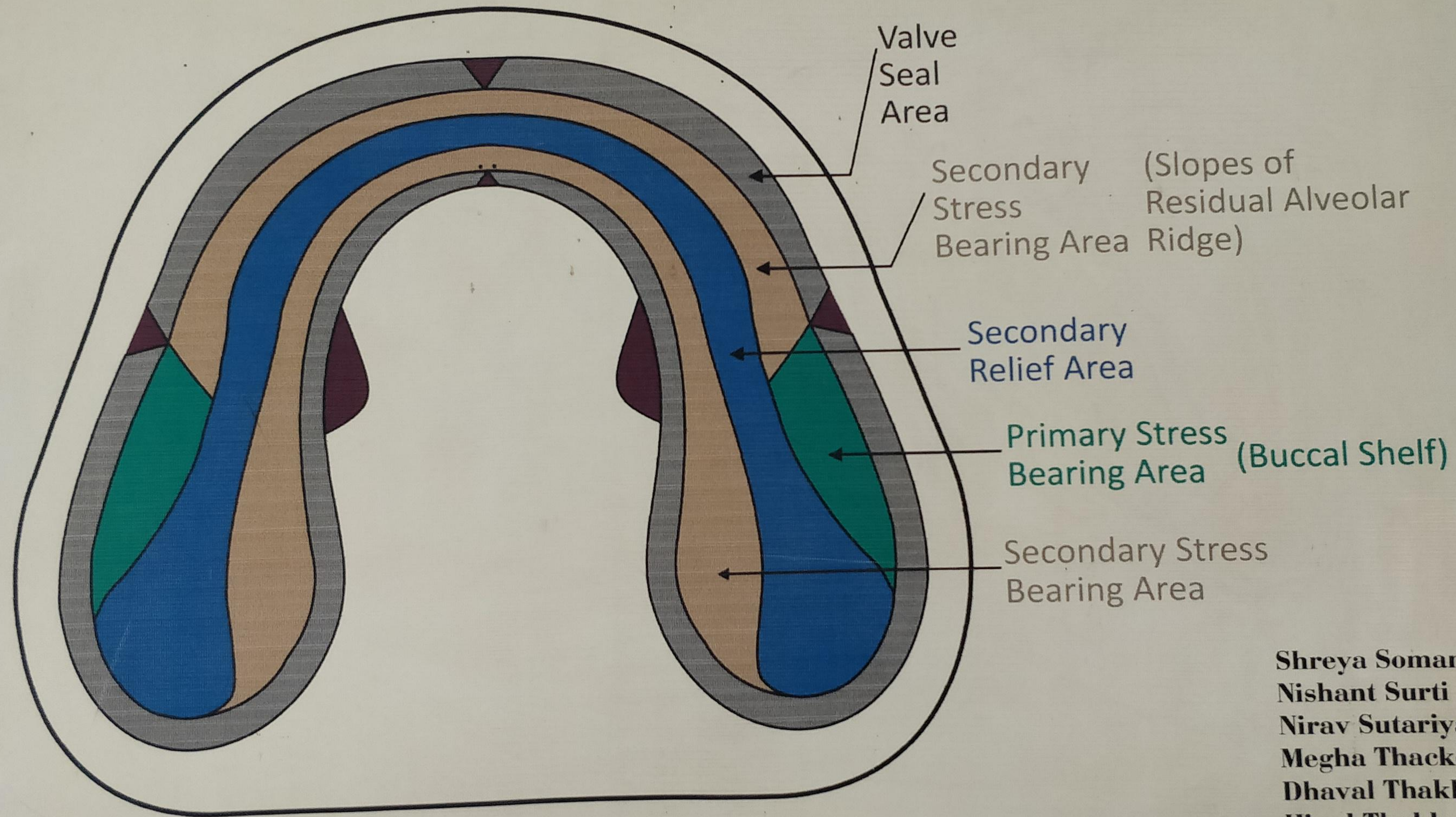
Designed by: Savyasachi shah

ANATOMICAL LANDMARKS OF LOWER EDENTULOUS JAW



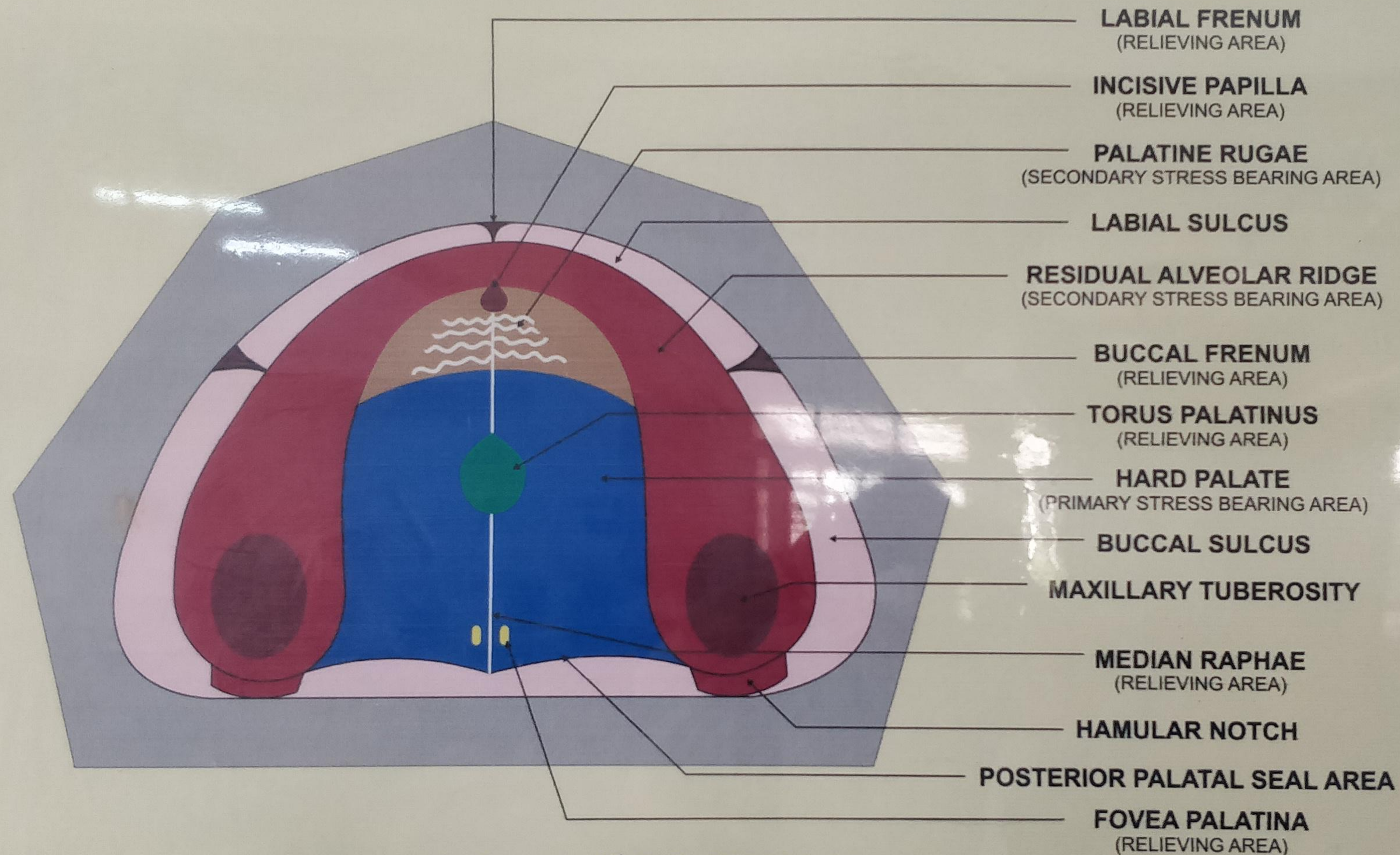
Jayneel Patel
Dipak Shah

STRESS BEARING AREA OF LOWER JAW



Shreya Somani
Nishant Surti
Nirav Sutariya
Megha Thacker
Dhaval Thakkar
Hinal Thakkar
Nirav Thakkar

STRESS BEARING AREAS OF UPPER JAW



College of Dental Science & Reserch Centre 1st B.D.S(2008-2009)

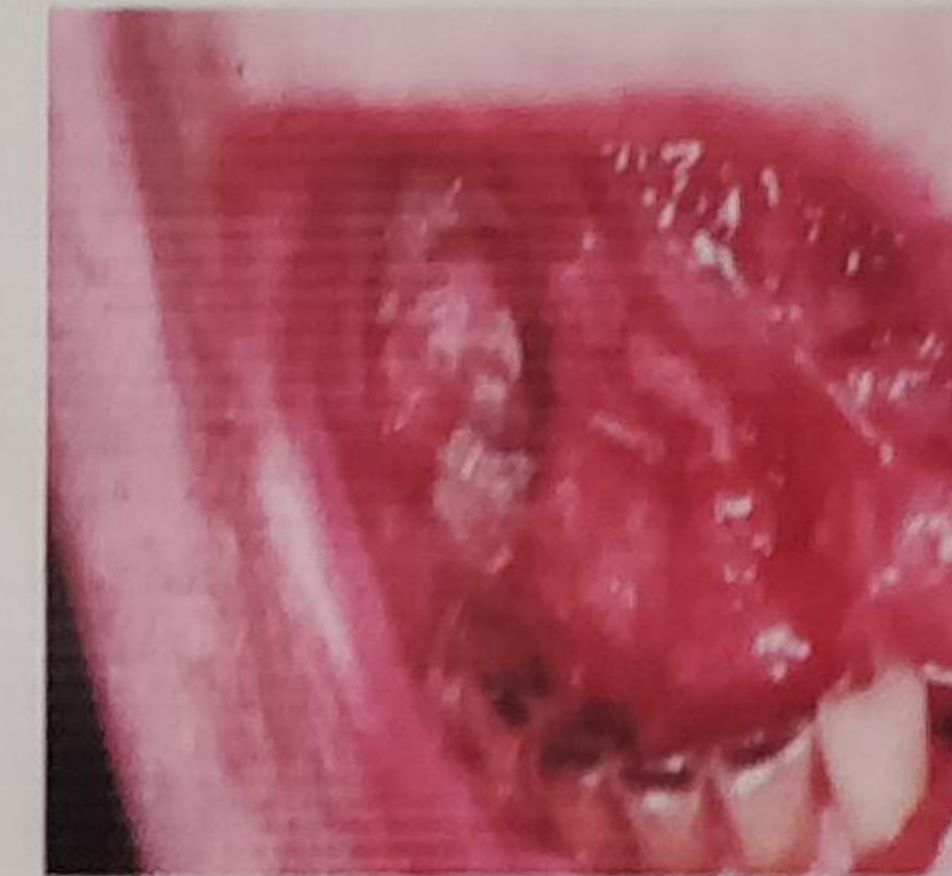
Prepared by: Savyasachi shah, Vaishavi shah, Pooja shukla, Vertika sisodiya
Deepmala sojitra, Parikrama solanki, Aniket somani

Designed by: Savyasachi shah

RECREATING GOD'S CREATION

TREATMENT MODALITIES AFTER ORAL CANCER TREATMENT:

- INTRAORAL: OBTURATORS
TONGUE PROSTHESIS
- EXTRAORAL: CHEEK PROSTHESIS
EAR PROSTHESIS
EYE PROSTHESIS
NOSE PROSTHESIS



MATERIALS USED IN FABRICATION OF SUCH PROSTHESIS:

- METAL
- ACRYLIC RESIN
- SILICONE

RECENT ADVANCES IN SILICONE:

- SILICONE ELASTOMERS
- FOAMING SILICONES
- SILICONE BLOCK CO-POLYMERS
- ADHESIVES WITH SILICONE

PROSTHESIS: A BOON FOR ORAL
CANCER PATIENTS

"SILICONE" A LIFE LIKE APPEARANCE



DEPT. OF PROSTHODONTICS AND CROWN & BRIDGE
COLLEGE OF DENTAL SCIENCES & RESEARCH CENTRE

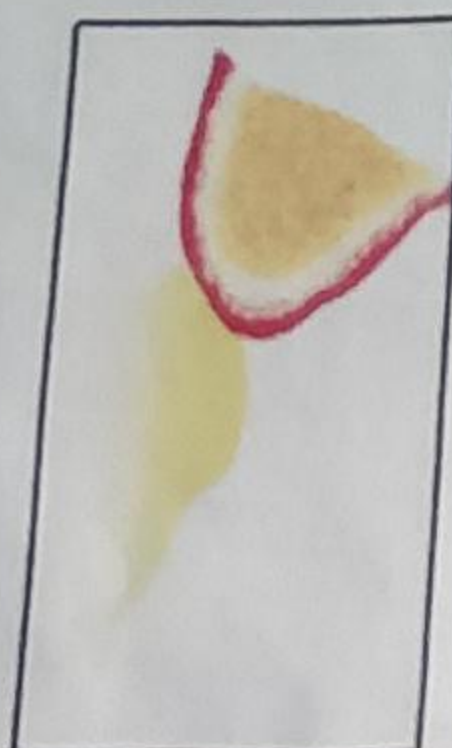
PONTIC DESIGN

Pontic : Pontic is artificial tooth of FDP that replace missing natural tooth, restoring function & appearance. (GPT-8)

CLASSIFICATION:

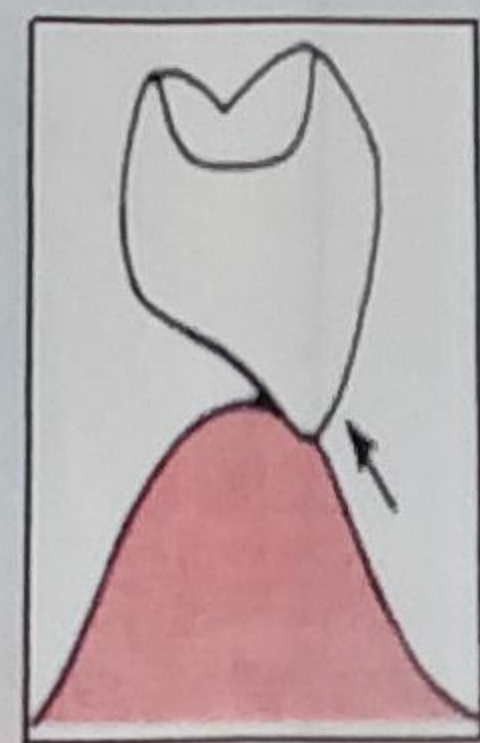
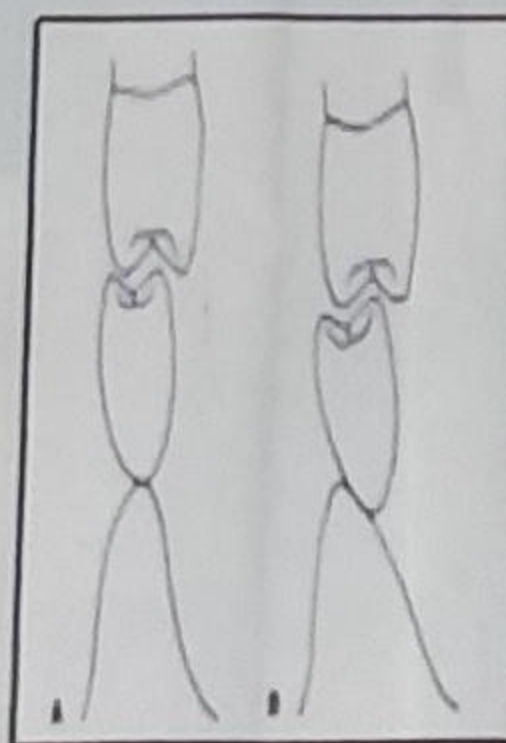
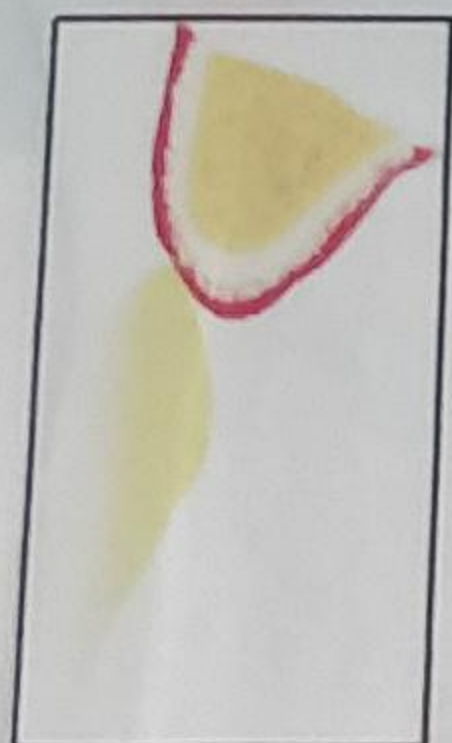
(1) Based on Mucosal Contact:

Ridge lap pontic

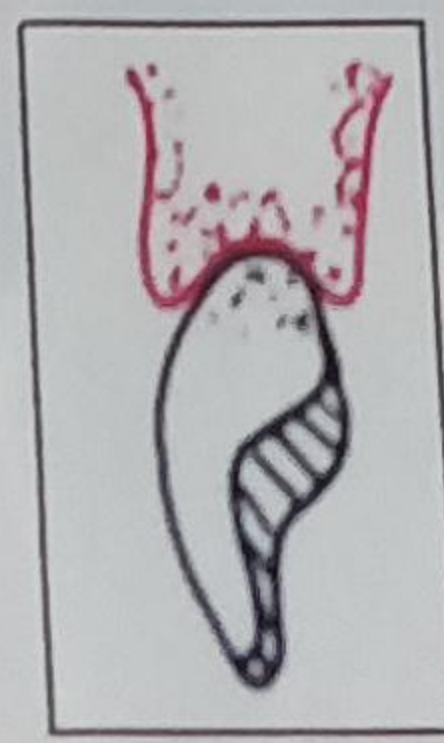
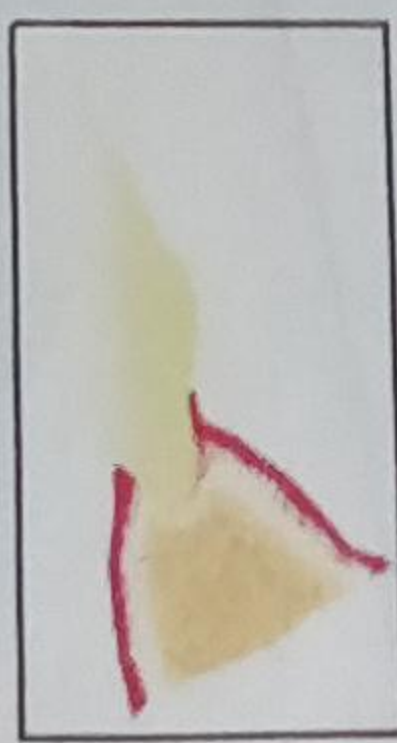


With mucosal contact:

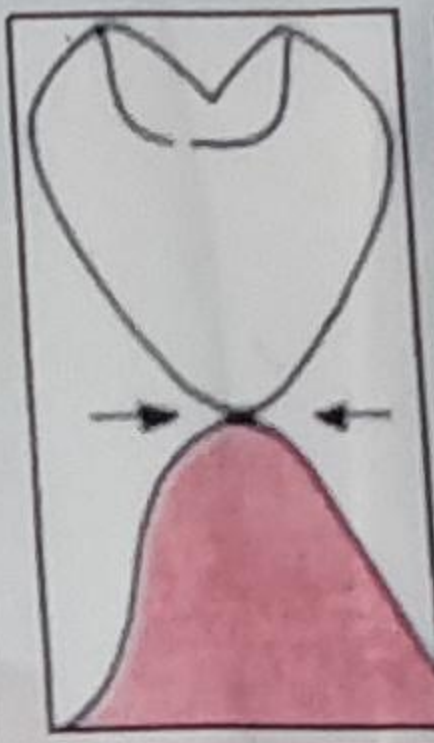
Modified ridge lap



Ovate pontic

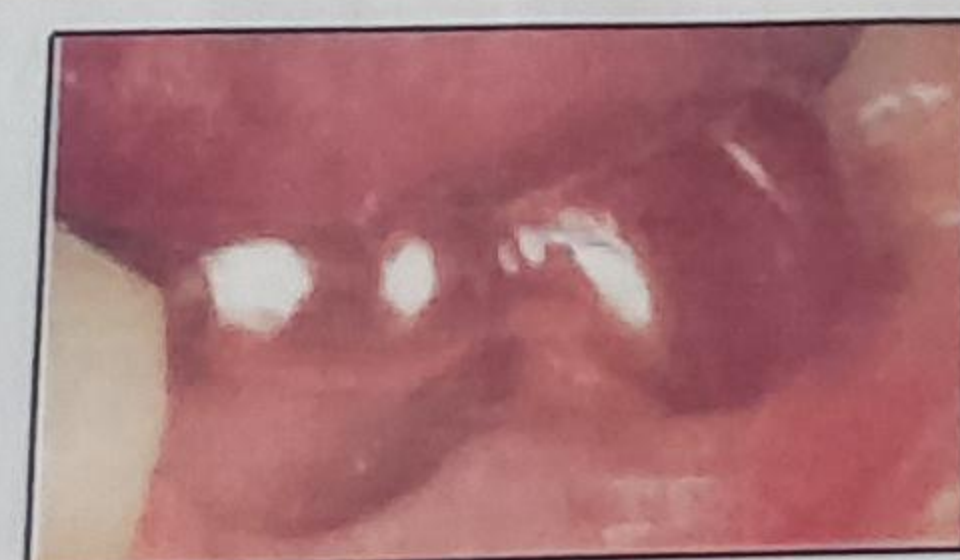
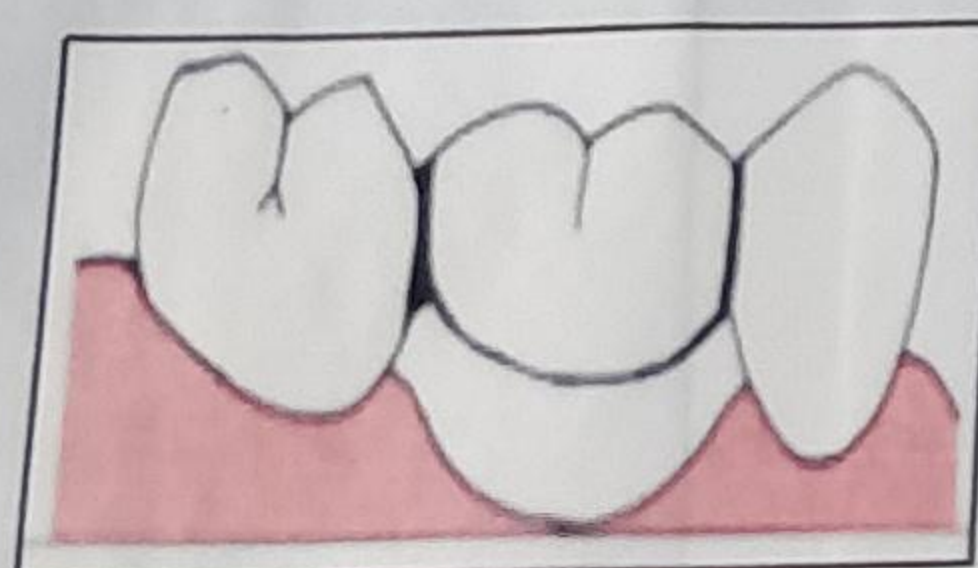


Bullet/Conical

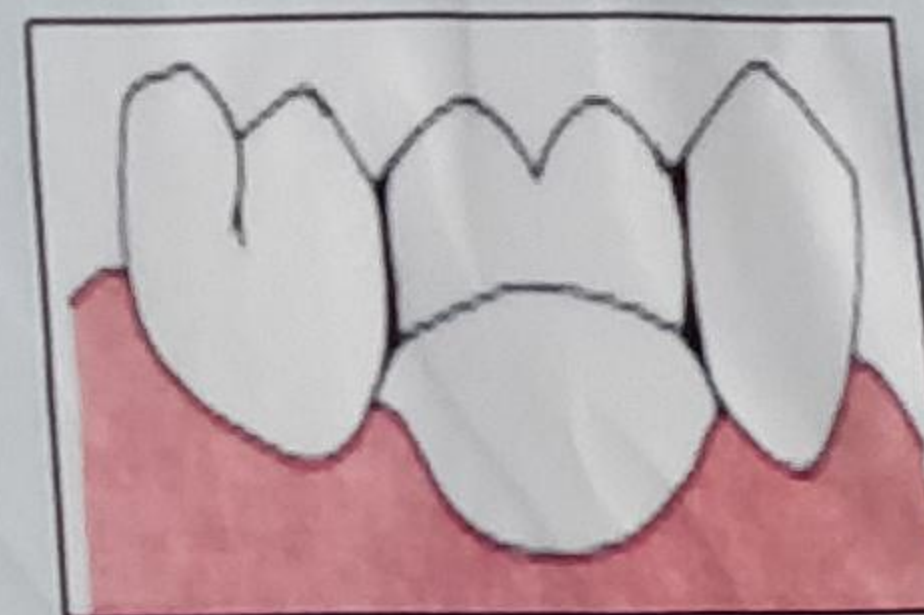
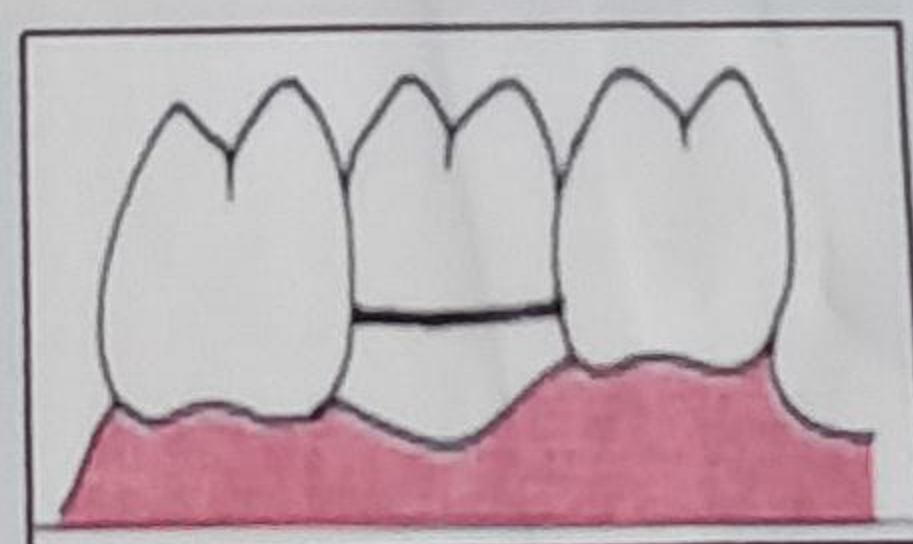


Without mucosal contact

Hygienic / Sanitary pontics

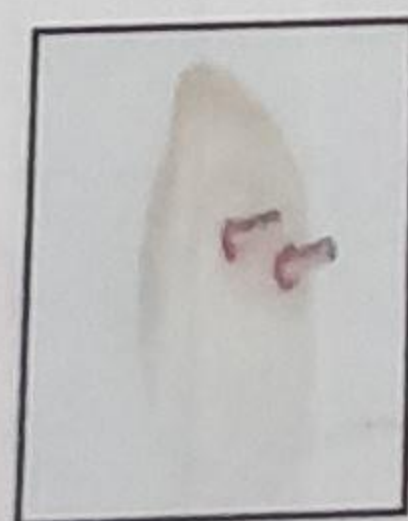


Modified Hygienic / Modified Sanitary pontic



(2) Type of Material

- Metal and porcelain veneered pontic
- Metal and resin veneered pontic
- All metal pontic
- All ceramic pontic



(3) Method of Fabrication

- Custom made pontic
- Prefabricated pontic
- Tru pontic
- Interchangeable facing
- Sanitary pontic
- Pin facing pontic
- Modified pin facing pontic
- Reverse pin facing pontic
- Harmony pontic
- Porcelain fused to metal pontic

Prepared by: Deep Mehta, Dhruvi Kathiria, Faizal khatri, Hemal Makwana, Mirali Lodhia, Asha Khadela, Harsha Lalwani, Vishakha Kansakar, Rajsi Kavi
Guided by: Dr. Shruti Mehta, Dr. Dipti Kohli, Dr. Chandrasingh Rajput, Dr. Vipul barasiya

FINAL YEAR BATCH (2014-2015)

CLINICAL STEPS OF COMPLETE DENTURE

STEP - 1

PRIMARY IMPRESSION



USING IMPRESSION COMPOUND

STEP - 2

SECONDARY IMPRESSION



BORDER MOLDING WITH GREEN STICK COMPOUND



ZOE IMPRESSION

STEP - 3

JAW RELATION



Jaw Relation Recorded



Articulation And Teeth Setting

STEP - 4

Try In



U/L Complete Denture Try In Patient's Mouth

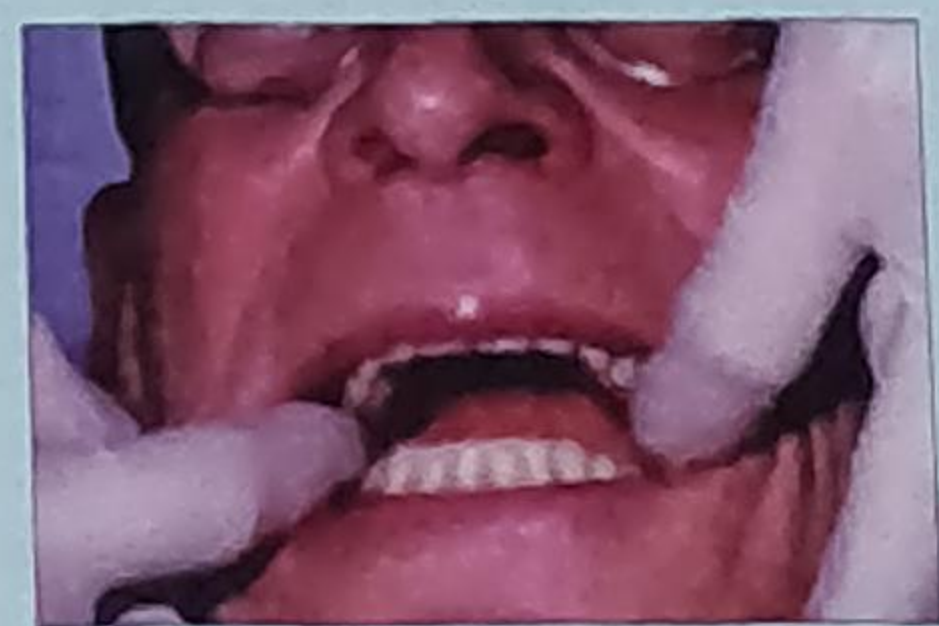
STEP - 5

Polished Final Prosthesis



STEP - 6

Denture Insertion



Prepared By : Jaydeep Solanki, Krishna Solanki, Pallavi Soni, Nikunj Sorathiya, Garg Thaker, Tushar Thummar, Ruchita Thakkar, Pankti Tilavat
 Guided By : Dr. Shruti Mehta, Dr. Dipti Kohli, Dr. Vipul Barasiya, Dr. Chandra Rajput

(3rd Year Batch : 2012/13)

POSTERIOR TOOTH FORM

HISTORY

hundreds of years ago teeth were carved from wood. One of the earliest dental materials used for denture were also used for denture.

CLASSIFICATION

MODIFIED

- Gysi Crossbite:-
 - Maxillary buccal cusp eliminated
 - Called "Mortar and pestle action"



- Sear's channel:-
 - Maxillary occlusal surfaces had deep channel running
 - ... in all posterior teeth

NON-

- Hall's Inverted Occlusion:-
 - Tooth was shaped deep
 - occlusal surface
- Meyerson's Inverted Occlusion:-
 - It had series



Kennedy's Classification For Partially Edentulous Arches

•It is the most popular classification based on partially edentulous arches.

Class - I



Bilateral edentulous area present posterior to the remaining natural teeth.

Class - II



Unilateral edentulous area present posterior to the remaining natural teeth.

Class-III



Unilateral edentulous area with natural teeth remaining both anterior and posterior to it.

Class-IV



A single, but bilateral edentulous area (crossing the midline) located anterior to remaining natural teeth.

Class-V



Edentulous area bounded by anterior and posterior teeth where anterior teeth not able to give support.

Class-VI



Edentulous area bounded by anterior and posterior teeth where anterior teeth able to give support.

APPLEGATE'S MODIFICATION

APPLEGATE'S RULES

- Rule 1 : Classification should follow rather precede extractions that might alter the original classification.
- Rule 2 : If third molar is missing and not to be replaced is not considered in the classification.
- Rule 3 : If third molar is present and is to be used as an abutment, it is considered in the classification.
- Rule 4 : If the second molar is missing and not to be replaced, It is not considered in the classification.
- Rule 5 : The most posterior edentulous area or areas always determine the classification.
- Rule 6 : Edentulous areas other than those, which determine classification, are referred to as modification spaces and are designated by their number.
- Rule 7 : The extent of the modification is not considered, only number of additional edentulous areas, i.e. the number of teeth missing in the modification spaces is not considered. Only the number of additional edentulous spaces are considered.
- Rule 8 : There can be no modification areas in class IV. Because any additional edentulous space will definitely be posterior to it and will determine the classification.

Prepared By : Khushbu Trivedi, Rishil Trivedi, Shachi Trivedi, Aanal Vaghasia, Sheena Upadhyay, Saurabh Patel, Vrushang Patel,

Guided By : Dr. Shruti Mehta, Dr. Dipti Kohli, Dr. Vipul Barasiya, Dr. Chandra Rajput

(3rd Year Batch : 2012/13)

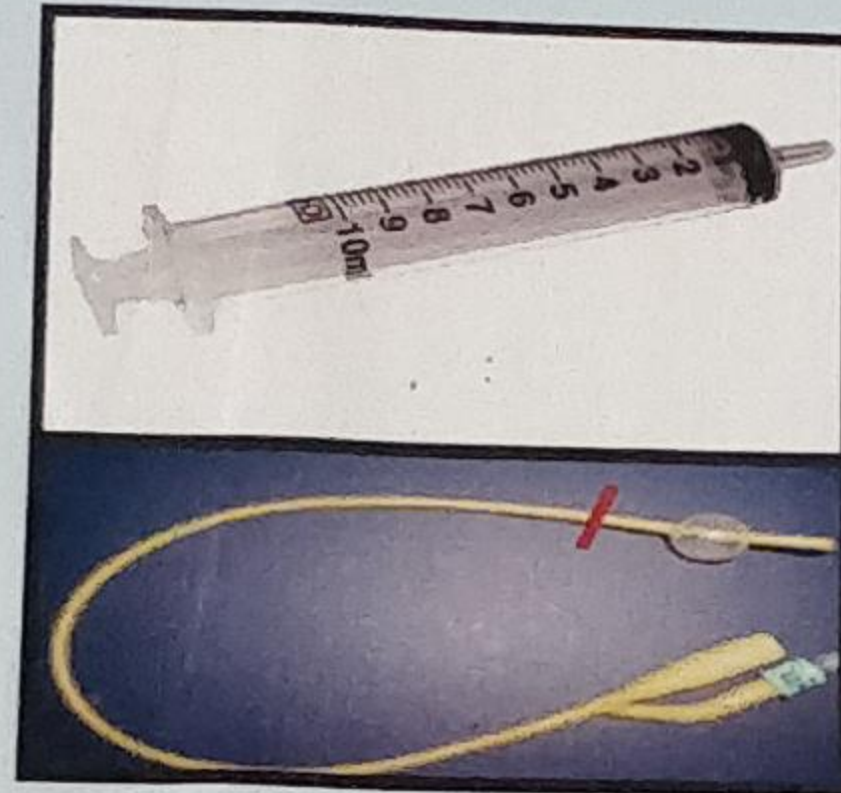
DISPOSAL OF BIOMEDICAL WASTE

DISCARDED BIOLOGICAL MATERIALS FROM TEACHING, CLINICAL AND RESEARCH LABORATORIES AND OPERATIONS



YELLOW BAGS

Infectious waste, bandage, gauze, cotton or any other



RED BAGS

Plastic waste such as catheters, injections, syringes, I.V. tubes,



BLUE BAGS

All types of Glass bottles and broken glass articles, out-dated and discarded



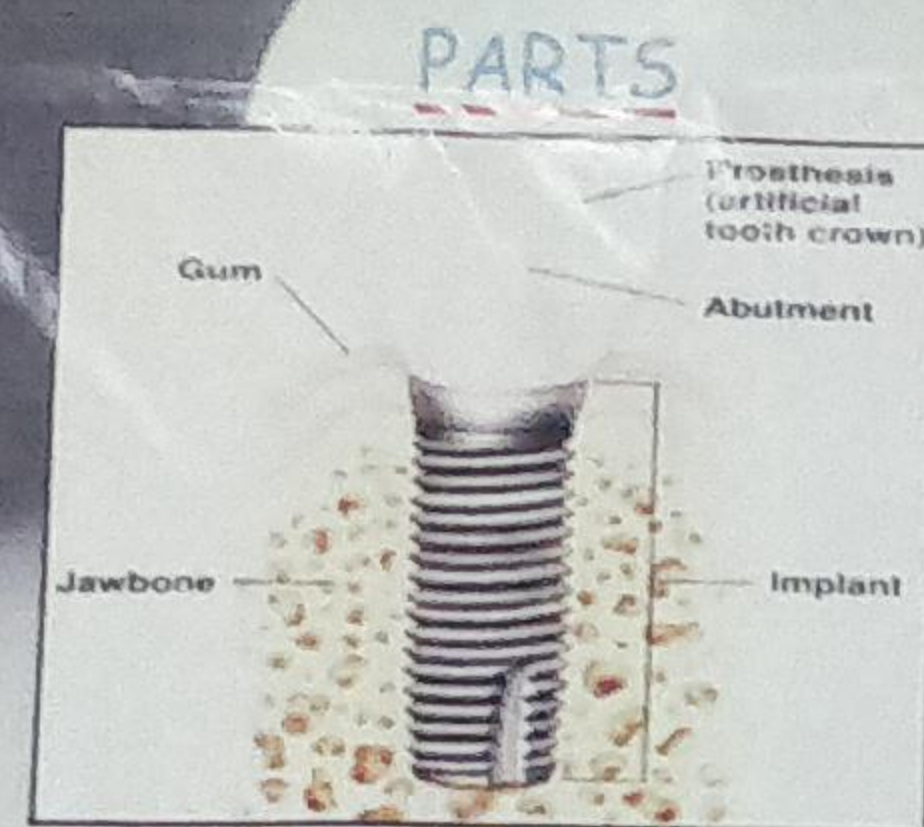
BLACK BAGS

Needles without syringes, blades, sharpers and all metal

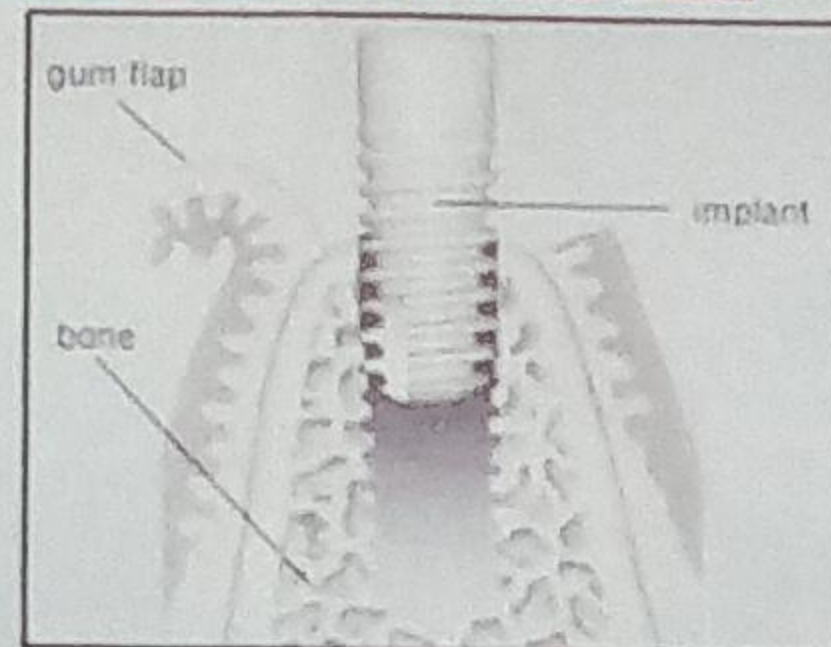
PREPARED BY : KRUPA PATEL, NIDHI PATEL, PANKTII PATEL, RITU PATEL, SALONI PATEL, MEERA RAO
GUIDED BY : DR. SHRUTI MEHTA, DR DIPTI KOHLI, DR CHANDRA RAJPUT, DR. VIPUL BARASIA

BATCH : 2012-2013
3RD YEAR

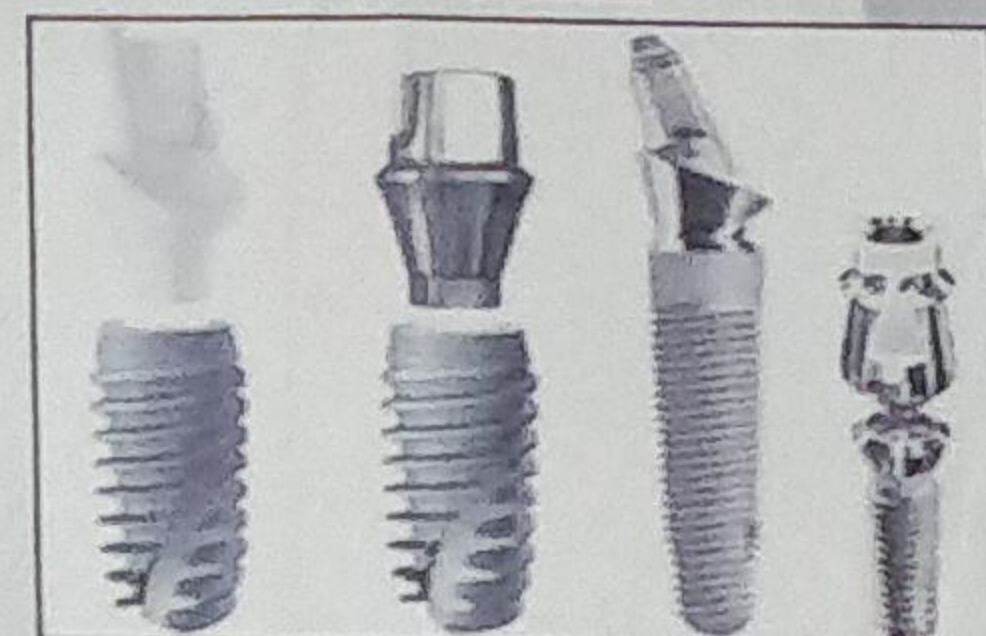
PARTS OF IMPLANT



RELATION OF IMPLANT WITH ADJACENT TISSUE

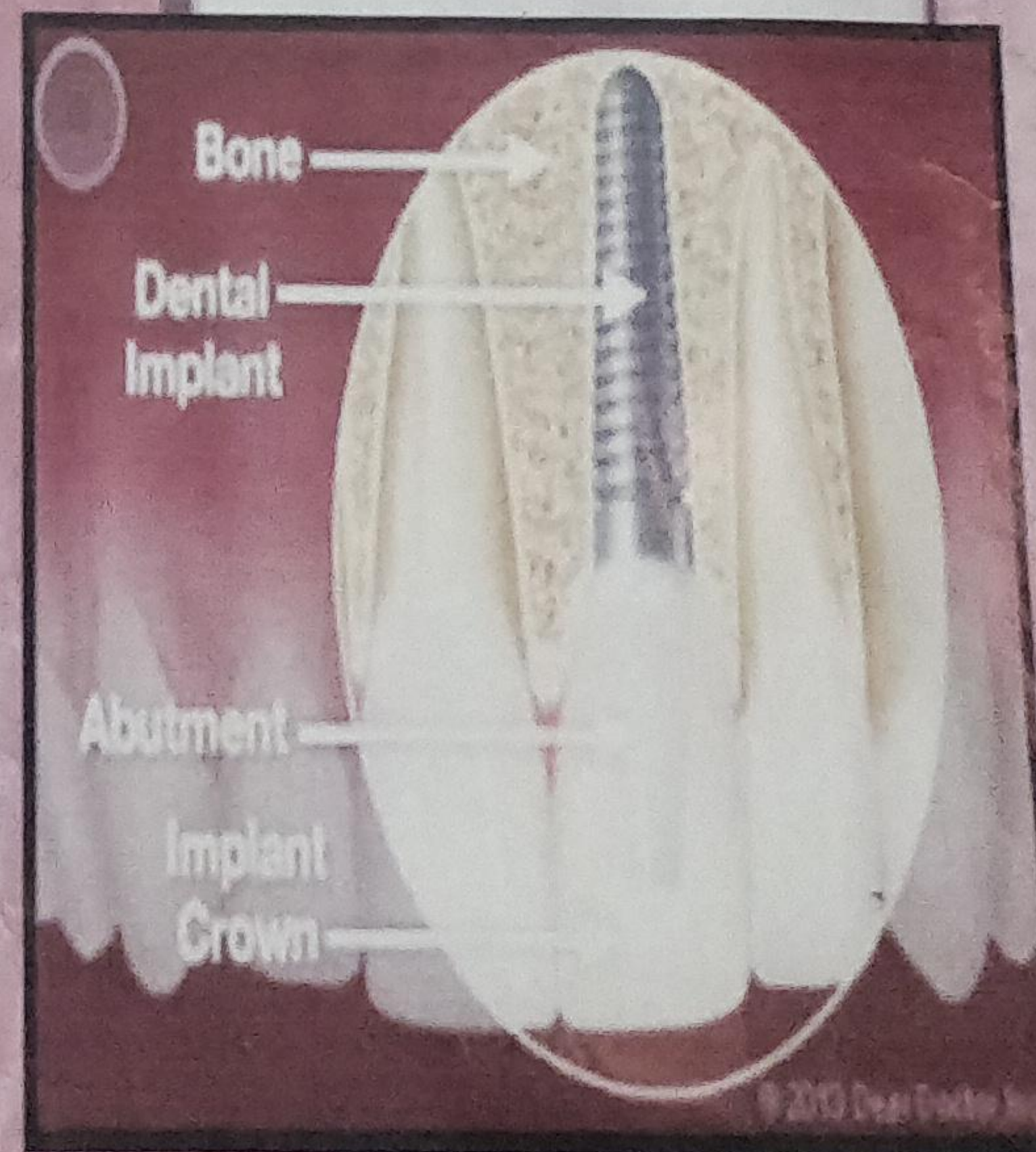
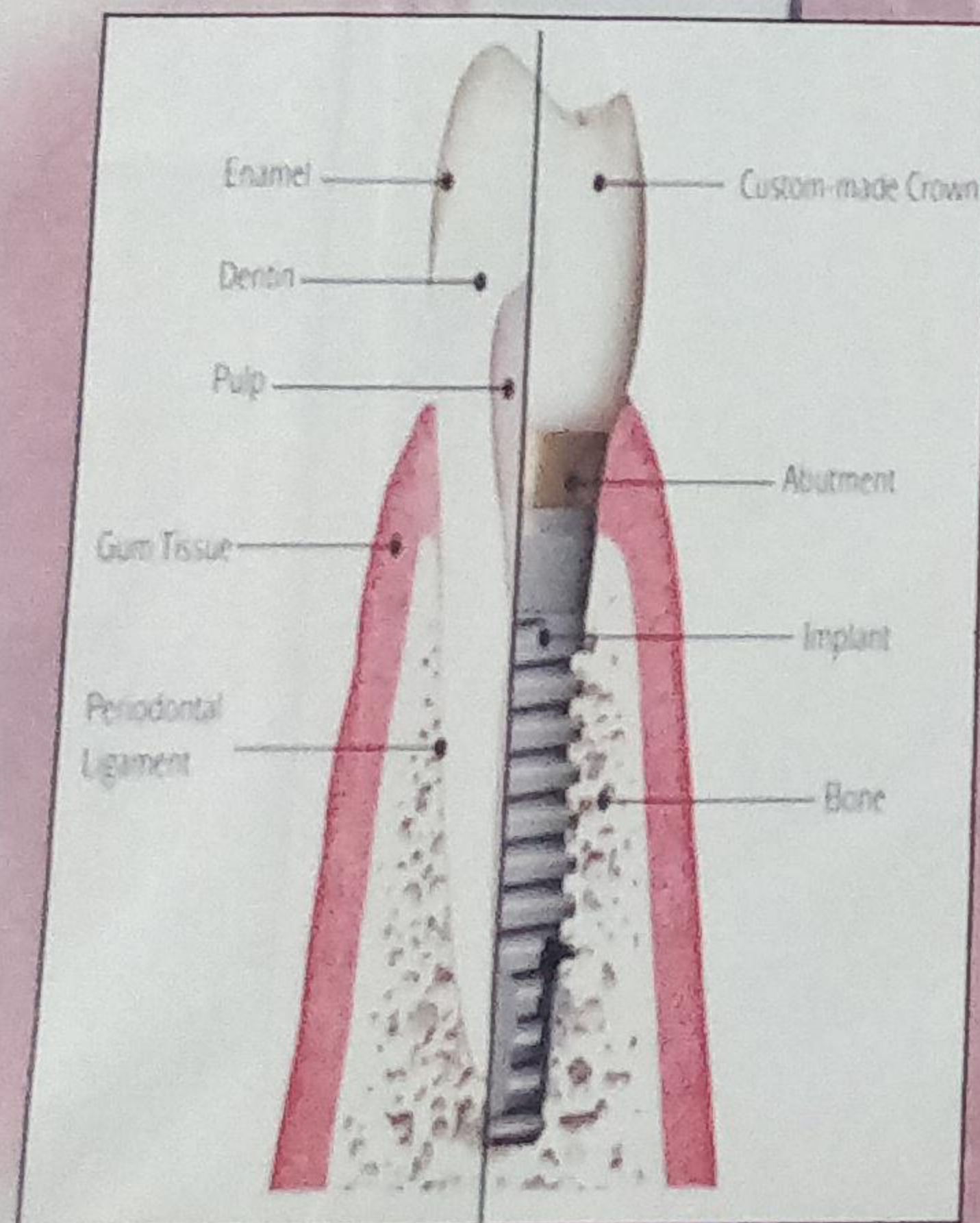


SCREWS USED IN IMPLANT



Parts of an implant 1. Manufactured Crown 2. Implant Abutment 3. Implant Screw

COMPARISON OF IMPLANT & STRUCTURE OF NATURAL TOOTH



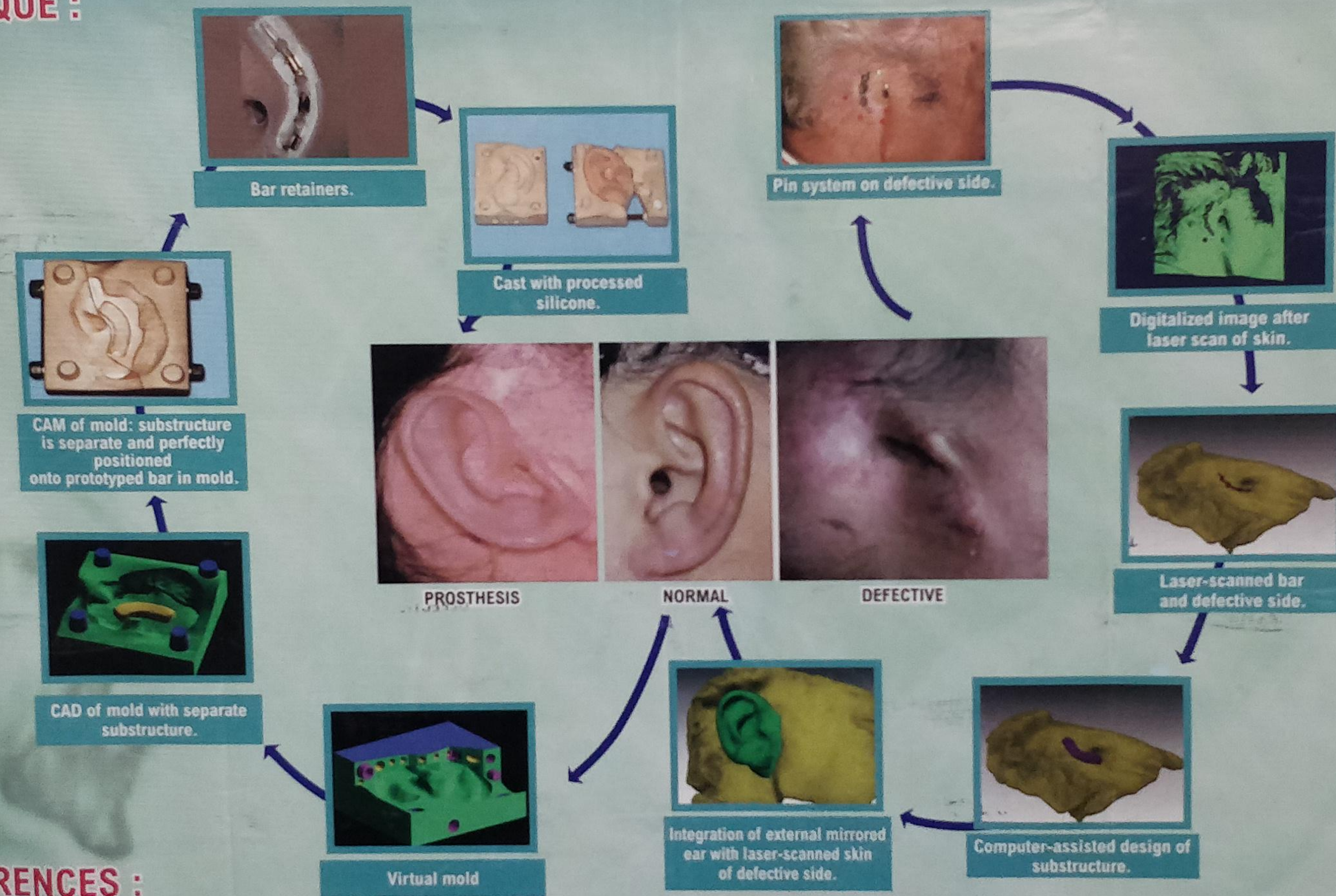
PREPARED BY : YASH MODHA, SWETA SATODIYA, NIYATI MEHTA, AMI MEHTA, ADITI MEHTA, PARIL BALAR (FINAL YEAR BATCH : 2014-'15)

GUIDED BY : DR. SHRUTI MEHTA, DR. DIPTI KOHLI, DR. VIPUL BARASIYA, DR. CHANDRA RAJPUT

AURICULAR PROSTHESIS : GOING DIGITAL

RAPID PROTOTYPING : The term Rapid Prototyping refers to a Class of technologies that can automatically construct physical models from computer aided design (CAD) data

TECHNIQUE :



REFERENCES :

lenardo C, roberto M, Gianfranco, Roberto S: cad/cam eae model and virtual construction of the mold. J Prosthet Dent 2007;98: 339-43
 Ashu sharma : rapid prototyping technology for proathodontics. Int J of clin Dent 2014;7(4):327-36

STEPS OF FLASKING & ACRYLISATION

Aim : It is to convert the waxed denture into hard acrylic resin denture.

Stages of Acrylisation : 1) Flasking 2) Dewaxing 3) Packing acrylic Dough 4) Curing 5) Cooling 6) Deflasking 7) Finishing & Polishing

Stages :

1) Flasking

Flask it is metal container to embed the denture in plaster of paris.

It has three parts :

- i) Shallower lower part.
- ii) Deeper middle part.
- iii) Top lid.

PROCEDURE

- 1) All three parts of the flask are separated.
- 2) Fill the shallow bottom part with the plaster.
- 3) Keep the cast in middle of the bottom part.
- 4) put middle part of the flask on the bottom part.
- 5) Fill the flask with plaster.
- 6) Put the top lid and put gentle pressure slowly.
- 7) Allow the plaster inside the flask to set wait for 15 minutes.



(A) Middle Part of flask (B) Maxillary set up flasked (C) Top lid of flask.

2) DEWAXING



- i) Flasking along with clamp placed in boiling water for 5 minutes.
- ii) Remove soften base plate.
- iii) Pour some more boiling water on base plate and teeth to remove excess wax.
- iv) Allow the flask to cool and dry.

3) PACKING ACRYLIC DOUGH :-

We have mixing of acrylic powder + liquid.

Chemical Stages :-

- (1) Induction (2) Propagation (3) Chain transfer (4) Termination.

Racking of acrylic dough is done in the following stages :-

Physical Stages :-

- (1) Wet sand stage (2) Sticky/Stage (3) Dough stage (4) Rubbery stage (5) Stiff stage.

(1) Wet sand stage



(4) Trial closure



(2) Sticky stage



(5) Flash



(3) Dough or gel stage



(6) Rubbery stage



(4) Curing :- This is the process which convert the acrylic Dough in a hard mass by a chemical reaction known as polymerisation.

Bench curing :

- After final closure the flask are kept at room temp for 30-60 minutes.

Purpose : Equalization of pressure through the mold.

(5) Cooling

Bench Cooling

- It is done for 30 minutes & then placing it in cold tap water.
- For 15 minutes.

Curing

Short Curing

- Start with cold water then raise to 60°c for ½ hr & then at 70°c for ½ hr. & then in boiling water for 1 hr.
- Total curing time 2 hr.

Long Curing

- Flask placed in water bath at maintained temp of 74 c
- 8-9 hr.

Cooling

Slow Cooling

- At room temp.
ex. Bench cooling

Faster Cooling

- may lead to Warpage of the denture due to differential thermal Contractio

(6) Deflasking -

The denture is retired from the flask by a procedure known as Deflasking



(7) Finishing & polishing

It includes

- (1) Trimming.
- (2) Sand papering
- (3) Pumish wash



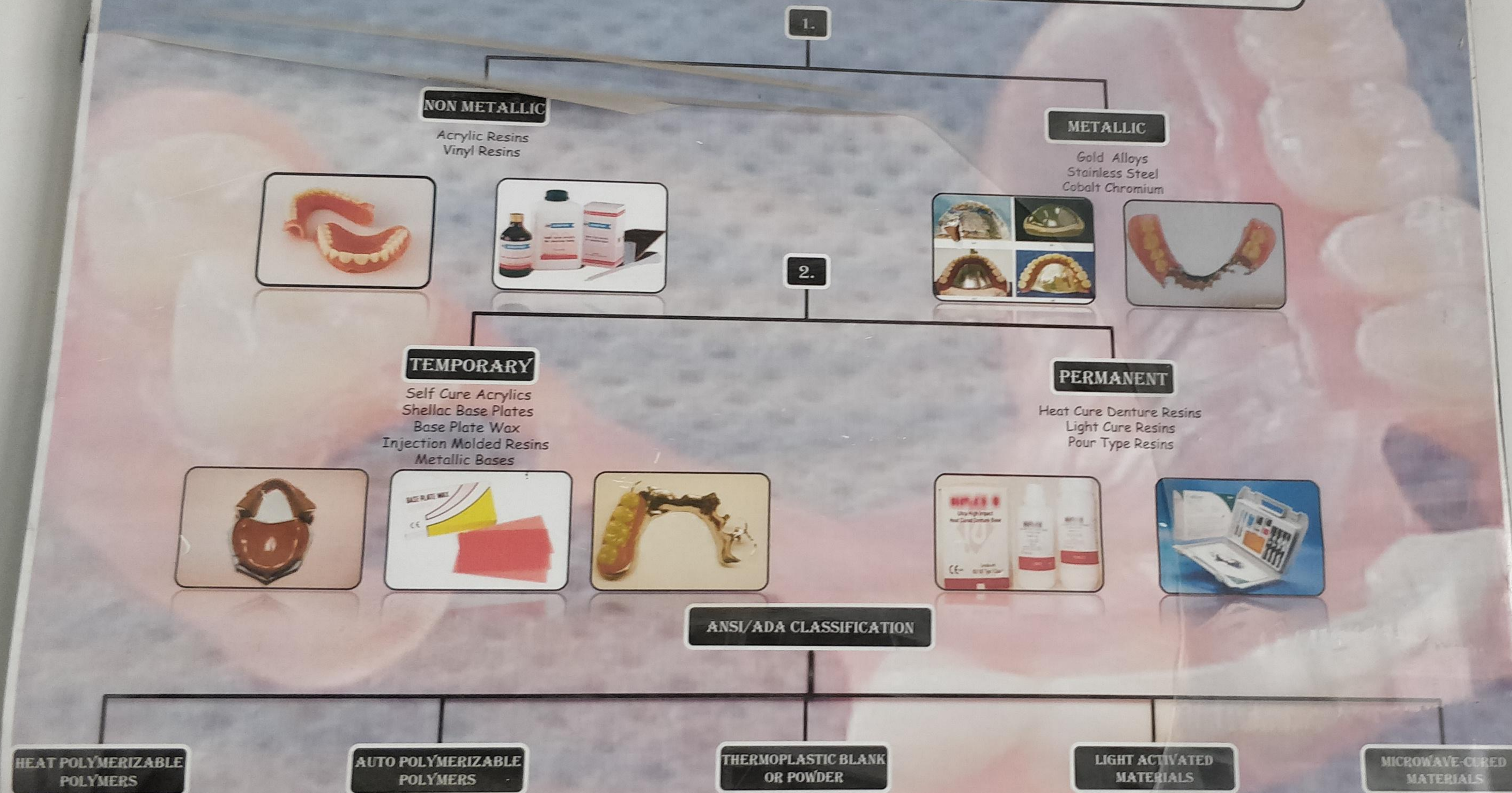
Department of Prosthodontics

Prepared By :- Payal Menpara
Dhara Pansuriya
Jyoti Makwana
Disha Jani
Khyati Patel

College of Dental Science & Research Centre,
year 2011-2012 2nd B.D.

Guided By :- Dr. Shruti Mehta
Dr. Dipti Kohli
Dr. Priyanka Makwana
Dr. Manish Mistri
Dr. Suchismita Choudhary

DENTURE BASE MATERIALS



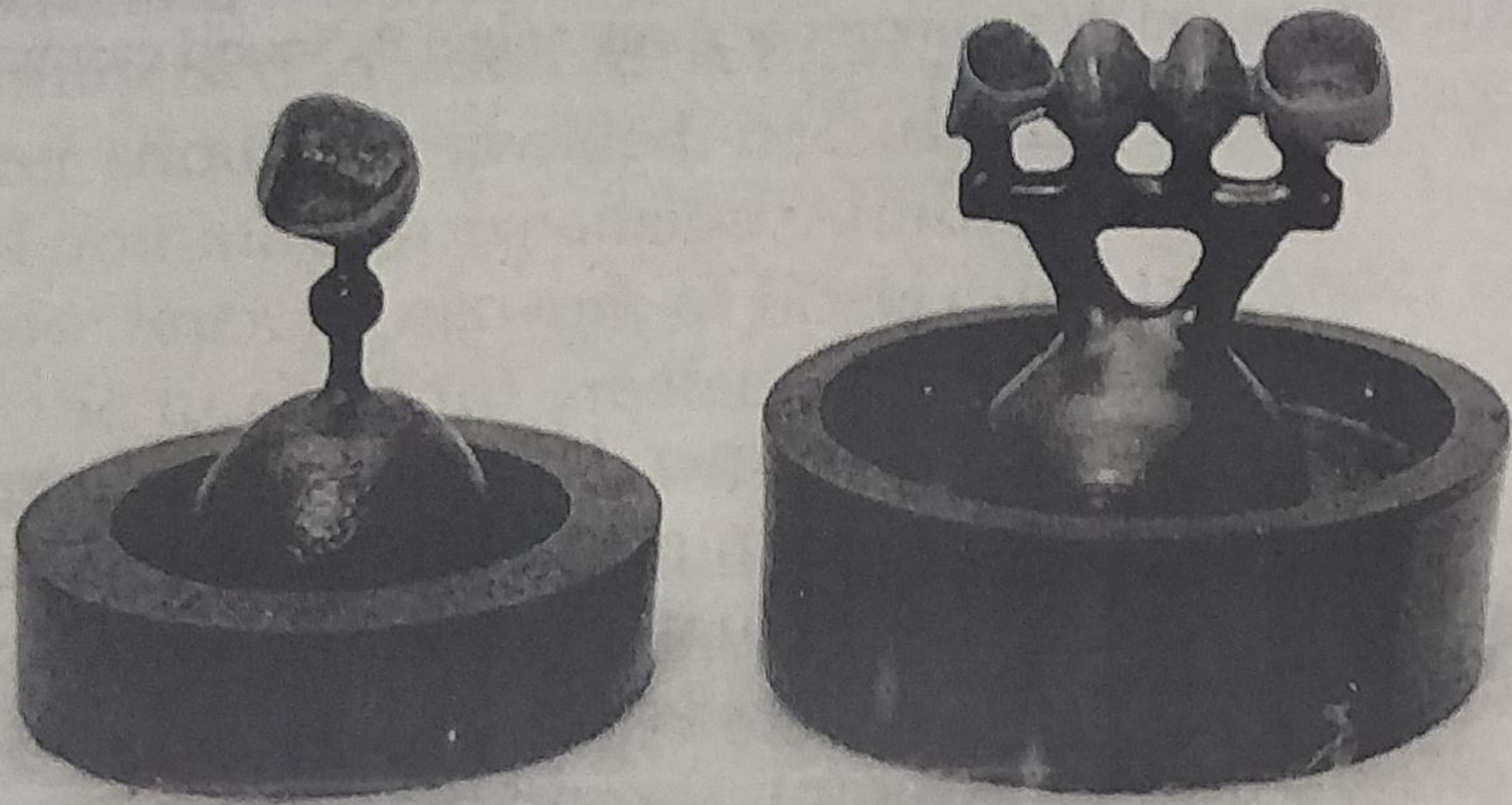
PREPARED BY:

VISHWA DAVE, ZALAK ADESHARA
PRIYANKA JAIN, SHREYA ALMUALA

DEPARTMENT OF PROSTHODONTICS

COLLEGE OF DENTAL SCIENCES AND RESEARCH CENTRE
MANIPUR, AHMEDABAD

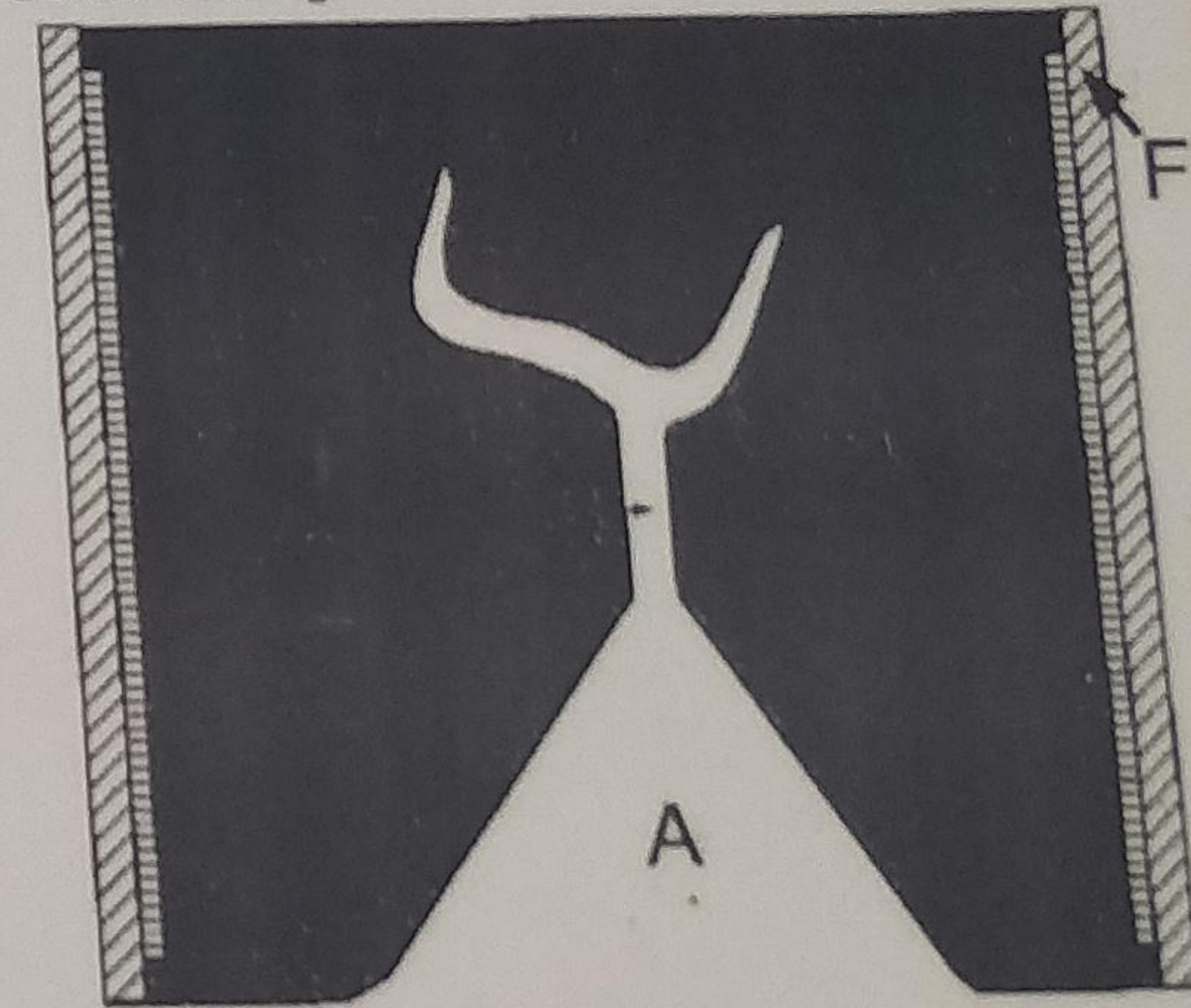
Wax Patterns



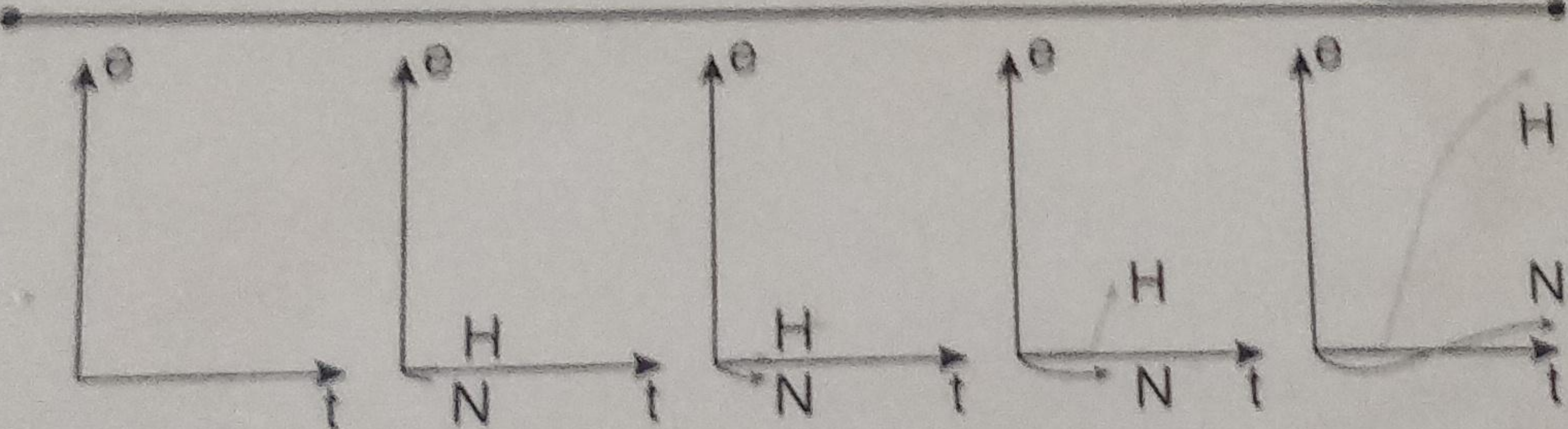
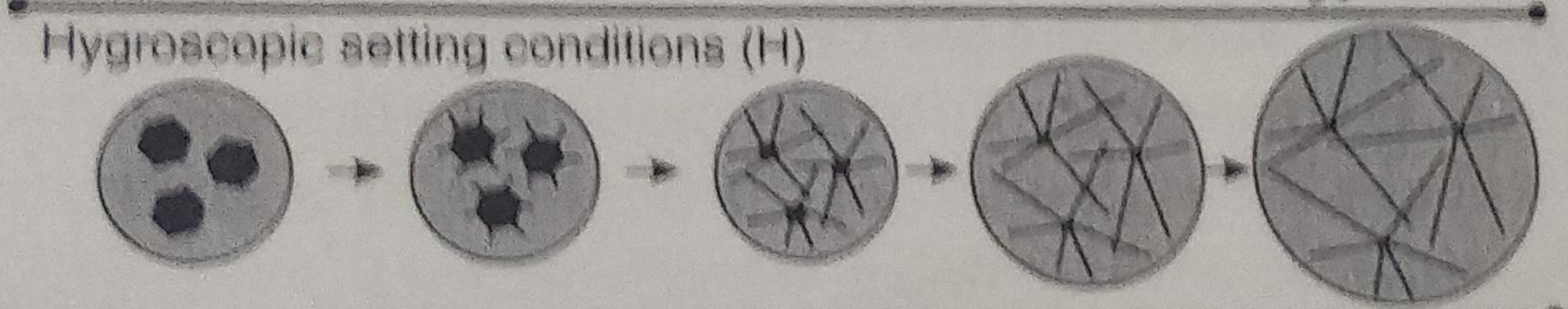
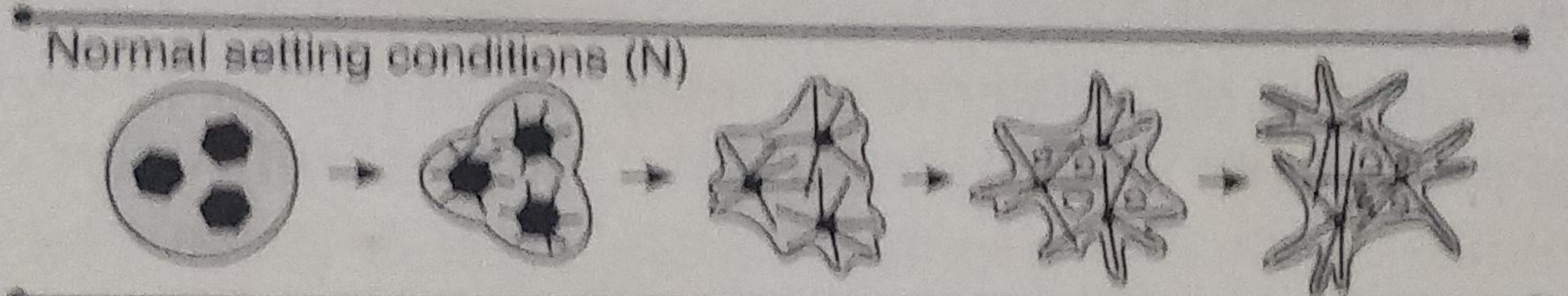
Left Primary sprue oriented directly toward the wax pattern Note the spherical reservoir of the vertical sprue Right Indirect sprue design showing a horizontal reservoir runner bar that is positioned near the heat center of the invested ring

Diagrammatic Representation of Dental casting mold

Diagrammatic representation of a dental casting mold: A, crucible former; B, sprue; C, cavity formed by wax pattern after burnout; D, investment; E, liner; F, casting ring; G, recommended maximum investment thickness of approximately 6 mm between the end of the mold cavity and the end of the invested ring to provide pathways for sufficient gas escape during casting.



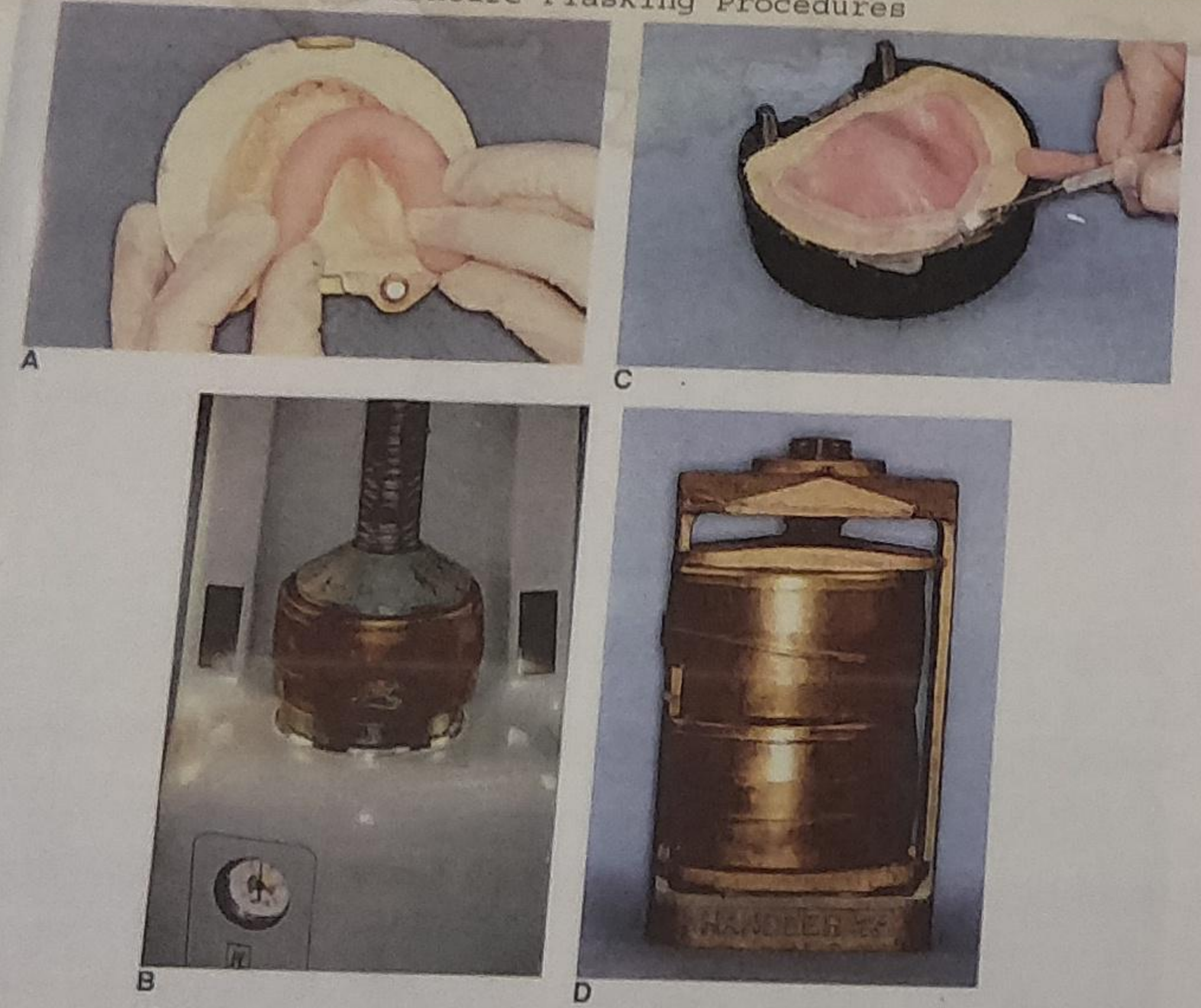
Stages of Setting Expansions of Dental Plaster (Normal & Hygroscopic)



(I) Initial mix
 (II) Initial crystal growth
 (III) Solid phase contact
 (IV) Expansion
 (V) Termination

Expansion vs. time curve

Denture Flasking Procedures



40 Steps in resin packing (compression molding technique). A, Properly mixed resin is bent into a horseshoe shape and placed into the mold cavity. B, The flask assembly is placed into a flask press, and pressure is applied. C, Excess material is carefully removed from the flask. D, The flask is transferred to a flask carrier, which maintains pressure on the assembly during processing.

Denture Flasking Procedures



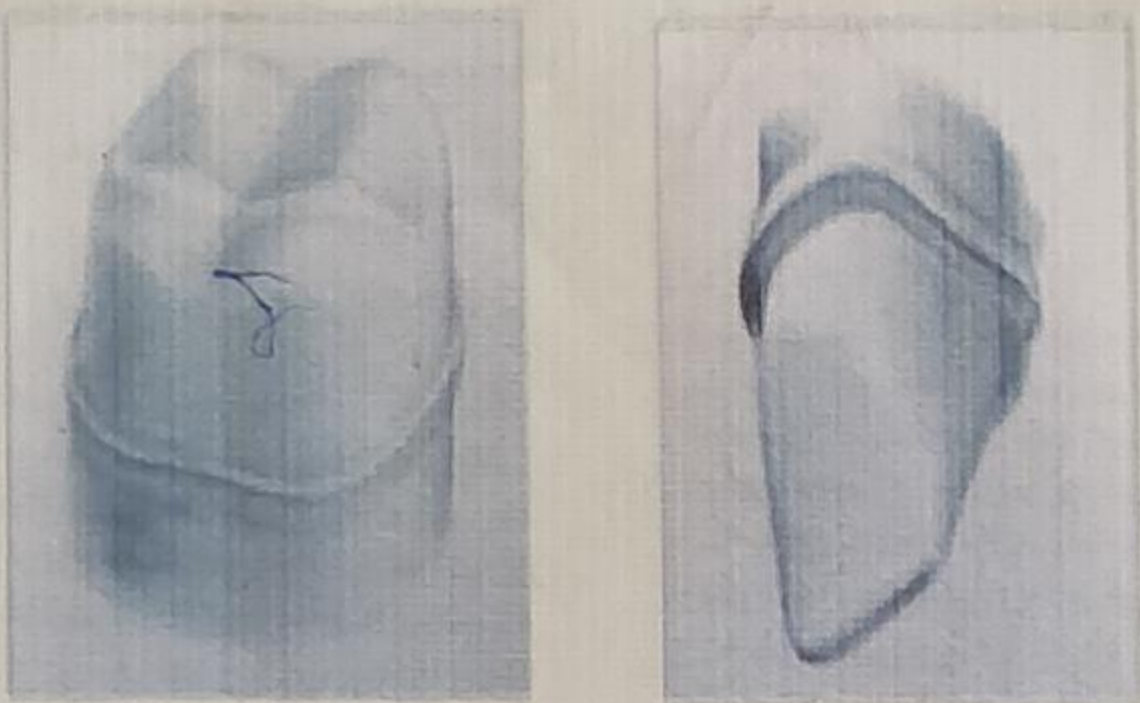
39 Steps in mold preparation (compression molding technique). A, Completed tooth arrangement prepared for flasking process. B, Master cast embedded in properly contoured dental stone. C, Occlusal and incisal surfaces of the prosthetic teeth are exposed to facilitate subsequent denture recovery. D, Fully flasked maxillary complete denture. E, Separation of flask segments during wax elimination process. F, Placement of alginate-based separating medium.

CASTING PROCEDURE

DEFINITION:- Something that has been cast in a mold: an object formed by the solidification of a fluid that has been poured or injected in to a mold.

Steps in making a Cast Restoration:

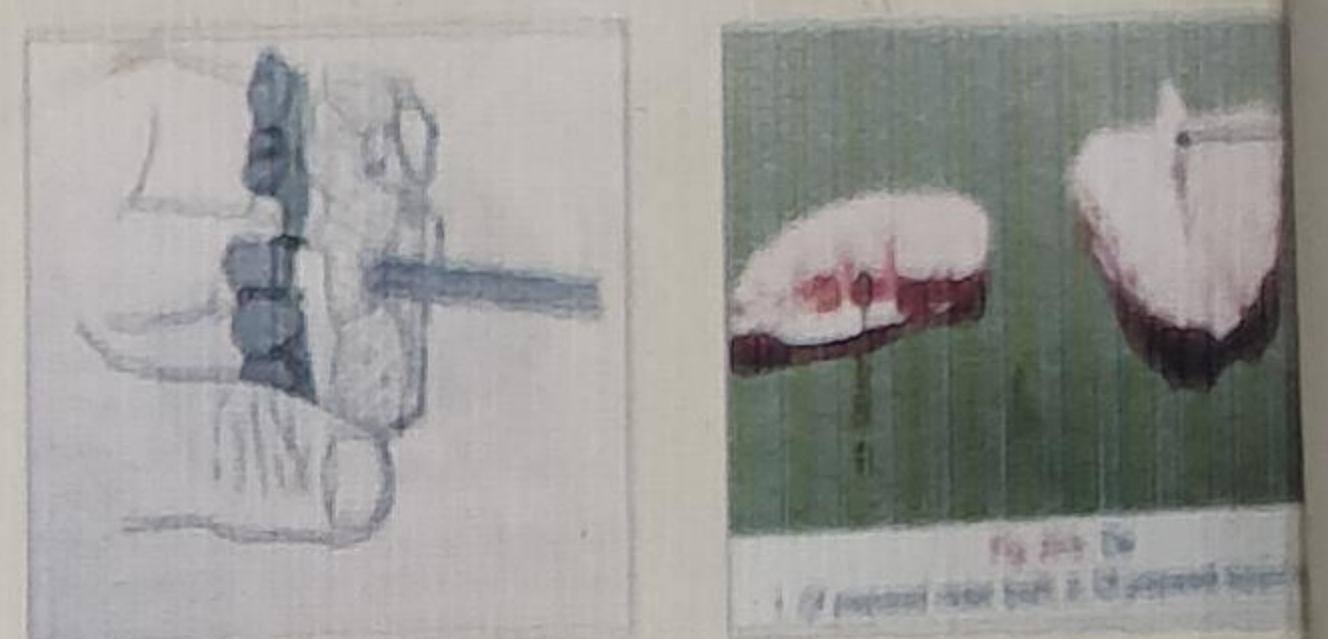
1. Tooth Preparation



2. Impression



3. Die Preparation



4. Wax Pattern fabrication



5. Attachment of sprue former



6. Ring liner placement



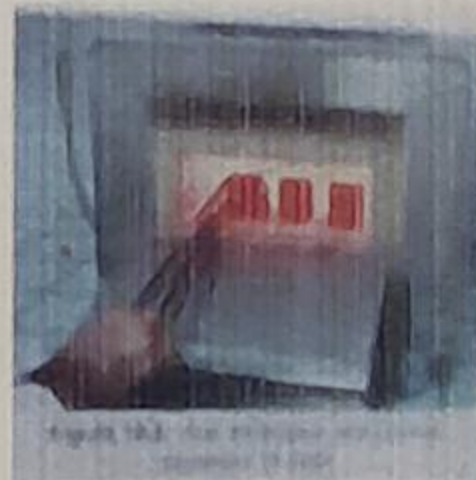
7. Assembly of casting ring



8. Investing



9. Burn out / wax elimination



10. Casting



11. Sand blasting & recovery 12. Finishing & polishing



Defect in Casting

1. Distortion
2. surface roughness
3. Porosity
4. Incomplete Casting
5. Contaminated Casting

Prepared by:-
 Bhadani Riddhi
 Bhadiyadra Bhumika
 Manvar Arati
 Katharotia Shrijal
 Gadhavi Nensi

Department of Prosthodontics
College of Dental Science & Research Centre
 2nd B.D.S., YEAR - 2011-12

Guided by:-
 Dr. Shruti Mehta
 Dr. Dipti Kohli
 Dr. Priyanka Makwana
 Dr. Manish Mistry
 Dr. Suchismita Chaudhary