



**Chettinad**



Dental College & Research Institute

**DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**


**E-Teaching/Learning sessions for Post Graduate**

**Post Graduate academic schedule**

DATE	TOPIC	PRESENTER	PARTIPANTS
4.05.2020	Lingual Orthodontics	Dr.Varalakshmi	15



### varalakshmi Dr's Personal Meeting Room

Meeting ID	555-637-7285
Host	varalakshmi Dr
Password	welcome
Numeric Password (Telephone/Room Systems)	994653
Invitation URL	<a href="https://us04web.zoom.us/j/5556377285?pwd=RTRQMWhyWDRtVDFyTzBiV3Vrb3hTQT09">https://us04web.zoom.us/j/5556377285?pwd=RTRQMWhyWDRtVDFyTzBiV3Vrb3hTQT09</a>  Copy URL
Participant ID	435331



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Participants (15)

Find a participant

- Navin.N (Me)
- varalakshmi Dr (Host)
- NB Nivethitha Bhaskar
- SR SUSHMITHA RAM
- AN Anitha Nallusamy
- Annamalai Orthodontist
- Joshua Stalin
- PA Prema Anbarasu
- PD Priya Darshini
- Priyanga Ravi
- SM Sagaya Mary
- Saravanakumar Subramanian
- D Somya Wilson
- Sriman Vishnu
- YJ Yamini Jeyaraj

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Windows taskbar with various application icons and system tray showing time 2:20 PM and date 5/4/2020.

Zoom 40-Minutes

You are viewing varalakshmi Dr's screen

View Options

Recording

00:17:48

Speaker View

Grid of 15 participants in a Zoom meeting. The grid shows 15 participants in a 3x5 layout. The participants are: Priya Darshini, Navin.N, Annamalai Orthodon..., Yamini Jeyaraj, Sagaya Mary, Anitha Nallusamy, SUSHMITHA RAM, Priyanga Ravi, Prema Anbarasu, Joshua Stalin, Saravanakumar Subr..., Sriman Vishnu, Somya Wilson, varalakshmi Dr (highlighted), and Nivethitha Bhas... (Connecting to audio). The background of the grid is dark with a grid pattern.

Unmute Stop Video

Participants

Chat

Share Screen

Record

Reactions

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Windows taskbar with various application icons and system tray showing time 2:20 PM and date 5/4/2020.



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**LINGUAL ORTHODONTICS**  
K. R. VARALAKSHMI  
POSTGRADUATE STUDENT  
DEPT. OF ORTHODONTICS, CDCRI

Participants: 13  
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Recording 00:10:39 Speaker View Exit Full Screen

**INTRODUCTION**

As the number of adult patients seeking orthodontic treatment is increasing, desire to have a perfect and a beautiful smile without putting their looks at jeopardy, hence lingual orthodontics has come as an aesthetic pleasing option.

For any system to succeed, it must address three issues directly

- ❖ Clinical manipulation of appliance
- ❖ Patient comfort
- ❖ Predictability of outcomes

Participants: 14  
Unmute Stop Video Participants Chat Share Screen Record Reactions Leave Meeting



Zoom 40-Minutes    You are viewing varalakshmi Dr's screen    View Options

Recording    00:17:56    Speaker View

## TASK FORCE BY ORMCO

Further study of the appliance- make suggestion for improvement

Members of Task force

- ❖ Moody Alexander
- ❖ Richard Wick
- ❖ Jack Gorman
- ❖ James Hilgers
- ❖ Craven Kurz
- ❖ Robert Scholz
- ❖ John Bob Smith

Objective

- ❖ To help redefine bracket system
- ❖ To develop mechanotherapy techniques
- ❖ To create archwire design
- ❖ To discuss treatment sequence
- ❖ To determine the case selection criteria

Participants: 15

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ENG IN 2:20 PM 5/4/2020

Zoom    Recording    00:22:59

### 5. Force system

Mechanics of tooth movement from the lingual side has different characteristic from labial mechanics on lingual appliance, Vector of force to the teeth are directed

Lingually COR of each tooth    Labial root torque on anterior teeth

→ Anterior teeth tip lingually

Posterior teeth become upright distally

In horizontal plane, forces are applied that rotate posterior teeth distally

Cortical bone anchorage is established, when root approach the cortical bone.

Cortical bone anchorage is increased in lingual orthodontics

Participants: 15

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### 3.COMBINING MAN. REPOSITIONING THERAPY WITH ORTHODONTIC MOVEMENTS

- When patients have **temporomandibular dysfunction (TMD)**, it is often necessary to treat in **two distinct clinical phases**.
- The **lingual appliance system** allows both arches to be treated simultaneously, while **maintaining the effects of the splint**.
- This combination of anterior bite plane and posterior acrylic supports can simulate the action of the conventional splint, thereby allowing treatment to progress simultaneously in both arches.

Participants: 15

Unmute Start Video Chat Share Screen Record Reactions Leave Meeting

Participants: SUSHMITHA R..., Navin.N, Nivethitha Bha..., Prema Anbarasu, Yamini Jeyaraj, Annamalai Ort..., Priya Darshini, Saravanakuma..., Priyanga Ravi, Connecting to ... .., Sagaya Mary, Anitha Nallusamy, Joshua Stalin, varalakshmi Dr, Connecting to ... ..

Zoom You are viewing varalakshmi Dr's screen

Recording 00:37:59 Speaker View

There are different applications of elastic wear for specific situations.

The third step in the finishing procedure is final detailing and finishing bends. At this stage finishing bends are preferred

Participants: 15

Unmute Stop Video Chat Share Screen Record Reactions Leave Meeting

Participants: Yamini Jeyaraj, Navin.N, SUSHMITHA ..., Priya Darshini, Nivethitha Bh..., Prema Anbar..., Priyanga Ravi, Sriman Vishnu, Sagaya Mary, Anitha Nallus..., Annamalai O..., Saravanakum..., Joshua Stalin, Somya Wilson, varalakshmi Dr



9:14 \* VoLTE 4G 88

← Attendees +

NN Navin Natarajaa  
Attendee, Me

VV Vaishali Venkat  
Organizer, Presenter

A Aarthy  
Attendee

AS Akansha Stephen  
Attendee

AM Alagappan Meyyappan  
Attendee

A Anurekha  
Attendee

AS Aswini S  
Attendee

B Bhavana  
Attendee

Caller 01

69.9 K/s VoLTE 57% 9:20

Sumathypurandhar is talking 93

### Diabetes Mellitus

- It is the **non-communicable** disease.
- It is a **metabolic** disease
- It is the most commonest disorder all over world as well as in INDIA
- It leads to long term damage, dysfunction and failure of different organs esp **the eyes, kidneys, nerves, heart & blood vessels**

Video Paused



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86.8 K/s 63% 9:03

Attendees

SM

Sagaya Mary

Attendee, Me

VV

Vaishali Venkat

Organizer, Presenter

A

Aarthy

Attendee

AS

Akansha Stephen

Attendee

AS

Aswini S

Attendee

B

Bhavana

Attendee

C

Clement

Attendee

D

Daya

Attendee

Deepika L

0.70 K/s 22% 4:53

Mary - Jc presentation

Add label

P

Priya Raymond

to rsushmi

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From: Priya Raymond [raymond.priya@gmail.com](mailto:raymond.priya@gmail.com)

To: [rsushmi@gmail.com](mailto:rsushmi@gmail.com)

Date: May 4, 2020, 9:53 AM

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GROWTH CHANGES IN THE SOFT TISSUE FACIAL PROFILE

Nanda RS, Meng H, Kapila S, Goorhuis J

Angle orthod 1990;60:177-190

P

Sagaya jc 4...anges.pptx

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Original Article

Growth changes in the soft tissue facial profile

PDF

jc 4.pdf

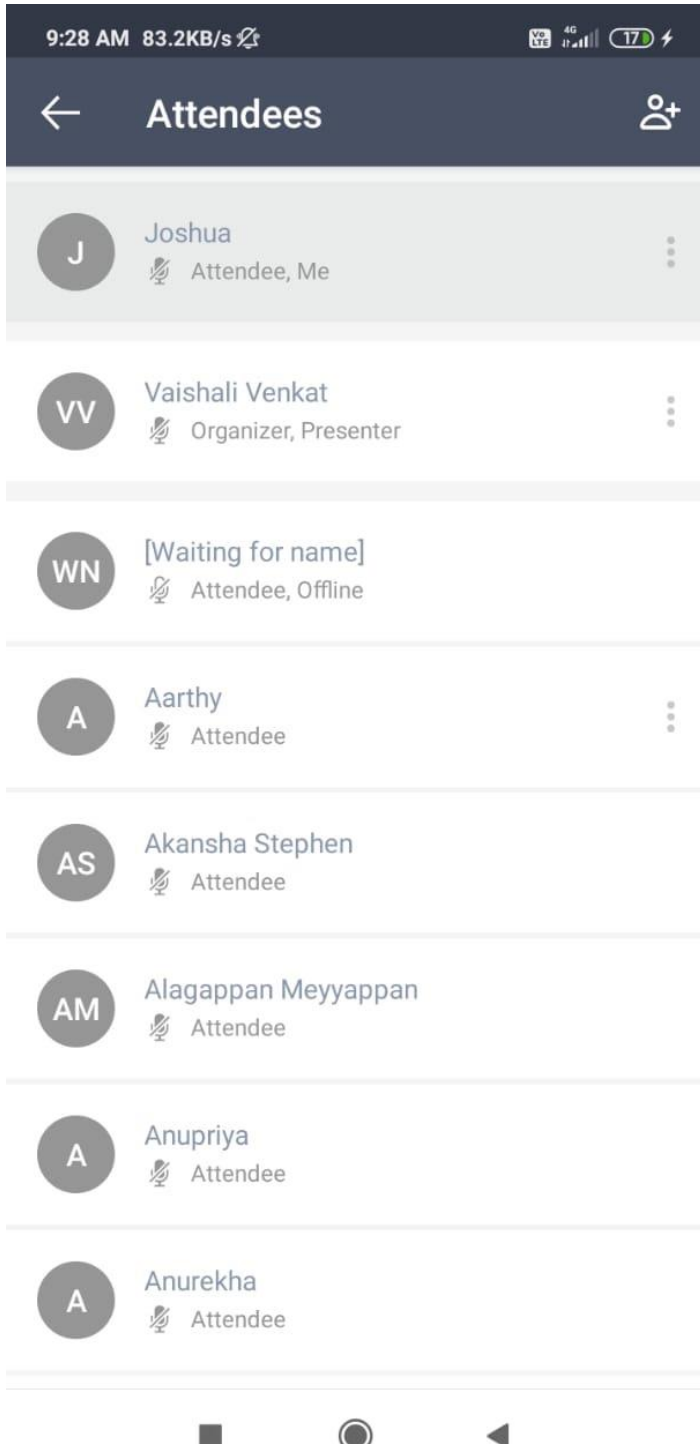
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**DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**


**E-Teaching/Learning sessions for Post Graduate**

**Post Graduate academic schedule**

DATE	TOPIC	PRESENTER	PARTIPANTS
5.05.2020	Lingual Orthodontics-II	Dr.Varalakshmi	14

 Recording

### varalakshmi Dr's Personal Meeting Room

Meeting ID	555-637-7285
Host	varalakshmi Dr
Password	welcome
Numeric Password (Telephone/Room Systems)	994653
Invitation URL	<a href="https://us04web.zoom.us/j/5556377285?pwd=RTRQMWhyWDRtVDFyTzBiV3Vrb3hTQT09">https://us04web.zoom.us/j/5556377285?pwd=RTRQMWhyWDRtVDFyTzBiV3Vrb3hTQT09</a>  Copy URL
Participant ID	420086



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- varalakshmi Dr (Host)
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- Annamalai Orthodontist
- Joshua Stalin
- NB Nivethitha Bhaskar
- PD Priya Darshini
- Priyanga Ravi
- SM Sagaya Mary
- Saravanakumar Subramanian
- SR SUSHMITHA RAM
- YJ Yamini Jeyaraj
- PA Prema Anbarasu
- Sriman Vishnu

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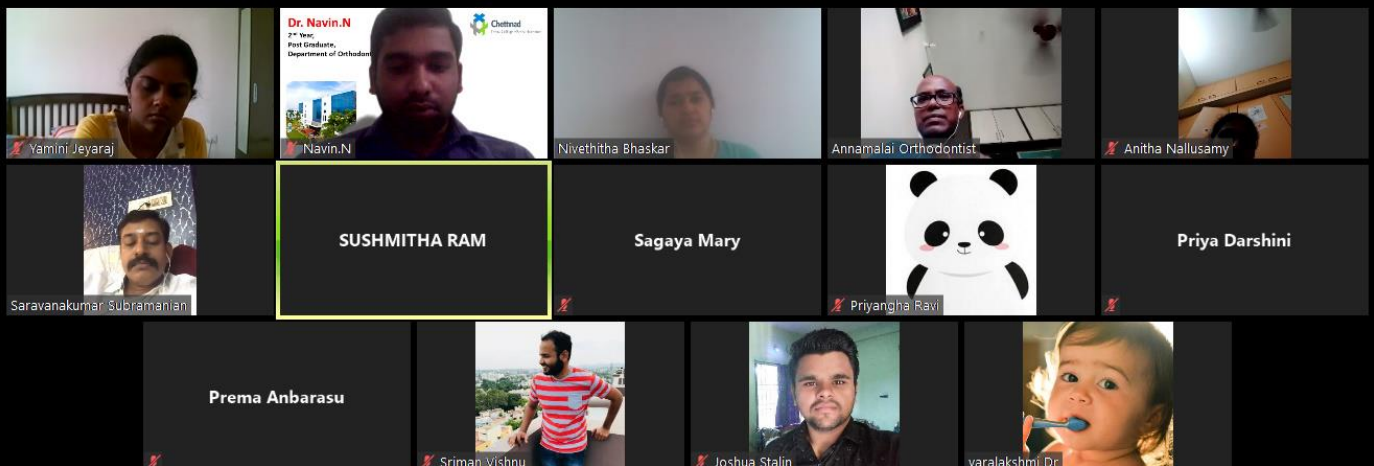
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Raise Hand

Zoom

00:51:27

Speaker View



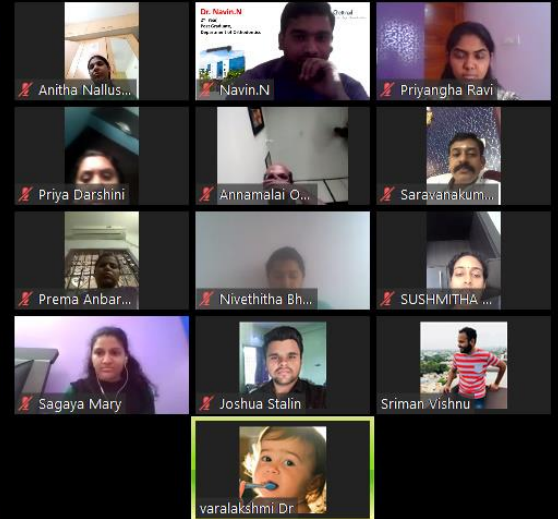


Recording

00:10:42

#### ADVANTAGES :

1. **No electronic equipment** is needed for bracket positioning & tray making.( lingual brackets, full size arch wire, GIC, Composite are required items)
2. No need to transfer brackets from the setup model to original malocclusion model
3. Extraction, elastic separation, expansion & distalization can be **carried out between impression & bonding.**
4. **The individual hard tray** is very small & rigid making bonding more accurate.( eliminate deformation & poor adhesion due to flexibility.
5. Resin core has no relation with tooth alignment , so bracket/tooth fit against it is not affected by tooth movement



## BANDING



Figs 5-23 and 5-24 Upper molars bands.



Anderson Gauge



Figs 5-23 and 5-26 lower molars bands.



Marking molar bracket height

- ❖ U6- mesial off centered, 5 degree mesial angulation- for anchorage & prevent vertical bowing effect
- ❖ L6 – center, cross over technique- functional cusp control in lower arch

0:00:12



2020-05-05 10:07:59





Recording You are viewing varalakshmi Dr's screen View Options 00:05:33 Speaker View Exit Full Screen

# CONTENT

- ❖ INTRODUCTION
- ❖ HISTORICAL PERSPECTIVE
- ❖ EVOLUTION OF LINGUAL BRACKET
- ❖ KEY TO SUCCESS IN LINGUAL ORTHODONTICS
- ❖ DIAGNOSTIC & CASE SELECTION
- ❖ INDICATION & CONTRAINDICATION
- ❖ LINGUAL BIOMECHANICS
- ❖ ADVANTAGES & DISADVANTAGES
- ❖ ANCHORAGE PREPARATION
- ❖ TREATMENT SEQUENCE- EXTRACTION MECHANICS
- ❖ FINISHING IN LINGUAL ORTHODONTICS
- ❖ RETENTION
- ❖ BRACKET PLACEMENT & BONDING TECHNIQUE
- ❖ EVIDENCE BASED IN LINGUAL SYSTEM
- ❖ EVOLUTION OF LINGUAL BRACKET SYSTEM
- ❖ CONCLUSION

SUSHMITHA RAM

Dr. Navin N  
Assistant Professor  
Department of Prosthodontics

Anitha Nallusamy

Saravankumar...

Priyanga Ravi

Priya Darshini

Sagaya Mary

Nivethitha Bhaskar

varalakshmi Dr

Yamini Jeyaraj

Annamalai Ortho...

Joshua Stalin

Sriman Vishnu



Prema Anbarasu

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## 1. CRAVEN KURZ LINGUAL BRACKET SYSTEM

❖ Principle Characteristic of Evolution of the Craven Kruz lingual bracket are

- ❖ A bite plane
- ❖ A base pad adapted to the anatomic characteristic of the lingual surface of teeth
- ❖ A pre angulated slot according to the conversion of the torque used on labial surface



00:05:06 10 30 2020-05-05 10:14:29

Dr. Navin N  
Assistant Professor  
Department of Prosthodontics

00:03:58





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16:23

VOLTE 93%

16% 4:56 pm



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## " Digital Diagnosis in Orthodontics 101" - Dr. Milivoj Sherrington

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Webinar ID 816 5615 4645

Host Ajay Kubavat

Password KubavatAK

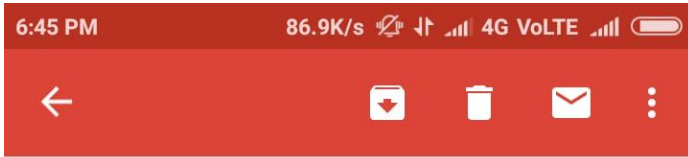
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Dr. Milo Sherrington's screen



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## Seminar Approval - Growth and Development concepts

Inbox



SrlmaN ViShNu

to me

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From: SrlmaN ViShNu  
[srimanvishnu.vishnu@gmail.com](mailto:srimanvishnu.vishnu@gmail.com)

To: [prema.arasu@gmail.com](mailto:prema.arasu@gmail.com)

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### GROWTH AND DEVELOPMENT



GROWTH AN...MENT.pptx



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**Post Graduate academic schedule**

DATE	TOPIC	PRESENTER	PARTIPANTS
6.05.2020	Growth changes in softtissue	Dr.Sagaya mary	15

 Zoom 40-Minutes

   Recording


**Mary's Zoom Meeting**

Meeting ID 716-5466-6257

Host Sagaya Mary

Password 12345

Invitation URL <https://us04web.zoom.us/j/71654666257?pwd=L1VpcXZRQ1ZwUUt5R3N4VU5BdE5HZz09>

 Copy URL

Participant ID 408622



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Participants (15)

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- SM Sagaya Mary (Host)
- Saravanakumar Subramanian
- AN Anitha Nallusamy
- Annamalai Orthodontist
- Joshua Stalin
- NB Nivethitha Bhaskar
- PA Prema Anbarasu
- PD Priya Darshini
- Priyanga Ravi
- D Somya Wilson
- SUSHMITHA RAM
- Varalakshmi Orthodontist
- YJ Yamini Jeyaraj
- Sriman Vishnu



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00:02:11






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## GROWTH CHANGES IN THE SOFT TISSUE FACIAL PROFILE

Nanda RS, Meng H, Kapila S, Goorhuis J  
Angle orthod 1990;60:177-190

SAGAYA MARY R.P  
1 YEAR MDS  
CDCRI

Saravanakumar ...

Dr. Navin.N  
21/06/2020  
Department of Orthodontics

Yamini Jeyaraj

Anitha Nallusamy

Varalakshmi Orth...

Priya Darshini

Somya Wilson

Nivethitha Bhaskar

Sagaya Mary

Annamalai Ortho...

SUSHMITHA RAM

Connecting to au...

Prema Anbarasu

Joshua Stalin

Priyanga Ravi

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## GROWTH CHANGES IN THE SOFT TISSUE FACIAL PROFILE

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Angle orthod 1990;60:177-190

SAGAYA MARY R.P  
1 YEAR MDS  
CDCRI

Saravanakumar...

Dr. Navin.N  
21/06/2020  
Department of Orthodontics

Yamini Jeyaraj

Anitha Nallus...

Varalakshmi ...

Priya Darshini

Somya Wilson

Nivethitha Bh...

SUSHMITHA ...

Sagaya Mary

Annamalai O...

Connecting t...

Prema Anbarasu

Joshua Stalin

Priyanga Ravi

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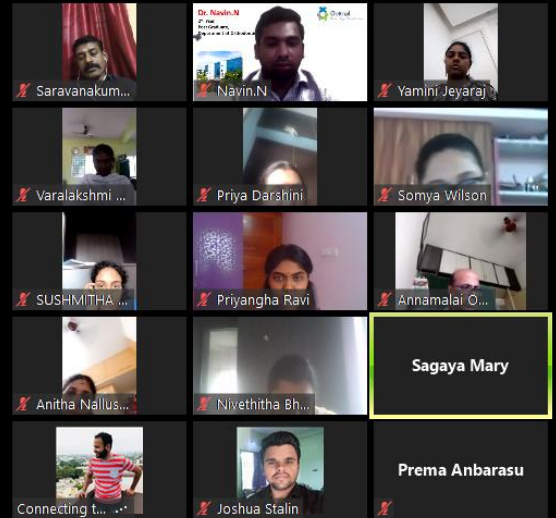
00:04:34

Speaker View

## MODERN PARADIGM SHIFT

Parameter	Angle Paradigm	Soft Tissue Paradigm
Primary treatment goal	Ideal dental occlusion	Normal soft tissue proportions and adaptations
Secondary goal	Ideal jaw relationships	Functional occlusion
Hard and soft tissue relationships	Ideal hard tissue proportions produce ideal soft tissues	Ideal soft tissue proportions define ideal hard tissues
Diagnostic emphasis	Dental casts, cephalometric radiographs	Clinical examination of intraoral and facial soft tissues
Treatment approach	Obtain ideal dental and skeletal relationships, assume the soft tissues will be all right	Plan ideal soft tissue relationships and then place teeth and jaws as needed to achieve this
Function emphasis	TMJ in relation to dental occlusion	Soft tissue movement in relation to display of teeth
Stability of result	Related primarily to dental occlusion	Related primarily to soft tissue pressure and equilibrium effects

CONTEMPORARY ORTHODONTICS - WILLIAN PROFFIT 6<sup>TH</sup> EDITION



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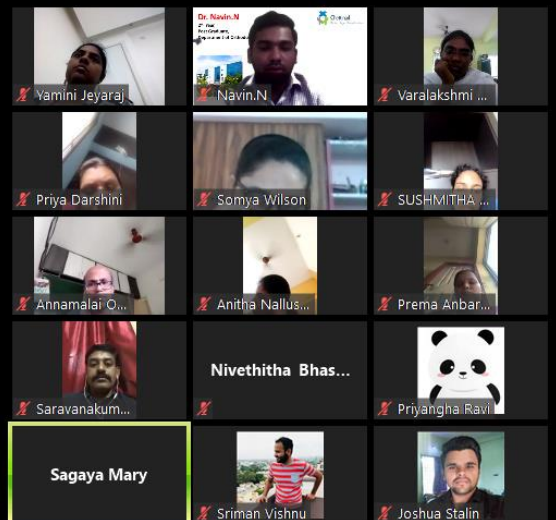
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**PROJECTED SUPRAMENTALE (B')**  
Pt of intersection of soft tissue with a line drawn perpendicular to PMV through B point

**PROJECTED POGONION (pg')**  
Pt of intersection of post border of symphysis with a line drawn perpendicular to PMV plane through pogonion

**PROJECTED SOFT TISSUE POGONION (pgs')**  
Pt of intersection of ant border of symphysis with a line drawn perpendicular to PMV through Pgs



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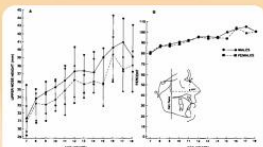

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00:11:56

Speaker View

## RESULTS - UPPER NOSE HEIGHT (n'-prn')

- At seven years size of upper nose remained same for both genders
- Increased height seen between 7-8 years
- Increased slowed down between 8-11 years
- Increased height again seen at 11 years & between 14-17 years with pre pubertal and pubertal accelerations at 11 years and during 14-17 years



Zoom 40-Minutes

You are viewing Sagaya Mary's screen

View Options

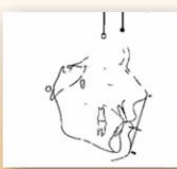
00:16:57

Speaker View

## LIP - ESTHETIC PLANE

**UPPER LIP - ESTHETIC PLANE:**  
Males: -0.8mm at 7 years  
-4.2 mm at 18 years  
Females:  
-0.9mm at 7 years  
-5.4mm at 18 years

**LOWER LIP - ESTHETIC PLANE:**  
Males: -0.8mm at 7 years  
-2.5mm at 18 years  
Females: -0.6mm at 7 years  
-2.5mm at 18 years





**DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**E-Teaching/Learning sessions for Post Graduate**

**Post Graduate academic schedule**

DATE	TOPIC	PRESENTER	PARTIPANTS
7.05.2020	Cleft lip and palate	Dr.Varalakshmi	14

**Varalakshmi Orthodontist's  
Personal Meeting Room**

✓ Your connection is encrypted

Meeting ID      614 851 6030

Host              Varalakshmi Orthodontist

Password        welcome

Invite Link       <https://us04web.zoom.us/j/6148516030?pwd=WFIFWDFJem1lSy9GUiZlelpGUGt0UT09>

Participant ID   377722

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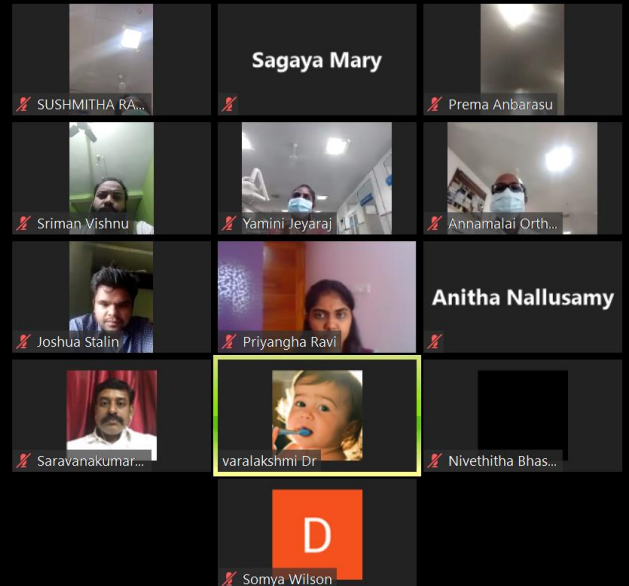
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## CLEFT LIP & PALATE

Dr. K.R VARALAKSHMI,  
2<sup>ND</sup> YEAR POSTGRADUATE, DEPT OF ORTHODONTICS



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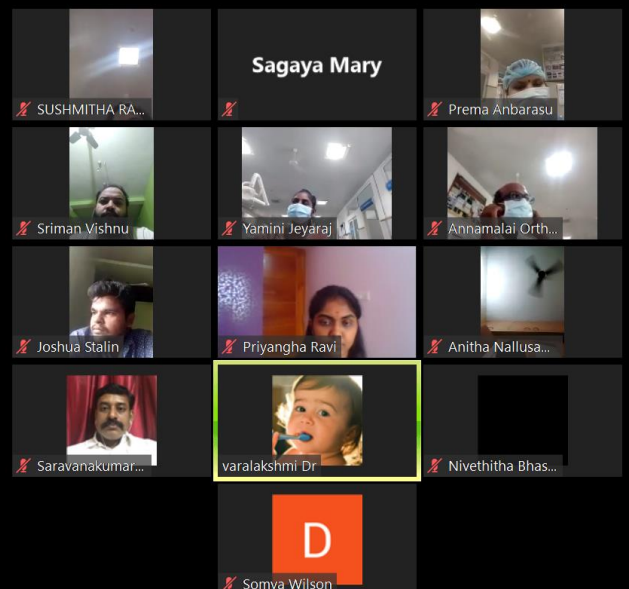
### 1. BACKGROUND

#### Cleft Lip and Palate



Mitchell L. Worley, MD<sup>1</sup>, Krishna G. Patel, MD, PhD<sup>2\*</sup>,  
Lauren A. Kilpatrick, MD<sup>3</sup>

- **Cleft lip and palate (CLP)** are common congenital malformations affecting the head and neck.
- Some experts say that the highest cleft incidences are among Asians (approximately 1 in 500 births). Caucasians have an average incidence of 1 in 700 births, and individuals of African descent have the lowest incidence of approximately 1 in 1,200 births





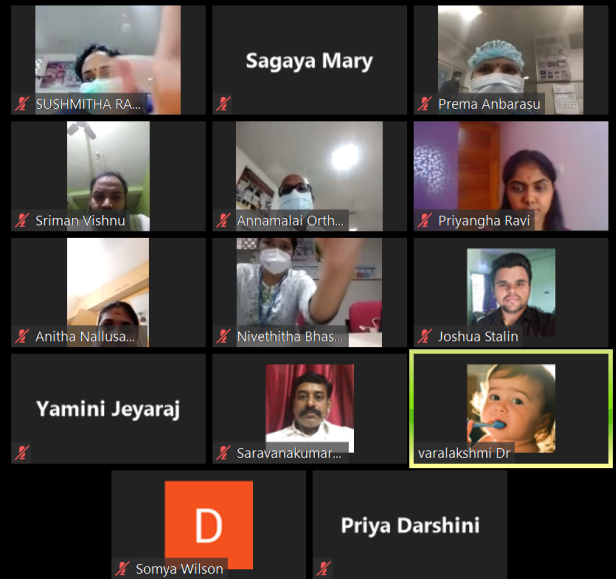
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- Common associated anomalies seen in children with CPO include congenital heart defects (31.1%), hydrocephalus (11.2%), and urinary tract defects (9.7%)
- The genetic component to orofacial clefting is also demonstrated in the **increased recurrence rate among affected families**.
- Each child of an **affected parent** with a cleft has a **3%** risk of having an orofacial cleft. If one **sibling is affected**, the risk of a cleft in subsequent children is **5%**. If both a **sibling and parent are affected**, there is a **14%** risk of cleft formation in subsequent children

Johnson CY, Little J. Folate intake, markers of folate status and oral clefts: is the evidence converging? *Int J Epidemiol* 2008;37(5):1041-58.

### An Overview of Timeline of Interventions in the Continuum of Cleft Lip and Palate Care

David Yates, PhD, MD<sup>1</sup>, Venkateshwar Allareddy, MD, PhD<sup>2,3</sup>, Jennifer Caplan, PhD, MD<sup>4</sup>, Susan Yates, MD, PhD<sup>5</sup>, Michael R. Starkiewicz, DDS, MPH, MD<sup>6,7,8</sup>



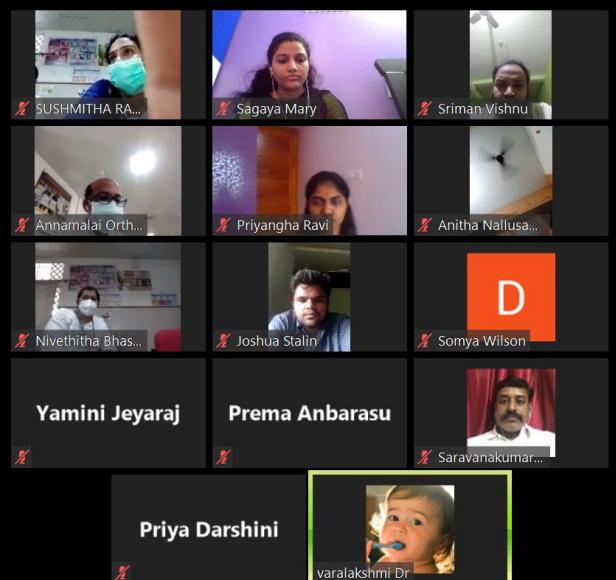
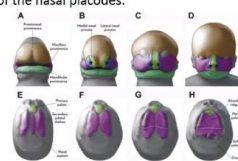
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## 2. EMBRYOLOGY

### Cleft Lip and Palate

Mitchell L. Worley, MD<sup>1</sup>, Krishna G. Patel, MD, PhD<sup>2,3</sup>, Lauren A. Kilpatrick, MD<sup>4</sup>

- **4<sup>th</sup> WEEK** - Lip embryologic development begins with the appearance of the paired maxillary prominences and the unpaired frontonasal prominence
- **5<sup>th</sup> week** - the medial and lateral nasal processes develop from the invagination of the nasal placodes.
- **6<sup>th</sup> - 7<sup>th</sup> week** - The paired maxillary prominences extend medially and meet the nasal processes to form the upper lip. The primary palate develops from the fusion of the paired medial nasal prominences
- This fusion forms the intermaxillary segment, which will contain the central 4 incisors and hard palate anterior to the incisive foramen.
- At this time, palatine processes or shelves also extend medially from the paired maxillary prominences. Fusion of the palatal shelves to form the secondary palate begins in **week 9**

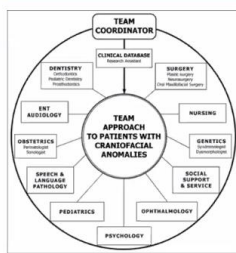




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## 6. CONTEMPORARY ROLE OF THE ORTHODONTIST IN THE MANAGEMENT OF OROFACIAL CLEFTS

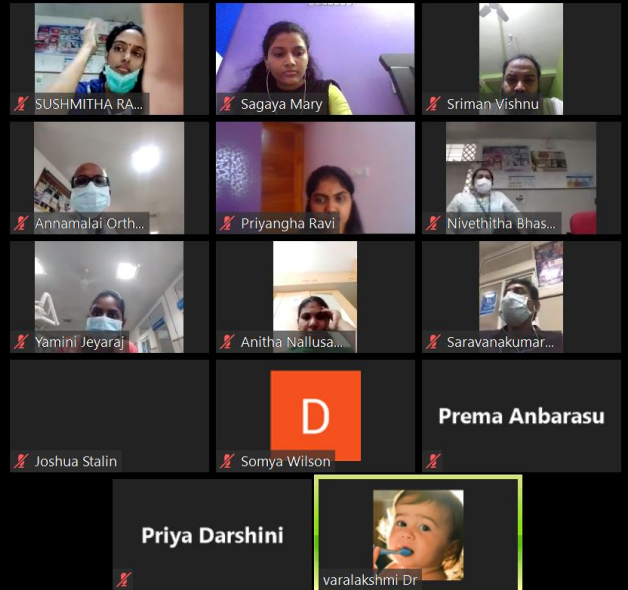
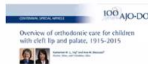
The role of the **orthodontist** in the clinical management of orofacial clefts differs from a typical 2-year comprehensive orthodontic treatment by extending treatment from the neonatal period with treatment of displaced alveolar segments, to **management of the skeletal and dental components of the developing dentition starting with the deciduous dentition, through treatment of the mixed dentition and into adolescence and adulthood.**



The original cleft palate teams in the 1950s represented 3 main disciplines: **surgery, speech pathology, and orthodontics.**

By the 21st century, the team embraced multiple specialties

Conveniently fall into **4 stages** with specific goals defined by periods of active orthodontic intervention followed by observation and rest periods.



Recording...

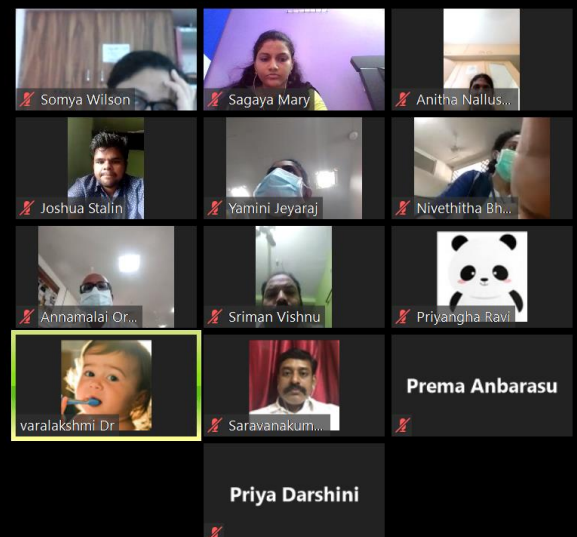
## Alt RAMEC

A New Protocol for Maxillary Protraction in Cleft Patients:  
Repetitive Weekly Protocol of Alternate Rapid  
Maxillary Expansions and Constrictions

Eric-Jean Wu Liou, D.D.S., M.S.  
Wen-Cheng Tsai, D.D.S.

- Once the patient is in the late mixed dentition, this strategy may be used to achieve a greater degree of disarticulation of the circummaxillary sutures.
- Liou and Tsai showed that **alt-RAMEC** allowed for maxillary displacement almost 3-times that of RME alone.

- LIOU introduced a different method called alternate rapid maxillary expansion and constriction
- This protocol is performed with a special double- hinged expansion screw that is alternatively opened & closed for 7-9 consecutive weeks.
- Center of rotation can be located near the maxillary tuberosity thereby enhancing the forward movement of maxilla
- The rationale for this technique is a form of distraction osteogenesis
- They reported a 3 mm advancement of point A with Alt-RAMEC protocol and 5.8 mm of total advancement after protraction





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9:46 AM 23.7KB/s

Close Participants (14)

Search

Joshua Stalin (me)

SM

varalakshmi Dr

AN

Annamalai Orthodontist

Nivethitha Bhaskar

PA

Priya Darshini

Priyanga Ravi

Saravanakumar Subramani...

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Invite

## Bonding -Part II (R.Priyanga)

me

To [Nivethitha Bhaskar](#)

7 May at 1:27 pm

1 attachment

Bonding(Pa... .pptx

2.7MB

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## DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

### E-Teaching/Learning sessions for Post Graduate

#### Post Graduate academic schedule

DATE	TOPIC	PRESENTER	PARTIPANTS
8.05.2020	Cleft lip and palate-II	Dr.Varalakshmi	13
8.05.2020	Bonding and Banding-II	Dr.Priyanga	13

### varalakshmi Dr's Personal Meeting Room


Meeting ID 555-637-7285

Host varalakshmi Dr

Password welcome

Numeric Password (Telephone/Room Systems) 994653

Invitation URL <https://us04web.zoom.us/j/5556377285?pwd=RTRQMWhyWDRtVDFyTzBiV3Vrb3hTQT09>

 Copy URL

Participant ID 141772



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Participants (13)

Find a participant

Dr Navin.N (Me)

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varalakshmi Dr (Host)

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AN Anitha Nallusamy

Unmute More >

Annamalai Orthodontist

Unmute More >

Joshua Stalin

Unmute More >

Nivethitha Bhaskar

Unmute More >

Prema Anbarasu

Unmute More >

PD Priya Darshini

Unmute More >

Priyanga Ravi

Unmute More >

SM Sagaya Mary

Unmute More >

Saravanakumar Subramanian

Unmute More >

SUSHMITHA RAM

Unmute More >

YJ Yamini Jeyaraj

Unmute More >

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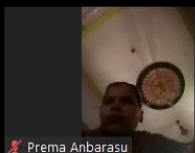
Raise Hand

Zoom 40-Minutes

Remaining Meeting Time: 06:37

00:29:50

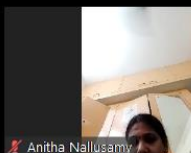
Speaker View



Prema Anbarasu



Dr Navin.N



Anitha Nallusamy



Nivethitha Bhaskar



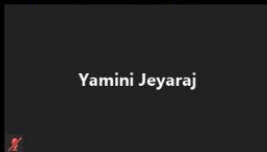
Annamalai Orthodontist



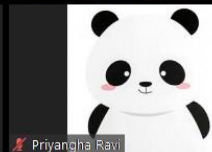
Sagaya Mary



Priya Darshini



Yamini Jeyaraj



Priyanga Ravi



varalakshmi Dr



SUSHMITHA RAM



Saravanakumar Subramanian



Joshua Stalin

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Participants 13

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Recording You are viewing varalakshmi Dr's screen View Options 00:05:41 Speaker View Exit Full Screen

## CLEFT LIP & PALATE II

Dr. K.R. VARALAKSHMI,  
2<sup>ND</sup> YEAR POSTGRADUATE, DEPT OF ORTHODONTICS

Participants: 13

Unmute Stop Video Chat Share Screen Record Reactions Leave Meeting

Grid of participants: Prem Anbarasu, Dr Navin.N, Annamalai Ortho..., Yamini Jeyaraj, Sagaya Mary, Priya Darshini, Priyanga Ravi, varalakshmi Dr, Nivethitha Bhaskar, SUSHMITHA RAM, Saravanakumar ..., Joshua Stalin, Anitha Nallusamy

Zoom 40-Minutes You are viewing varalakshmi Dr's screen View Options 00:07:50 Speaker View

Original Article

### Long-term stability of maxillary protraction therapy in Class III patients with complete unilateral cleft lip and palate

Yixin Zhang<sup>a</sup>, Zhen Fu<sup>a</sup>, Haichao Jia<sup>a</sup>, Yiping Huang<sup>a</sup>, Xiaobai Li<sup>a</sup>, Hao Liu<sup>a</sup>, Weiran Li<sup>a</sup>

**ABSTRACT**  
**Objectives:** This study evaluated the long-term stability of maxillary protraction (MP) in patients with complete unilateral cleft lip and palate (UCLP) and identified factors influencing relapse and long-term outcomes.  
**Materials and Methods:** Twenty-three adolescents with UCLP who underwent MP therapy were recalled when craniofacial growth was close to completion. Subjects exhibiting reverse-positive overjets were assigned to unstable/stable groups. Lateral cephalometric measurements were made before treatment (T0), after active treatment (T1), and at the end of the growth spurt (T2).  
**Results:** About 63% of the subjects exhibited positive overjets during follow-up. The unstable group demonstrated higher B-s and Co-Gon distances than the stable group (both  $P < .05$ ) at T0. More short-term (T0-T1) sagittal advancement of point A (A-s) was evident in the unstable group than in the stable group ( $P < .05$ ), but no long-term difference was apparent between the two groups ( $P = .481$ ). During the posttreatment period (T1-T2), the SNA angle and maxillary incisor protrusion (I1-SNA angle) were considerably lower in the unstable group than in the stable group (both  $P < .05$ ). Overall, the unstable group exhibited a lower increase in the vertical extent of point A (A-v) than the stable group from T0 to T2 ( $P = .05$ ).  
**Conclusions:** In the long term, MP affords favorable maxillary advancement in patients with UCLP. A mandibular excess at T0 and vertical maxillary hypoplasia may contribute to the long-term relapse of a reverse overjet. (Angle Orthod. 0000;00:000-000.)

**KEY WORDS:** Maxillary protraction; Unilateral complete cleft lip and palate; Skeletal Class III malocclusion; Long-term stability

Participants: 13

Unmute Stop Video Chat Share Screen Record Reactions Leave Meeting

Grid of participants: Prem Anbar..., Dr Navin.N, Annamalai O..., Yamini Jeyaraj, Sagaya Mary, Anitha Nallus..., Priya Darshini, Priyanga Ravi, varalakshmi Dr, Nivethitha Bh..., SUSHMITHA ..., Saravanakum..., Joshua Stalin



Zoom 40-Minutes You are viewing varalakshmi Dr's screen View Options

Recording 00:08:36 Speaker View

### Orthodontic Intervention in the Late Mixed Dentition (10–12 Years Old)

From the team in Oslo, Norway, provided strong evidence for the benefits of autologous **secondary bone grafting** using **cancellous bone from the iliac crest**; this remains the gold standard in the 21st century

Treatment goals during the late mixed dentition stage aim to **improve bone and periodontal support around the cleft site through alveolar bone grafting** in preparation for future orthodontic tooth movement and/or prosthodontic rehabilitation.

Participants: 13

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ENG IN 9:42 AM 5/8/2020

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### TECHNICAL ADVANCES IN THE 21ST CENTURY

#### Cone-beam computed tomography

This 3-dimensional imaging of anatomic structures is especially valuable in evaluating cleft palate and other craniofacial skeletal anomalies

**Table I. Articles published in the AJO-DO about the applications of CBCT technology in craniofacial orthodontics**

Authors, year	CBCT application
Pereira et al, 2011 <sup>11</sup>	Diagnosis and localization of teeth in hypodontia cases
Ghani et al, 2012 <sup>12</sup>	Evaluation of skeletal and soft tissue asymmetry in patients with hemifacial microsomia
Yoshikawa et al, 2013 <sup>13</sup>	Assessment of pharyngeal airway morphology and volumes in growing patients with clefts
Celikoglu et al, 2013 <sup>14</sup>	Evaluation of mandibular asymmetry in patients with clefts
Shibasaki-Yorozuya et al, 2014 <sup>15</sup>	Assessment of longitudinal craniofacial growth in patients with hemifacial microsomia
Celikoglu et al, 2014 <sup>16</sup>	Evaluation of pharyngeal airway volumes in patients with unilateral clefts
Figueiredo et al, 2014 <sup>17</sup>	Evaluation of maxillary dentoalveolar effects of expansion in patients with clefts
Celikoglu et al, 2014 <sup>18</sup>	Measurement of facial soft-tissue thickness in patients with bilateral clefts
Yatabe et al, 2015 <sup>19</sup>	Detection of bone dehiscences in maxillary canines moved into grafted alveolar clefts

Participants: 13

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Yamini Jeyaraj Dr Navin.N varalakshmi Dr

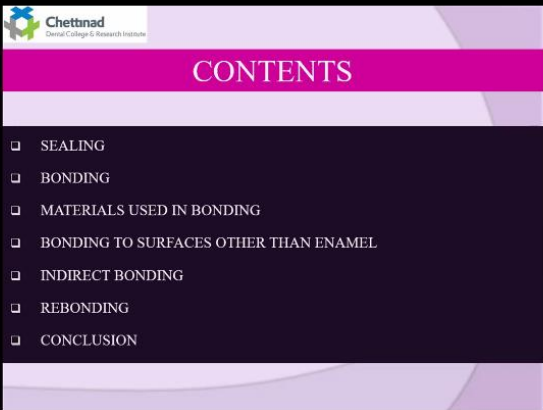
Annamalai Orthodo... Sagaya Mary Anitha Nallusamy

Prema Anbarasu Saravanakumar ... Priyanga Ravi

Joshua Stalin Priya Darshini SUSHMITHA RAM

Unmute Stop Video 12 Participants Chat Share Screen Record Reactions Leave Meeting

Zoom 40-Minutes Recording You are viewing Priyanga Ravi's screen View Options 00:07:50 Speaker View



Yamini Jeyaraj Dr Navin.N varalakshmi Dr

Annamalai Orthodo... Sagaya Mary Anitha Nallusamy

Prema Anbarasu Priya Darshini Saravanakumar ...

Priyanga Ravi Joshua Stalin SUSHMITHA RAM

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Recording 00:11:16 Speaker View

### III-GENERATION

- ❖ Late 1980's, partially removed or modified smear layer
- ❖ The primer contains hydrophilic resins - BDPDM.
- ❖ Infiltrates smear layer.
- ❖ The unfilled resin adhesive is applied, attaching cured primer to the composite resin.

Examples :

- ❖ Mirage bond
- ❖ Scotch bond 2
- ❖ Prisma Universal bond 2 and 3.



Participants: 13

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Recording 00:18:05 Speaker View

### SHELF ETCHING PRIMERS ( SEP)

#### SHELF ETCHING PRIMERS

- ❑ Without saliva contamination – 6 Mpa
- ❑ Contamination before primer – 4.8 Mpa
- ❑ Contamination after primer – 4.8 Mpa
- ❑ Contamination before & after primer – 1.7 MPa

- ❖ Reported that composite resin with SEP has less bond strength.
- ❖ Ramkumar Gandhi et al in AJO-DO 2001 compared SEP with light cured composites and the chemically cured ones.

Samir E. Bishara, Effect of a self-etch primer/adhesive on the shear bond strength of orthodontic brackets; Am J Orthod Dentofacial Orthop 2001;119:621-4.

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Recording LIVE on YouTube

## Insight into Lingual Orthodontics



Sanjay Ganeshkar

Audio Settings ^ Chat 1 Raise Hand Q&A Leave Meeting


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Windows taskbar: File Explorer, Edge, Photoshop, 99+ apps, Chrome, Zoom, WhatsApp, Telegram, Signal, Discord, Slack, Messenger, Email, Calendar, Photos, Music, Settings, Network, Volume, Battery, Time: 4:36 PM 5/7/2020

Zoom 0:00:31

## The Hitch about Lingual

- Skill
- Tedious /Laborious
- Dietary restrictions
- Frequent Visits
- Oral Hygiene concerns
- Longer Chair side time



DR. TUSHAR HEGDE

Audio Settings ^ Chat 1 Raise Hand Q&A Leave Meeting

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Windows taskbar: File Explorer, Edge, Photoshop, 99+ apps, Chrome, Zoom, WhatsApp, Telegram, Signal, Discord, Slack, Messenger, Email, Calendar, Photos, Music, Settings, Network, Volume, Battery, Time: 4:37 PM 5/7/2020





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**DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS**

**E-Teaching/Learning sessions for Post Graduate**

**Post Graduate academic schedule**

DATE	TOPIC	PRESENTER	PARTIPANTS
9.05.2020	Growth and Development concept	Dr.Sriman	15




**Sriman Vishnu's Zoom Meeting**

Meeting ID 752-2923-3578

Host Sriman Vishnu

Password 12345

Invitation URL <https://us04web.zoom.us/j/75229233578?pwd=Q3VBb0FKMWJxZkFSSldMSk1GMnZDZz09>

 [Copy URL](#)

Participant ID 211987





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Participants (15)

Find a participant

- Dr Navin.N (Me)
- Sriman Vishnu (Host)
- AN Anitha Nallusamy
- Annamalai Orthodontist
- Joshua Stalin
- Nivethitha Bhaskar
- Prema Anbarasu
- Priya Darshini
- Priyanga Ravi
- SM Sagaya Mary
- Saravanakumar Subramanian
- D Somya Wilson
- SUSHMITHA RAM
- Varalakshmi Orthodontist
- YJ Yamini Jeyaraj

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Zoom 40-Minutes

00:05:50 Speaker View

Annamalai Orthodontist	Dr Navin.N	Sriman Vishnu	Yamini Jeyaraj	Priyanga Ravi
Nivethitha Bhaskar	Saravanakumar Subram...	Varalakshmi Orthodontist	Sagaya Mary	Anitha Nallusamy
Joshua Stalin	Priya Darshini	Somya Wilson	Prema Anbarasu	SUSHMITHA RAM


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Recording 00:07:54 Speaker View



**GROWTH AND DEVELOPMENT**

Participants: 14

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ENG IN 9:38 AM 5/9/2020

Participants: Yamin Jeyaraj, Dr. Navin.N, Sagaya Mary, Annamalai O..., Sriman Vishnu, SUSHMITHA..., Nivethitha Bh..., Somya Wilson, Varalakshmi..., Anitha Nallusamy, Priyanga Ravi, Priya Darshini, Joshua Stalin, Saravanakum...

Zoom 40-Minutes You are viewing Sriman Vishnu's screen View Options

Recording 00:08:41 Speaker View

**DEVELOPMENT**

- TODD- development means progress towards maturity.
- MOYERS- All the naturally occurring unidirectional changes in the life of an individual from its existence as a single cell to its elaboration as a multifunctional unit terminating in Death.
- PROFITT- increase in complexity.

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Participants: 15

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ENG IN 9:39 AM 5/9/2020

Participants: Yamin Jeyaraj, Dr. Navin.N, Sagaya Mary, Varalakshmi..., Anitha Nallus..., Annamalai O..., Sriman Vishnu, SUSHMITHA..., Nivethitha Bh..., Somya Wilson, Priyanga Ravi, Priya Darshini, Joshua Stalin, Saravanakum..., Prema Anbarasu



Zoom 40-Minutes

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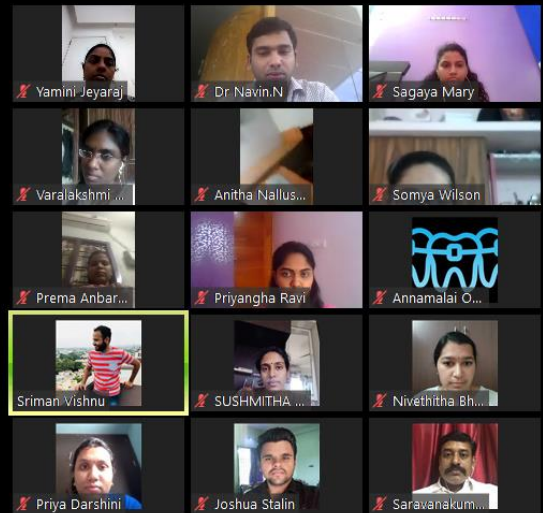
View Options

00:09:16

Speaker View

## Concepts

- Pattern
  - Differential growth
  - Predictability
- Variability
  - Concept of normality
  - Age equivalence
- Timing



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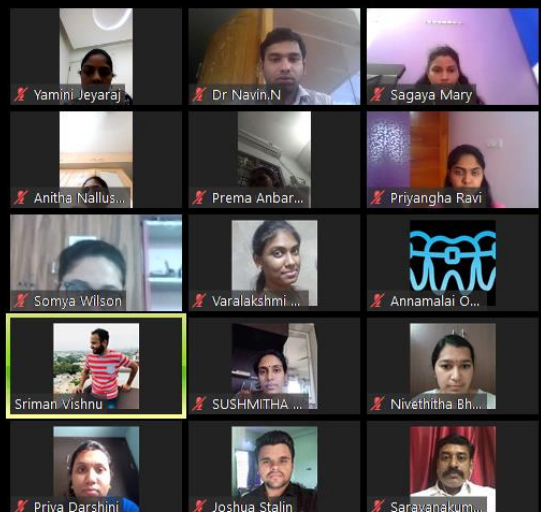
View Options

00:14:01

Speaker View

## IMPORTANCE OF GROWTH SPURT

- Differentiate normal and pathological growth changes.
- Treatment of skeletal discrepancies can be best done during pre pubertal growth spurt
- Orthognathic surgery should be performed only after the growth ceases
- Arch expansion and orthopaedic appliance therapy should be done during mixed dentition growth spurt.



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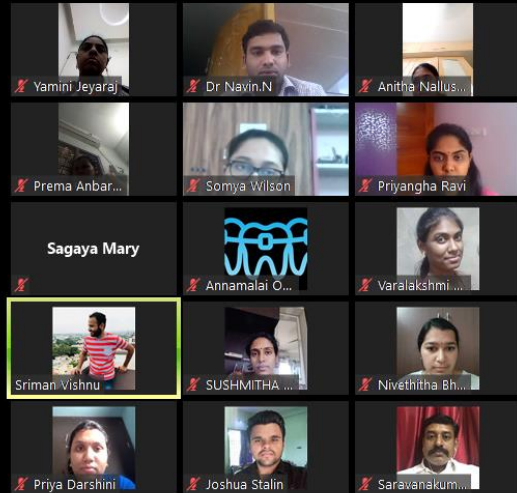
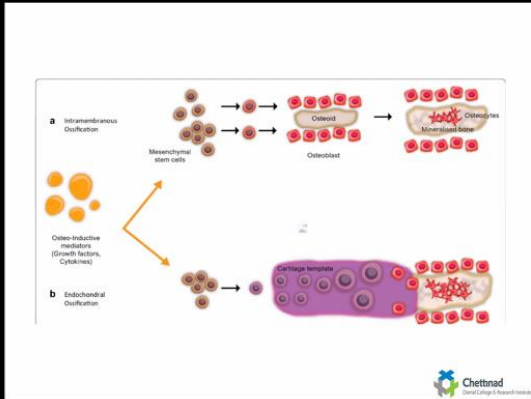
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29



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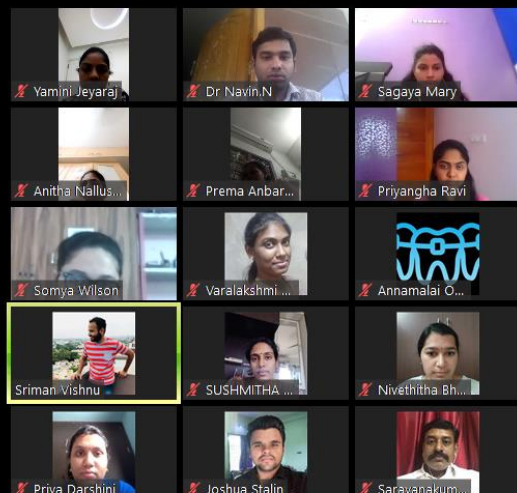
00:14:01

Speaker View

29

## IMPORTANCE OF GROWTH SPURT

- Differentiate normal and pathological growth changes.
- Treatment of skeletal discrepancies can be best done during pre pubertal growth spurt
- Orthognathic surgery should be performed only after the growth ceases
- Arch expansion and orthopaedic appliance therapy should be done during mixed dentition growth spurt.



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Participants Chat Share Screen Record Reactions

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00:38:36 Speaker View

- VITAL STANING
- First reported by Belchier in 1796 and also by John Hunter attributed their finding to alizarin dye.
- One injection of alizarin forms a thin colored line on all active surfaces of bone growth during the period in which the dye is in the bloodstream, hence subsequent depositions are not colored
- The method reveals manner in which bone is laid down, the sites of bone growth, the direction and amount of growth, and the timing and relative duration of growth at different sites.
- Alizarin, tetracycline and procion

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15 Participants

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00:01:40 Speaker View

### REFERENCES

- TEXTBOOK OF CRANIOFACIAL GROWTH – SHRIDHAR PREMKUMAR
- ESSENTIALS OF FACIAL GROWTH- ENLOW AND HANS
- CONTEMPORARY ORTHODONTICS – WILLIAM R PROFFIT

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15 Participants

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# Chettinad

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## Applicability with various fixed appliance systems

- Forsus can be integrated with either PEA, Tip-edge or any self ligating appliance too.

One may have to consider alterations in each of these situations.

Click to add notes

Slide 122 of 188 - English (United States)

11:55 09-05-2020

Exit

Meeting Registration Success - x Join the Webinar | GoToWebinar x Google Account x Reminders: Synchronising Forsus x GoToWebinar | GoToWebinar x

app.gotowebinar.com/index.html#377421643/4386076534602466316/5538023872035033359

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## Synchronizing MBT with Forsus in Class II - A Clinician's perspective

11:58 AM 5/9/2020

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11:04

New Era in Orthodontics : Post - Pandemic\_ Dr. Ajit Kalia

“ORTHODONTICS “ during and after COVID-19 pandemic

Leave

3:28 / 4:33

LIVE

86%

## To Maximize Maxillary Dental Distalization



- Allow molar to distalize independent of the buccal segment
- Used in creating arch length
- Expect 2mm of distalization per activation





# Chettinad

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1:25 PM

28%

## Current Clinical protocol

- During pre-functional phase, care is taken to maintain or alter inclinations of upper and lower anteriors.

7:11

45%



858-1711-2905

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Password: DrKubavatA

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### ORTHO & AIRWAY CASE



Only treatment suggested by different  
Orthodontists:

Orthognathic operation



Chats



Raise Hand



Q&A



More

7:09

45%

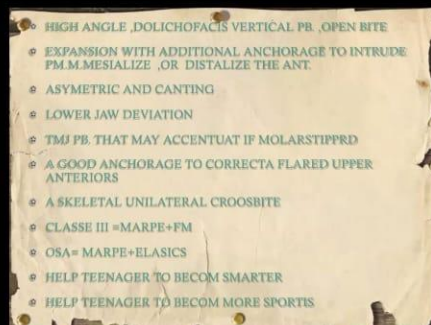


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Chats



Raise Hand



Q&A



More