



DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

**E-Teaching/Learning sessions for Final year
Theory class sessions**

S.No	Date	Lecture topic	Faculty	No of students Participated
1	08.04.20	ANCHORAGE	Dr.Annamalai	84

Clinical discussions

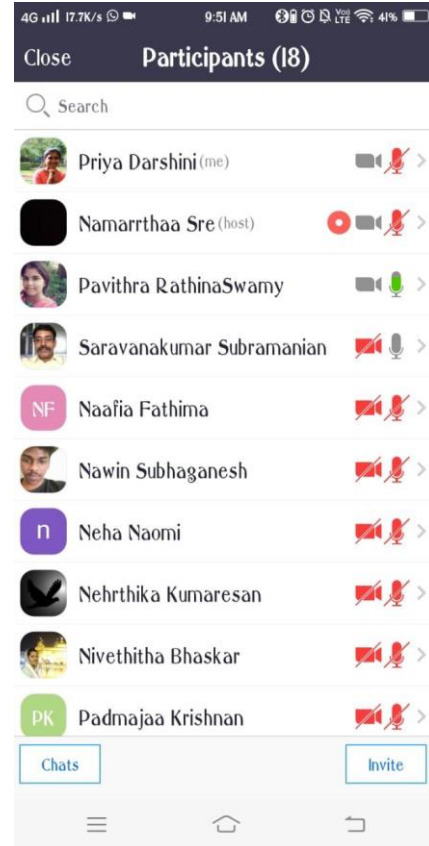
S.No	Date	Clinical discussion topic	Faculty	No of students participated
1	06.04.2020	CASE DISCUSSION	Dr. Saravanakumar	06
2	07.04.20	CASE DISCUSSION	Dr. Sushmitha	11
3	08.04.20	CASE DISCUSSION	Dr. Yamini	12
4	09.04.20	CASE DISCUSSION	Dr. Annamalai	38
5	10.04.2020	CASE DISCUSSION	Dr. Nivethitha	39
6	11.04.2020	CASE DISCUSSION	Dr. Prema	41

FINAL YEAR Case discussion

06.04.2020



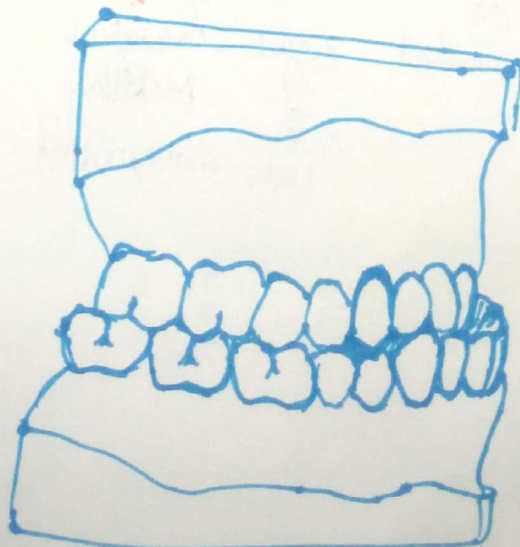
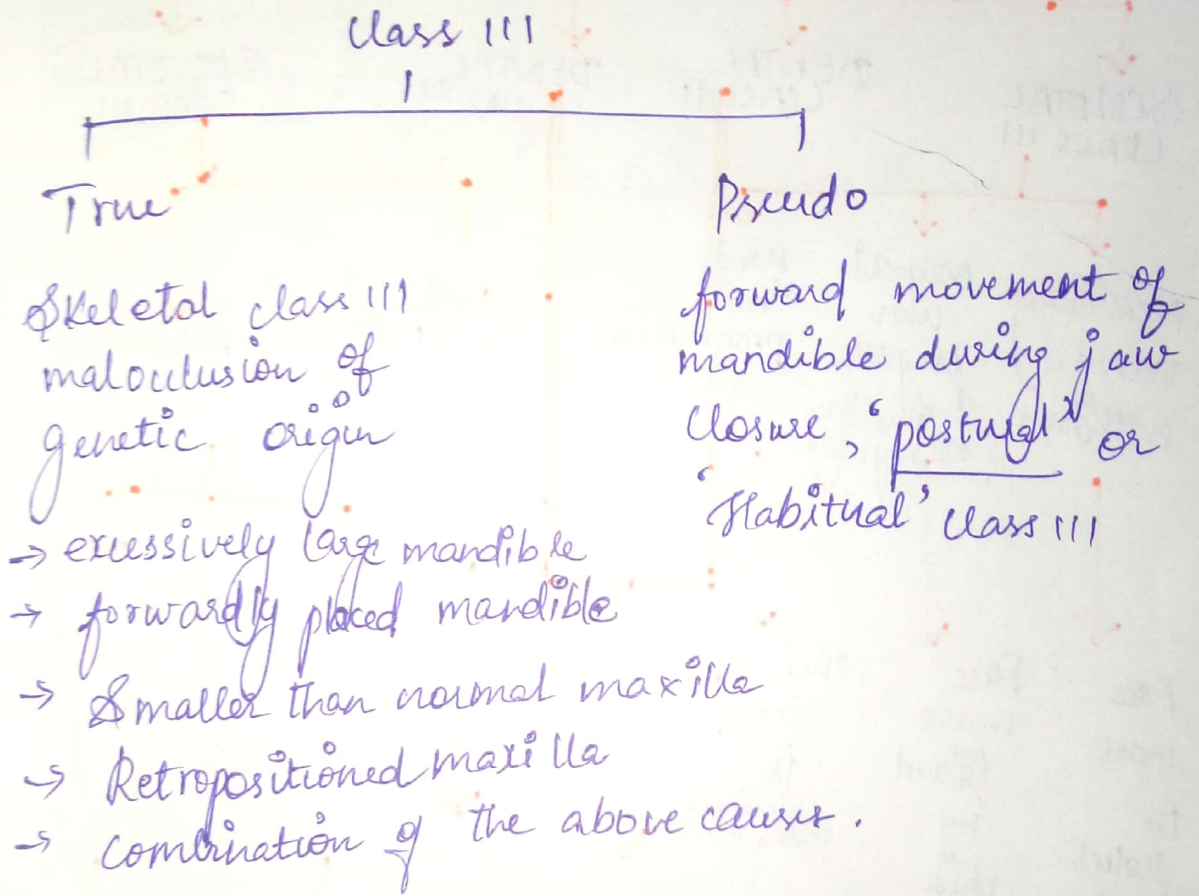
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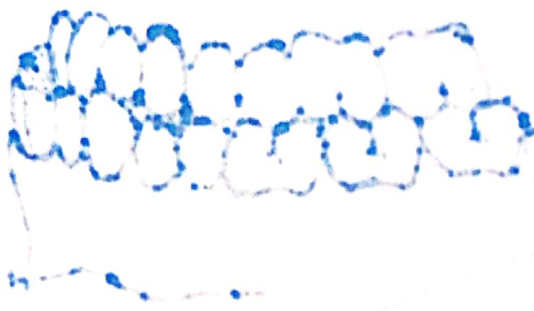
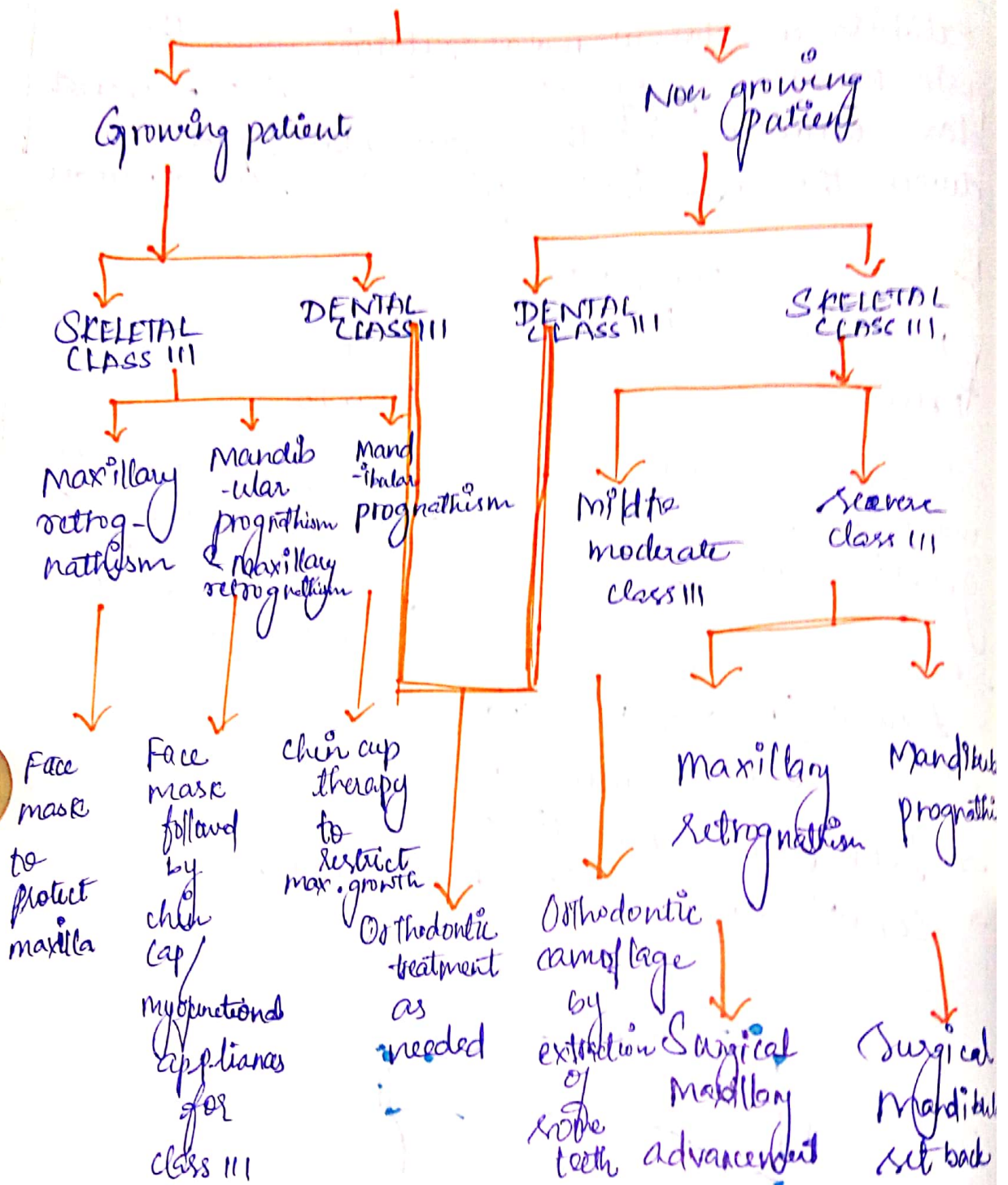
7/4/2020

CLASS III MALOCCLUSION

Exhibits a class III molar relation with the mesio-buccal cusp of the maxillary first permanent molar occluding in the interdental space between the mandibular first and second molars.



class III malocclusion



Indications & contraindications for interception of class III malocclusion

Indications :-

- Good facial esthetics
- Presence of antero-posterior functional shift.
- Convergent facial type
- Symmetric condylar growth.

Contra-indications:

- Familial prognathism
- No growth potential
- Severe skeletal problem
- Poor facial esthetics
- Divergent facial type.

Treatment of anterior crossbite :-

Mild - lower anterior inclined planes/
Removable appliances
↓
anterior expansion.

Treatment of posterior crossbite :-

Rapid maxillary expansion.

Treatment of severe class III after growth :-

↓
Due to maxillary deficiency
↓
Treated by maxillary advancement procedures

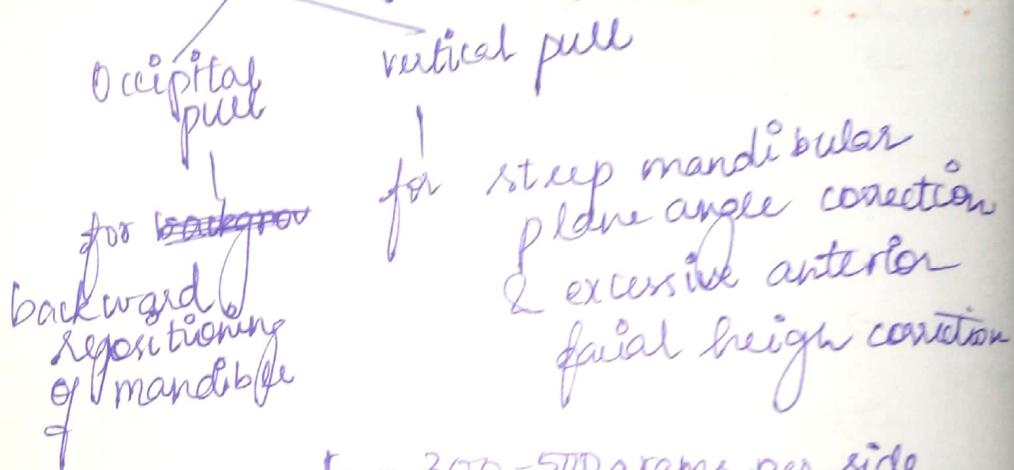
Class III malocclusions
due to mandibular prognathism
↓
mandibular set back procedures.

Interception during growth

i) Myofunctional appliance - Frankel III - max skeletal retrusion

Frankel III - can also be used as a retainer after maxillary protrusion using face mask therapy.

ii) Chin cup therapy



F = 300-500 grams per side
12-14 hours a day.

iii) Facemask therapy / Reverse pull headgear
for retrognathic maxilla & hypodivergent growth pattern

Fixed appliance

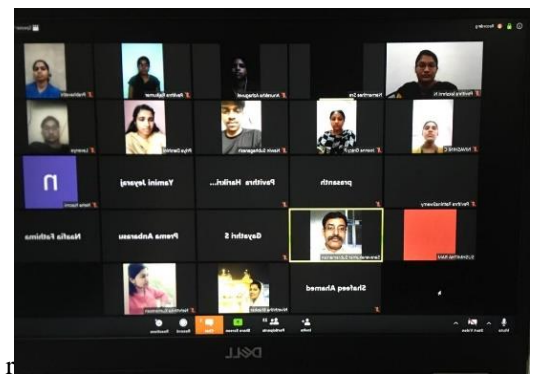
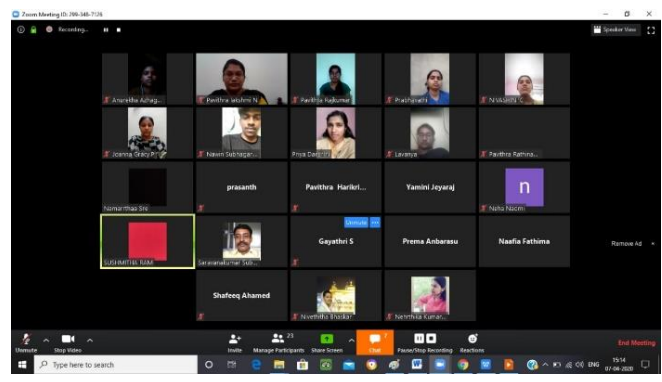
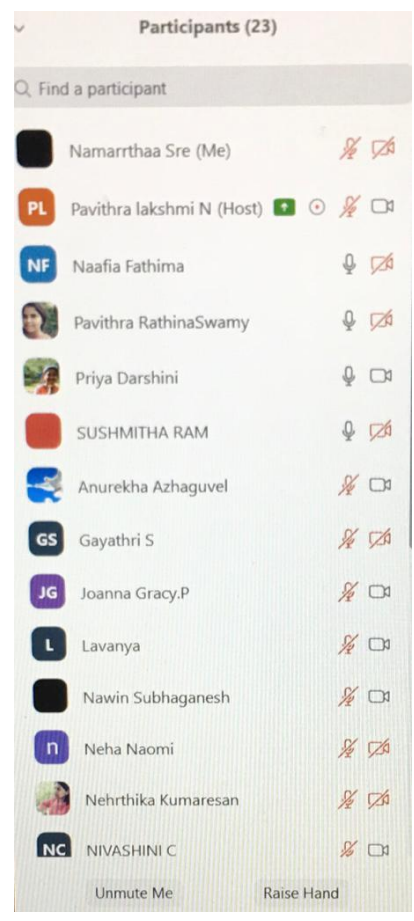
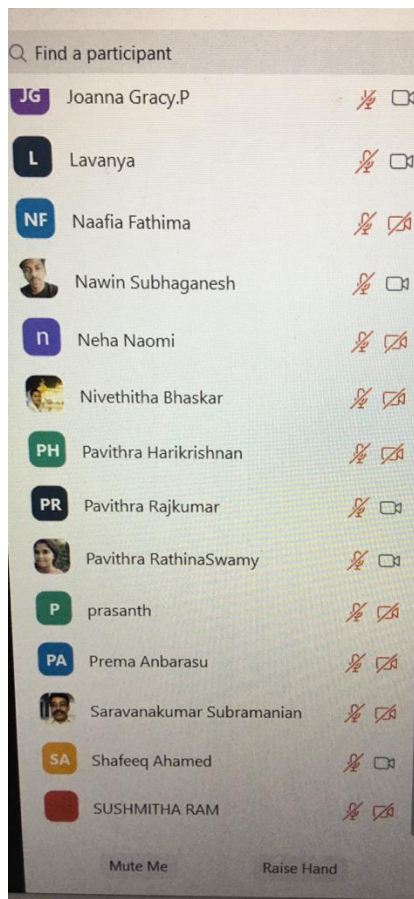
- mixed dentition before eruption of canines.
Class III intermaxillary elastic traction.

FINAL YEAR Case discussion

07.04.2020



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ORTHODONTICS ASSIGNMENT - 5

14/2020

1. DEWEY'S MODIFICATION OF ANGLE'S CLASSIFICATION OF MALOCCLUSION

Dewey proposed a modification of Angle's classification of malocclusion

Class I modifications of Dewey :-

Type 1 - Class I malocclusion with bunched or crowded anterior teeth

Type 2 - Class I with protrusive maxillary incisors.

Type 3 - Class I with anterior crossbite.

Type 4 - Class I with posterior crossbite.

Type 5 - Permanent molar has drifted mesially due to early extraction of second deciduous molar or second premolar.

Class III modifications of Dewey :-

Type 1 :- The upper and lower dental arches when viewed separately are in normal alignment.

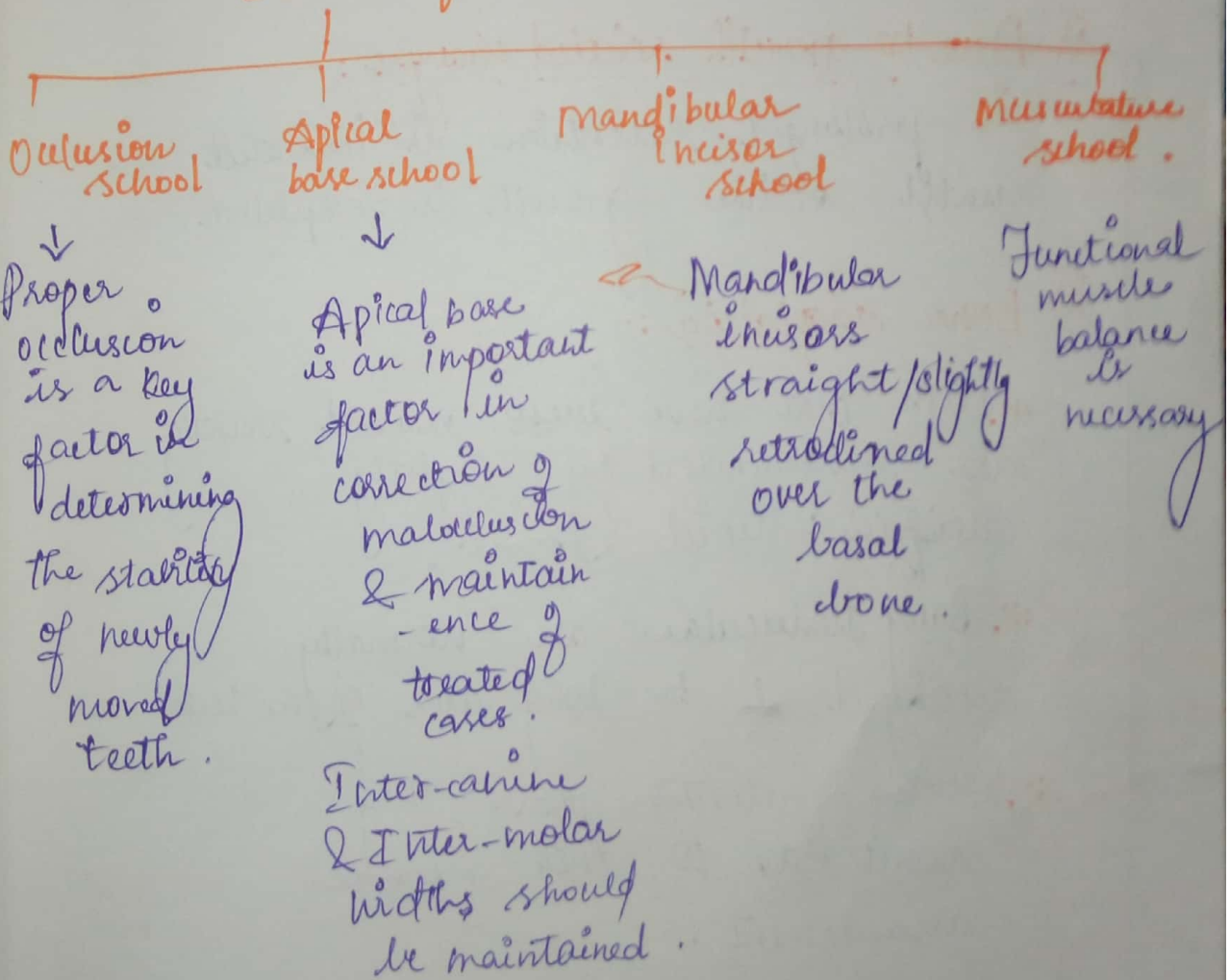
* But when the arches are made to occlude the patient shows an edge to edge incisor alignment, suggestive of a forwardly ~~pro~~ moved mandibular dental arch.

Type 2 - Mandibular incisors are crowded and are in lingual relation to the maxillary incisors.

Type 3 :- Maxillary incisors are crowded and are in crossbite in relation to the mandibular anteriors.

2) RETENTION & RELAPSE :-

Schools of retention



Causes of relapse :-

- 1) Periodontal ligament traction - ortho tooth movement - PDL fibres & gingival fibres - stretched.

* Stretched fibres can contract & cause relapse.

* PDL fibres reorganize in about 4 weeks around new position

* Gingival fibres 40 weeks to rearrange around the new position

* Hence full time retention.

ii Due to growth related changes :-

prolonged retention is indicated until active growth is completed.

iii Bone adaptation :-

* Teeth that have been moved recently are surrounded by lightly calcified osteoid bone.

* Bony trabeculae are normally arranged \perp to long axes of the teeth.

* During retention phase, they revert back to their normal arrangement.

iv Muscular forces :-

Harmonising the muscles at the end of orthodontic treatment

V Failure to eliminate the original cause :-

cause of malocclusion should be determined

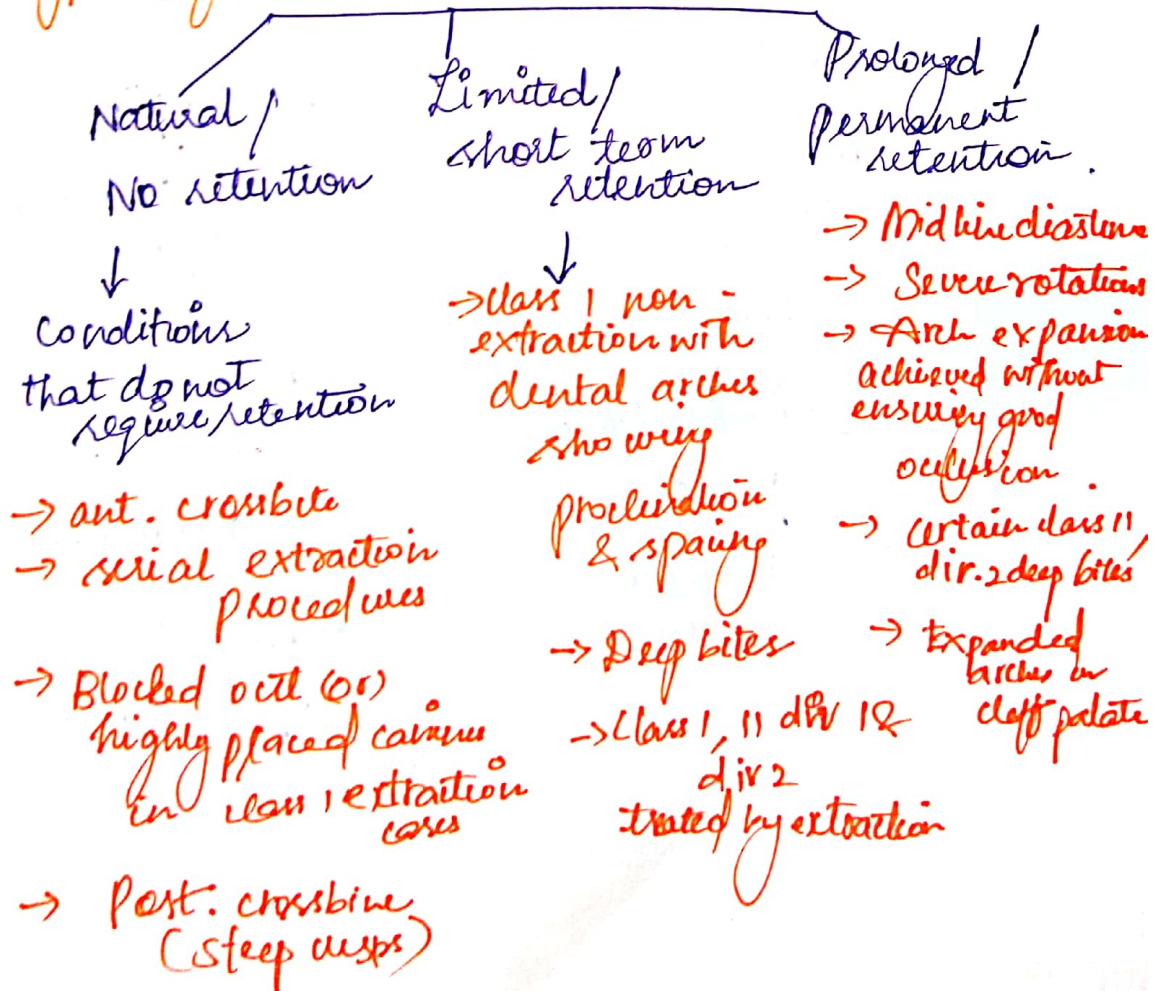
VI Role of III molars :-

Pressure effect exerted by 3rd molars is believed to cause anterior crowding (late).

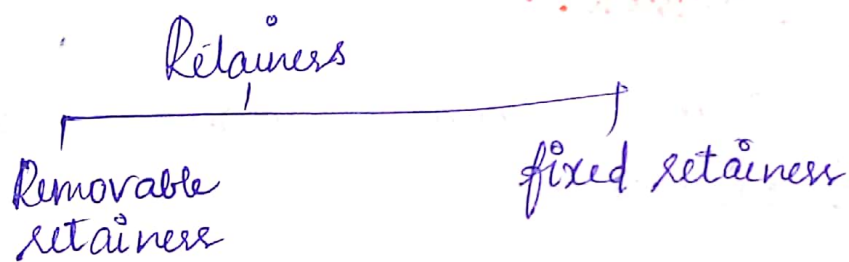
VII Role of Occlusion :-

centric relation & centric occlusion should coincide or the slide from centric should be not more than 1.5 - 2 mm

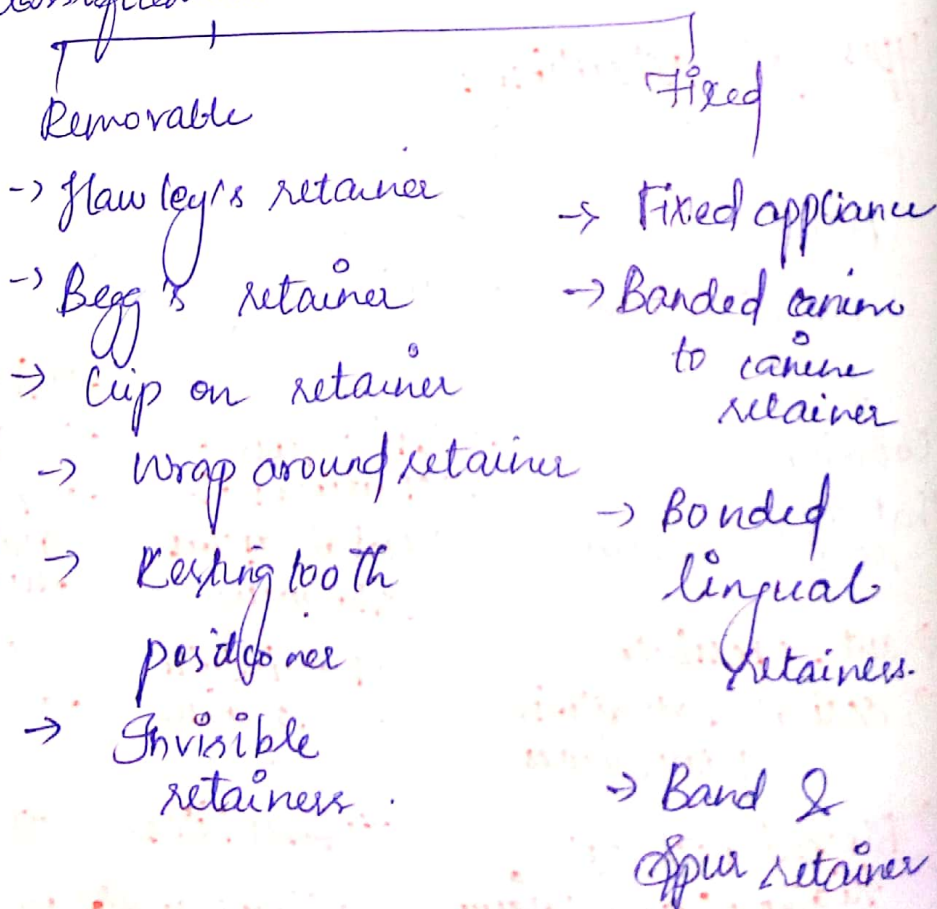
Types of retention :



Retainers are passive orthodontic appliances that help in maintaining & stabilizing the position of teeth long enough to permit re-organization of the supporting structures after the active phase of orthodontic therapy.



Classification: -



Case discussion 08.04.2020



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Participants (25)

Find a participant

- Neha Naomi
- Nehrthika Kumaresan
- NC NIVASHINI C
- Nivethitha Bhaskar
- PK Padmajaa Krishnan
- PH Pavithra Harikrishnan
- PR Pavithra Rajkumar
- P Prabhavathi
- P prasanth
- PA Prema Anbarasu
- Priya Darshini
- Saravanakumar Subramanian
- SA Shafeeq Ahamed
- SUSHMITHA RAM

Unmute Me Raise Hand

Participants (25)

Find a participant

- Namarrthaa Sre (Me)
- PL Pavithra lakshmi N (Host)
- L Lavanya
- YJ Yamini Jeyaraj
- Annamalai Orthodontist
- Pavithra Rathinaswamy
- Anurekha Azhaguvel
- GS Gayathri S
- JG Joanna Gracy. P
- NF Naafia Fathima
- Nawin Subhaganesh
- n Neha Naomi
- Nehrthika Kumaresan
- NC NIVASHINI C

Unmute Me Raise Hand

Zoom Meeting

Recording...

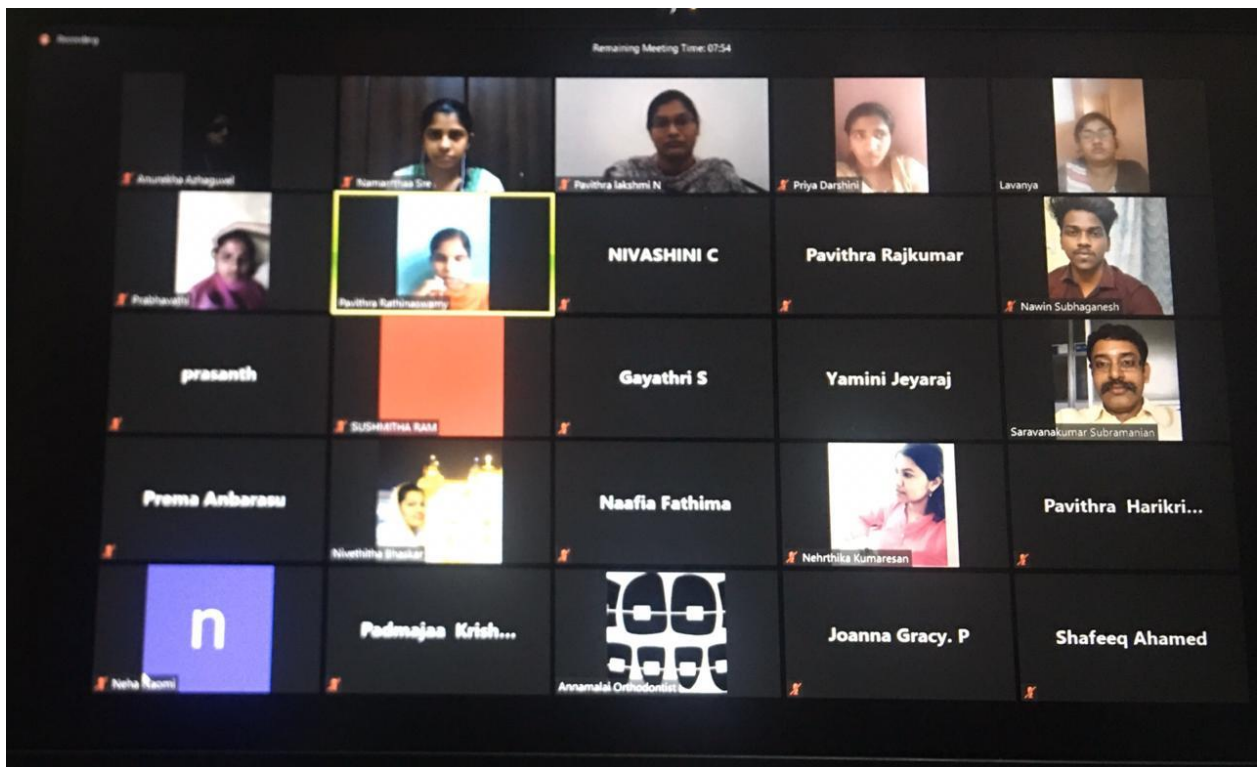
Zoom Meeting interface showing a grid of 25 participants. The top-left tile is highlighted with a green border. The bottom status bar shows the Windows taskbar with the date 04-04-2020 and time 10:19.

08.04.2020






























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**FINAL YEAR THEORY CLASS
ANCHORAGE**



Close Participants (88)

Search

-  prasanth (me)   >
-  Namarrthaa Sre (host)   >
-  Annamalai Orthodontist   >
-  Ateeq Ahamed   >
-  Aakifa M   >
-  Aamina Afra   >
-  Achsah Evangelin   >
-  Adithi Karthik   >
-  agalya Panneer selvam   >

Chats

Invite

Close

Participants (88)



agalya Panneer selvam



Akshayaa Shankar



Anusha R



Archana . S



Arunachalesh Anbazhagan



Balaji's iPhone



Balan Edward



Chandhni's iPhone



Deepika Ramachandra Mur...



Dhanesh Bala



Chats

Invite

Close

Participants (88)



Dhanesh Bala



Gautham B



Gowtham PD



Harini Prabha



Harish P



Harish Raghav



Hema Suresh



Janani Suresh



Jaya Kumar



Jayabalan C
















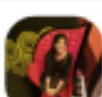
















Chats

Invite

Close































Participants (88)

-  JC Jayabalan C   >
-  Jineesh M   >
-  Johnvee S   >
-  KR Kadambari Ramaswamy   >
-  KM Kanchana Mala   >
-  Kauvya Karunanidhi   >
-  Kishan Kumar   >
-  KR Kudiarasi Rajendran   >
-  Lakshika Sree   >
-  LC Lalitha Choudhary   >

Chats

Invite

Close **Participants (88)**































-  Lalitha Choudhary   >
-  Logesh Ram   >
-  M Abinandhan   >
-  M.Lakshmipriya   >
-  Madhu Bala Sermarajan   >
-  Maha srinithi Selvaraj   >
-  Meghana   >
-  Munira Begam   >
-  Naafia Fathima   >
-  Nawin Subhaganesh   >

Chats

Invite

Close





















Participants (88)

-  Nawin Subhaganesh   >
-  Neha Naomi   >
-  Nehrthika Kumaresan   >
-  Padmajaa Krishnan   >
-  Padmajee Selvaraj   >
-  Pavithra Harikrishnan   >
-  Pavithra lakshmi N   >
-  Pavithra Rajkumar   >
-  Pavithra RathinaSwamy   >
-  Prabhavathi   >

Chats

Invite

Participants (88)































-  Prabhavathi 
-  Prema Anbarasu 
-  Priya Darshini 
-  Ragavi vijayan 
-  Rakshanaa Jeevan 
-  Ram Prasath 
-  Ramu Ganesan 
-  Ranjani Srinivasan 
-  Sanjana Dev 
-  Santra Joseph 

Chats

Invite

Close































Participants (88)

-  Santra Joseph   >
-  Saravanakumar Subramani...   >
-  Sathiya Ganesan   >
-  Shindhuja N   >
-  Shivani   >
-  shruthi priya   >
-  Shweta Ranjith   >
-  Sneha D   >
-  Sophia srikanth   >
-  Sowmya Natarajan   >

Chats

Invite

Close **Participants (88)**

-  Sowmya Natarajan   >
-  Sruthi S   >
-  Suba Keerthi   >
-  Subashini Natarajan   >
-  Sureka Varatharaj   >
-  Surya Nandakumar   >
-  Tamil Selvan M D   >
-  Thouseef Ahmed   >
-  V. Priyanga   >
-  Varshini Venkat   >

Chats

Invite

Close

Participants (88)



Thouseef Ahmed



V. Priyanga



Varshini Venkat



Vikneshwari Jayabalan



Vikraman J



Vishalini Mohan



Vishnu Kumar



Yamini Jeyaraj



Yuvarani Muthu Kumar



Sai Aditiya



Chats

Invite

① Dewey's modification :-

Dewey's modification of Angle's classification of malocclusion divided class I into 5 sub types + class II into 6 subtypes.

Class I modification :-

Type 1 :- class I malocclusion with bunched (or crowded anterior teeth.

Type 2 :- class I with protrusive maxillary incisors

Type 3 - class I malocclusion with anterior crossbite.

Type 4 - class I malocclusion with posterior crossbite.

Type 5 - The permanent molar has drifted maxillary mesially due to early eruption of second deciduous molar (or) second premolar.

Class II malocclusion

Type 1 : The upper + lower dental arches when viewed separately such as normal alignment but such the arches are made to occlude, the patient shows an 'edge to edge' incisal alignment, suggestive of forward movement of mandible.

Type 2 :- The mandibular incisors are crowded + are in equal relation to the maxillary incisors. Maxillary incisors are crowded + are in

coronoid relation to mandibular condyle.

② Retention + relapse.

Retention :-

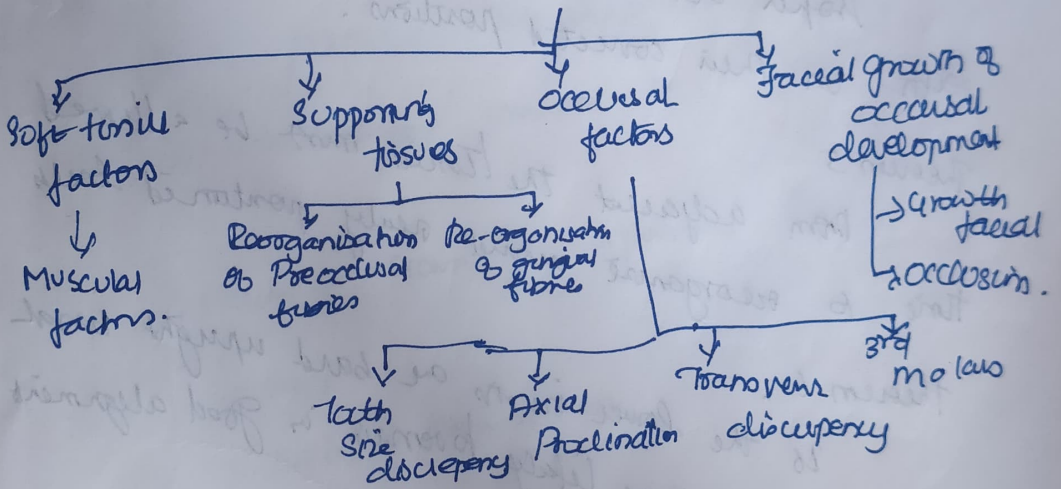
Maintaining newly moved teeth in a position long enough to aid in stabilizing correction - Moyers.

Relapse :-

It has been defined as the loss of any correction achieved by orthodontic treatment - Moyers.

Why retention is needed ?

Causes for relapse.



Types of retention :-

- Natural retention
- Limited or short term retention
- Prolonged / Permanent retention

Retainers → Removable retainers → Fixed retainers.

- Hawley's retainers
- Begg's retainers
- Lip on retainers
- Wrap around retainers
- Invisible retainers
- Band & space fixed
- Bonded canine - on one
- Bonded Cant - Cervi.

③ Theories of retention :

Theorem 1 :

Teeth that have been moved tend to return to former position.

Theorem 2 :
Elimination of the cause of malocclusion will

prevent relapse

Theorem 3 :

Malocclusion should be over corrected as

a safety factor.

Theorem 4 :

Proper occlusion is a potent factor in holding teeth in their corrected positions.

Theorem 5

From adjacent the tissue must be allowed time to reorganise around newly positioned teeth

Theorem 6 :

As the lower incisors are hard upright basal bone they are more likely to remain in good alignment.

Theorem 7.

Corrections carried out during periods of growth are less likely to retain.

Theorem 8 :

The further the teeth have been moved, the less is the risk of relapse.

Theorem 9:

Arch form, particularly to the mandibular arch, cannot be permanently altered by appliances except.

Theorem 10:

Many treated malocclusions require permanent retaining devices.

A. Dynamic occlusion:

Dynamic or functional occlusion refers to the occlusal contacts that are made during the mandible's moving relative to maxilla ~~and~~ (i.e.) during speech, mastication & swallowing.

It is primarily concerned with opening & closing movements involved in mastication.

The direction of crown is influenced by

- TMJ
- occlusal form & teeth
- occlusal plane
- musculature
- Resistance of food & relative tolerance of

Summation times.

09.04.2020



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FINAL YEAR CASE DISCUSSION

A screenshot of a Zoom meeting grid with 20 participants. The grid is arranged in 4 rows and 5 columns. The participants and their names are as follows:

Pavithra RathinaSwamy	Namarrthaa Sre	Anurekha Azhaguvel	Ram Prasath	Rakshanaa Jeevan
Sanjana Dev	Annamalal Orthodontist	Santra Joseph	Balan Edward	Lavanya
Naafia Fathima	Nehrthika Kumaresan	prasanth	Priya Darshini	Ranjani Srinivasan
Jahvee S	NIVASHINI C	Neha Naomi	Gayathri S	Joanna Gracy.P
Jineesh M	Prema Anbarasu	Pavithra Rajkumar	SUSHMITHA RAM	Jayabalan C

Ranjani Srinivasan

Johnvee S

NIVASHINI C

Neha Naomi

n

Gayathri S

Joanna Gracy.P

Jineesh M



Prema Anbarasu

Pavithra Rajkumar

SUSHMITHA RAM



Jayabalan C

Nawin Subhaganes



Deepika Ramachandra M.



Yamini Jeyaraj

Gowtham PD

a

Azeeq Ahamed

Gautham B

Nivethitha Bhaskar



Balaji's iPhone

Chandhni's iPho...



Hema Suresh



Ramu Ganesan

Padmajaa Krish...

Saravanakumar Subrama...



Harish P



DELL

Participants (50)

Find a participant

GS	Gayathri S		
GP	Gowtham PD		
	Harish P		
	Hema Suresh		
	Jaya Kumar		
JC	Jayabalan C		
	Jineesh M		
JG	Joanna Gracy.P		
	Johnvee S		
L	Lavanya		
	Nawin Subhaganesh		
N	Neha Naomi		
NC	NIVASHINI C		
	Nivethitha Bhaskar		

Unmute Me Raise Hand

Participants (50)

Find a participant

NC	NIVASHINI C		
	Nivethitha Bhaskar		
PK	Padmajaa Krishnan		
PH	Pavithra Harikrishnan		
PR	Pavithra Rajkumar		
P	Prabhavathi.s		
P	prasanth		
PA	Prema Anbarasu		
	Priya Darshini		
R	Rakshanaa Jeevan		
	Ram Prasath		
	Ramu Ganesan		
RS	Ranjani Srinivasan		
SD	Sanjana Dev		

Unmute Me Raise Hand

Participants (50)



Find a participant

- Ramu Ganesan
- RS Ranjani Srinivasan
- SD Sanjana Dev
- SJ Santra Joseph
- Saravanakumar Subramanian
- SG Sathiya Ganesan
- SA Shafeeq Ahamed
- SN Shindhuja N
- S Shivani
- shruthi priya
- SR Shweta Ranjith
- Sneha D
- SUSHMITHA RAM
- YJ Yamini Jeyaraj

Unmute Me Raise Hand

Participants (49)

Find a participant

- Namarrthaa Sre (Me)
- PL Pavithra lakshmi N (Host)  
- Annamalai Orthodontist
- NF Naafia Fathima
- Nehrthika Kumaresan
- PR Pavithra RathinaSwamy
- Sneha D
- Anurekha Azhaguvel
- a Ateeq Ahamed
- BI Balaji's iPhone
- Balan Edward
- CI Chandhni's iPhone
- Deepika Ramachandra Murali
- GB Gautham B

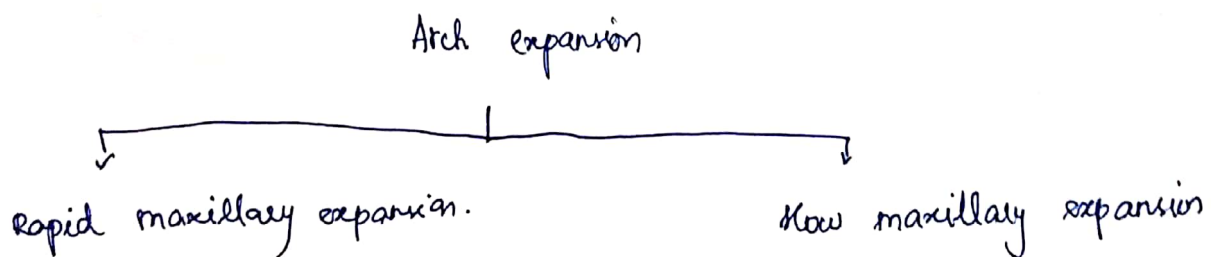
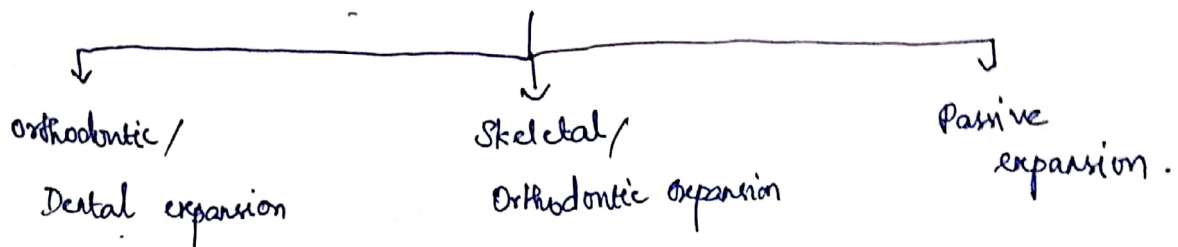
Unmute Me Raise Hand

Ortho assignment

① Palatal arch expansion:

Expansion of palate was first achieved by Emerson in 1860.

Classification by Mc Namee



Indications :-

- * Correction of posterior crossbite.
- * Relief of mild crowding
- * Treatment of class II malocclusion in growing patients.
- * Skeletal class III malocclusion.
- * Distal molar movement
- * Orthognathic surgeries to correct discrepancies.

Rapid maxillary expansion :-

Father of rapid maxillary expansion is Emerson. C. Angell.

Effect :-

Opening of mid palatal suture

Downward and forward maxillary movement.

Buccal tipping and extension of maxillary posterior.

Downward and backward rotation of mandible.

Increase in face height - intra-oral space.

Types of appliances used :-

* Removable appliance:

split acrylic plate with midline screw

* Fixed appliance

Tooth borne appliance

• Issacson type.

* Hyrax type.

Tooth and tissue borne appliance.

• Dewick sweater type

• Dam type

Slow expansion :-

Maxillary arch is expanded slowly at a rate of 0.5 mm/month

Appliances used - Removable - Jakescrew, coffin spring, quad helix.

Fixed appliance - Expansion with arch wire, use of quad helix / auxiliary arches.

Fixed removable tandem loop nickel titanium maxillary expander.

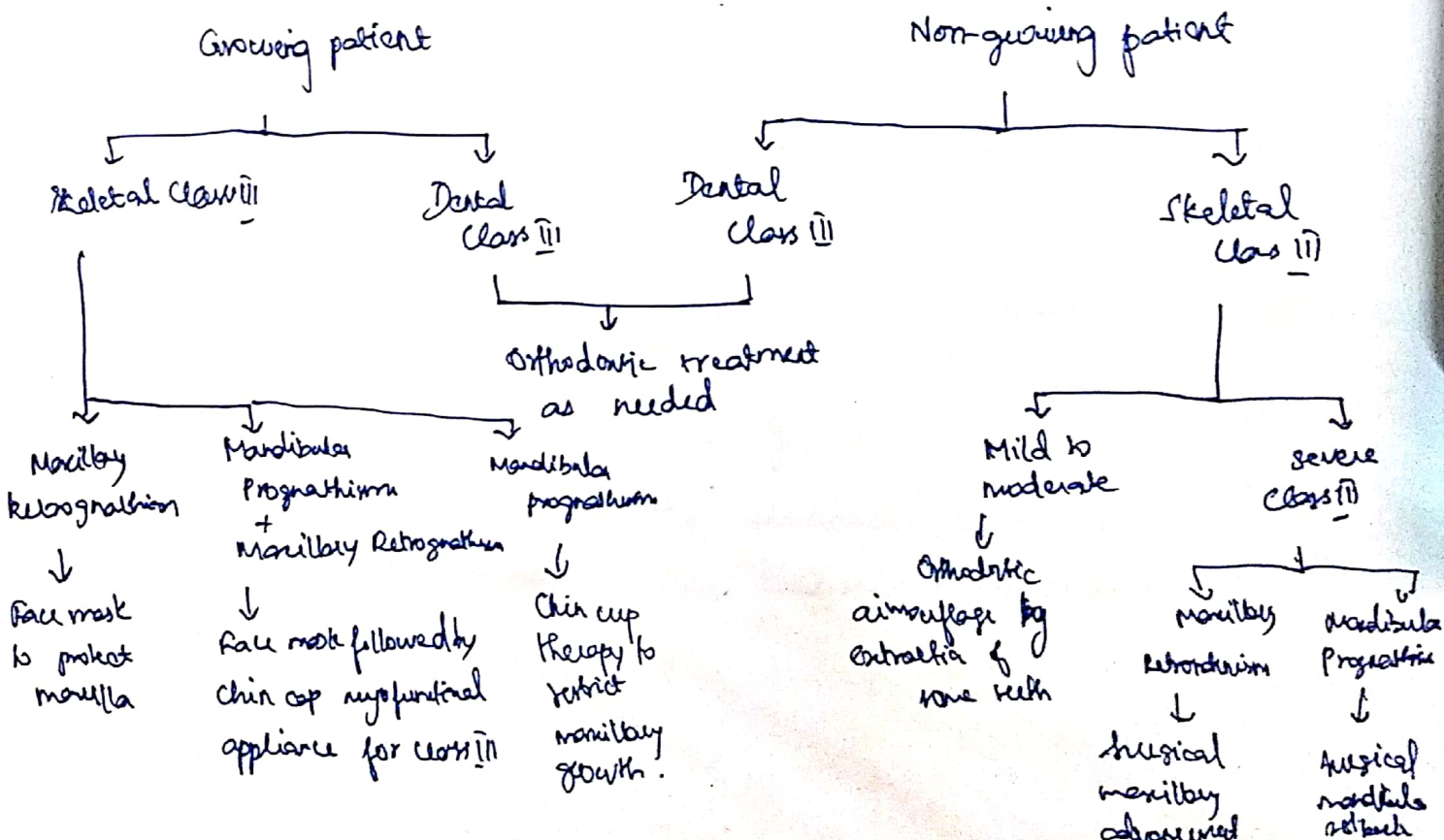
Difference between slow and rapid expansion:

Feature.	Slow expansion	Rapid expansion.
Type	Mostly dental	Skeletal
Tissue reaction	Physiologic	Traumatic
Force used	Mild	Great
Duration of treatment	long	short
Age	Any age	Before fusion of midpalatal suture
Retention.	↓ relapse	↑ relapse.

Assignment - 2 :

① Management of class IV malocclusion:

Class IV malocclusion.



Interception during growth :-

① Myofunctional appliance :-

Frankel III appliance.

- Class III due to maxillary skeletal retrusion.
- Restrict mandibular growth

can incorporate vertical shield in upper arch lower arches. They are away from buccal plates thereby stretching periosteum + allowing forward growth of maxilla.

Also cause proclination of upper anterior and retroclination of mandibular anterior.

② Chin cup therapy :-

Indication :-

- Protrusive mandible + normal maxilla.
- Used in primary + early mixed dentition.

Types :-

- Occipital full chin cup
- Vertical full chin cup.

12-14 hours of wear everyday.

Effects :-

- Backward repositioning of mandible.
- Redirection of mandibular growth.
- Remodelling of mandible with closure of gnathial angle.

③ Face mask therapy :-

Reverse pull head gear

Indication :-

Mild to moderate skeletal class III malocclusion.

Retrognathic maxilla + Primary, early mixed dentition.

Types :-

Delain type

Tubiger type

Petit face mask.

12-14 hrs of wear per day

Produce change in circummaxillary sutures leading to forward positioning of maxilla.

Treatment using fixed appliance :-

Correction of incisor relationship by proclination of upper incisor can be considered in mild class III

Class II skeletal pattern, a combination of retroclination of lower incisor and proclination of upper incisor may be required to achieve correct incisor relationship.

Treatment anterior crossbite :-

Mild anterior crossbite can be treated using lower arch inclined plane.

Treatment of posterior crossbite :-

Treated by rapid maxillary expansion.

Role of extraction :-

* mild mandibular prognathism and lower arch crowding.

↳ Extraction of upper and lower first premolars.

* Arch length deficiency.

↳ Extraction of upper and lower first premolars.

Treatment of reverse class (ii) malocclusion after growth.

↳ maxillary deficiency → LeFort I osteotomy.

↳ Mandibular prognathism → mandibular set back procedure.

FINAL YEAR Case discussion

10.04.2020



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Participants (48)

Find a participant

SD	Sanjana Dev		
SJ	Santra Joseph		
	Saravanakumar Subramanian		
SS	Sophia srikanth		
SK	Suba Keerthi		
	Subashini Natarajan		
SV	Sureka Varatharaj		
	Surya Nandakumar		
	SUSHMITHA RAM		
TS	Tamil Selvan M D		
VV	Varshini Venkat		
VJ	Vikneshwari Jayabalan		
VJ	Vikraman J		
VM	Vishalini Mohan		
YJ	Yamini Jeyaraj		
Y	Yuvarani Muthu Kumar		

Unmute Me Raise Hand

Participants (48)

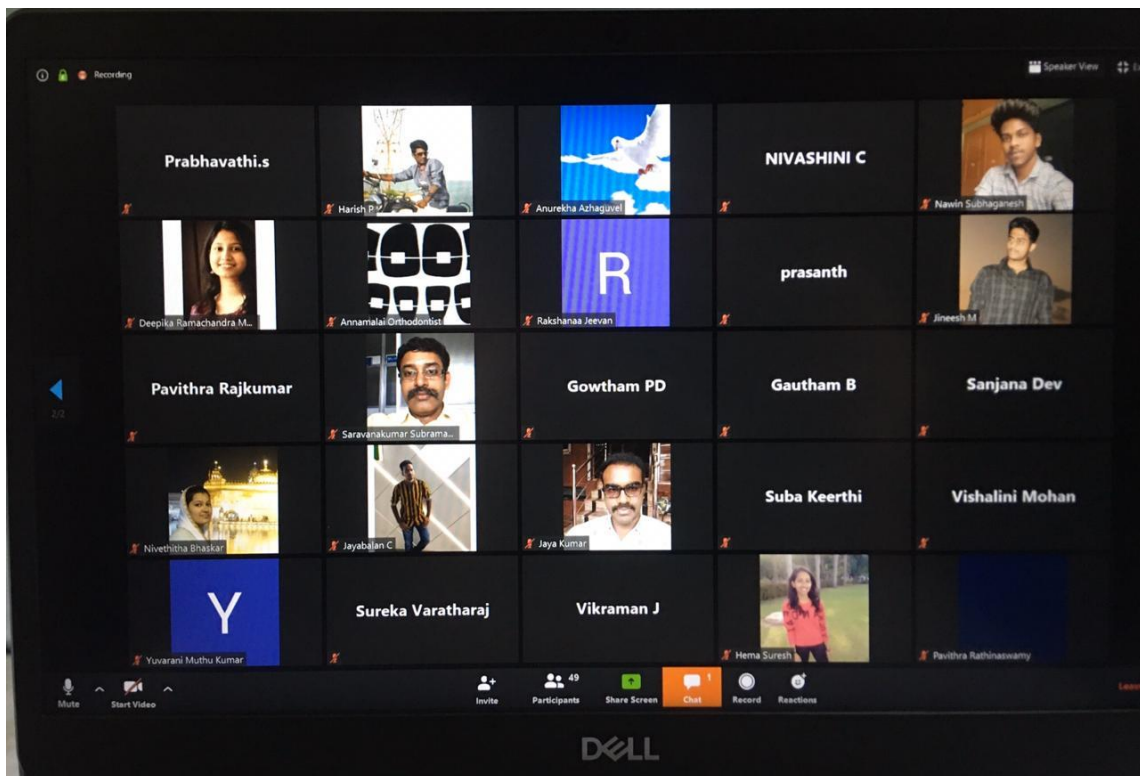
Find a participant

	Namarrthaa Sre (Me)		
PL	Pavithra lakshmi N (Host)		
	Nivethitha Bhaskar		
L	Lavanya		
NF	Naafia Fathima		
GS	Gayathri S		
	Annamalai Orthodontist		
	Anurekha Azhaguvel		
a	Ateeq Ahamed		
	Balan Edward		
	Deepika Ramachandra Murali		
GB	Gautham B		
GP	Gowtham PD		
	Harish P		
	Jaya Kumar		
	Jayabalan C		

Unmute Me Raise Hand



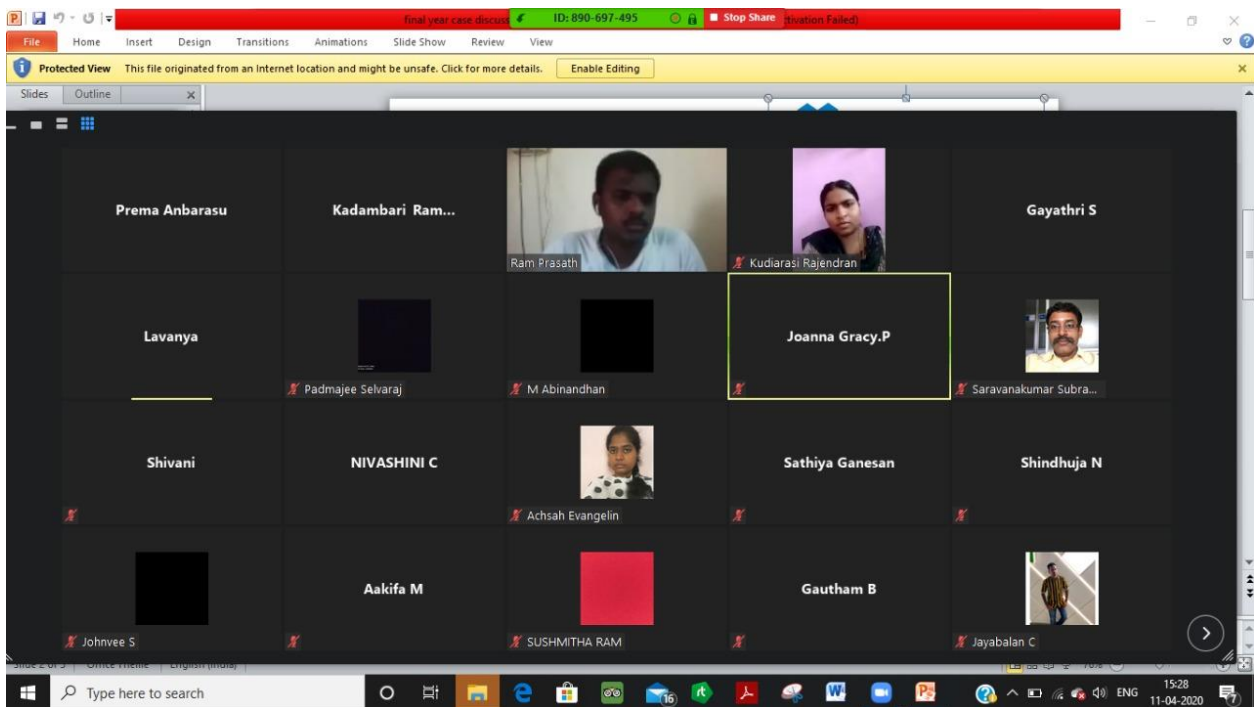
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Case discussion


















































11.04.2020



Close

Participants (52)

Search








































-  Kanchana Mala (me)   
-  Kadambari Ramaswamy (host)    
-  Anurekha Azhaguvel   
-  Gayathri S   
-  Lavanya   
-  NIVASHINI C   
-  Prema Anbarasu   
-  Aakifa M   
-  Aamina Afra   
-  Adithi Karthik   
-  Akshayaa Shankar   
-  Annamalai Orthodontist   

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Close

Participants (52)

-  Annamalai Orthodontist   >
-  Anusha R   >
-  Archana . S   >
-  Ateeq Ahamed   >
-  Balan Edward   >
-  Chandhni's iPhone   >
-  Deepika Ramachandra Murali   >
-  Gautham B   >
-  Harish P   >
-  Janani   >
-  Jaya Kumar   >
-  Jayabalan C   >
-  Jineesh M   >








































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Participants (52)





















































- | | | |
|--|---------------------|---|
|  JG | Joanna Gracy.P |   > |
|  | Johnvee S |   > |
|  | Kavya Karunanidhi |   > |
|  | Kishan Kumar |   > |
|  | Kudiarasi Rajendran |   > |
|  | Lakshika Sree |   > |
|  | M Abinandhan |   > |
|  | M.Lakshmipriya |   > |
|  | Nivethitha Bhaskar |   > |
|  | Padmajee Selvaraj |   > |
|  | Ragavi vijayan |   > |
|  | Rakshanaa Jeevan |   > |
|  | Ram Prasath |   > |

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Participants (52)

-  **RS** Ranjani Srinivasan   
-  **SD** Sanjana Dev   
-  **SJ** Santra Joseph   
-  Saravanakumar Subramanian   
-  **SG** Sathiya Ganesan   
-  **SA** Shafeeq Ahamed   
-  **SN** Shindhuja N   
-  **S** Shivani   
-  shruthi priya   
-  **SR** Shweta Ranjith   
-  Sneha D   
-  **SUSHMITHA RAM**   
-  **YJ** Yamini Jeyaraj   






































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Participants (52)

- | | | |
|--|---------------------------|---|
|  SJ | Santra Joseph |   > |
|  | Saravanakumar Subramanian |   > |
|  SG | Sathiya Ganesan |   > |
|  SA | Shafeeq Ahamed |   > |
|  SN | Shindhuja N |   > |
|  S | Shivani |   > |
|  | shruthi priya |   > |
|  SR | Shweta Ranjith |   > |
|  | Sneha D |   > |
|  | SUSHMITHA RAM |   > |
|  YJ | Yamini Jeyaraj |   > |
|  | Arunachalesh Anbazhagan |  > |
|  | Hema Suresh |  > |

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