



**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	PARTICIPANTS
29.06.20	0.018vs 0.022 slot V & Step bend mechanics	Dept Of Orthodontics	12



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Recording

Gokul Raj

Baala Gopal

Joshua Stalin

Varalakshmi Raja

Navin N

Nivethitha Bhaskar

Yamini Jeyaraj

Somya Wilson

Saravanakumar Subramanian

Annamalai Orthodontist

Sagaya Mary

Sriraman Vjshnu

You are viewing Joshua Stalin's screen

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145%

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Text

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Fonts

Object List

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# Contents

- Introduction
- Evolution
- Review of articles
- Bidimensional technique
- Conclusion
- References.

Gokul Raj

Baala Gopal

Joshua Stalin

Varalakshmi Raja

Navin N

Saravanakum...

Unmute

Start Video

Participants 13

Chat

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Recording

**Bends are placed for a number of reasons-for example,**

- (1) to **correct tooth position** if a **discrepancy or error** is present in bracket position;
- (2) as teeth approach their **final position of alignment**,
- (3) certain types of **specialized tooth movement**, such as space closure, tipback mechanics, intrusion, and root movement, require appropriate wire bending.

Participants (12):

- Gokul Raj
- Joshua Stalin
- Navin N
- Yamini Jeyaraj
- Somya Wilson
- Sagaya Mary
- Baala Gopal
- Varalakshmi Raja
- Nivethitha Bhaskar
- Annamalai O...
- Saravanakum...
- Sriman Vishnu

Recording 166% View Zoom Play Keynote Live Table Chart Text Shape Media Comment Collaborate Add Slide Fonts Object List

## REFERENCE - 4

Torque expression of 0.018 and 0.022 inch conventional brackets. [Iosif Sifakakis](#) [Nikolaos Pandis](#) [Margarita Makou](#) [Theodore Eliades](#) [Christos Katsaros](#) [Christoph Bourauel](#). *European Journal of Orthodontics*, Volume 35, Issue 5, October 2013.

✱ Evaluated high-torque 0.018 and 0.022 inch and low-torque 0.018 and 0.022 inch.

Participants (12)

Find a participant

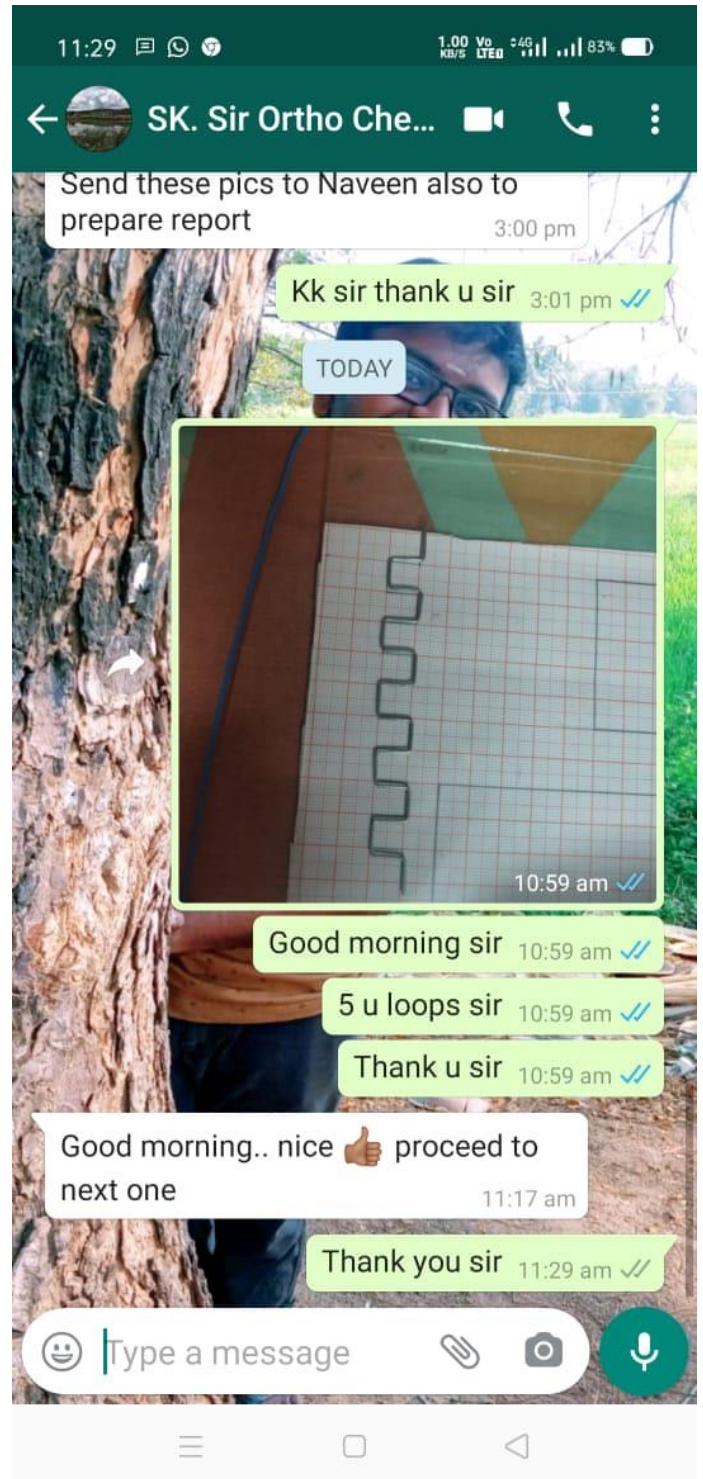
- BG Baala Gopal (Me)
- Gokul Raj (Host)
- Joshua Stalin
- Annamalai Orthodontist
- Navin N
- Nivethitha Bhaskar
- SM Sagaya Mary
- Saravanakumar Subramani...
- SW Somya Wilson
- Sriman Vishnu
- VR Varalakshmi Raja
- Yamini Jeyaraj

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30.06.20	0.018vs 0.022 slot V & Step bend mechanics	Dept Of Orthodontics	14



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You are viewing Baala Gopal's screenView Options

# INFLUENCE OF SLOT SIZE & BRACKET DIMENSIONS ON THE EFFICACY OF APPLIANCE

## TEAM A

Participants14ChatShare ScreenRecord

Leave

Participants (14)

Find a participant

SM

Sagaya Mary (Me)

BG

Baala Gopal (Host)

VR

Varalakshmi Raja

AN

Anitha Nallusamy

AO

Annamalai Orthodontist

Gokul Raj

Joshua Stalin

Navin N

Nivethitha Bhaskar

P

priyadarshini

Saravanakumar Subramanian

Somya Wilson

Sriman Vishnu

Yamini Jeyaraj

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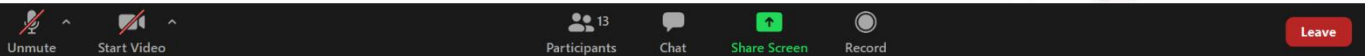
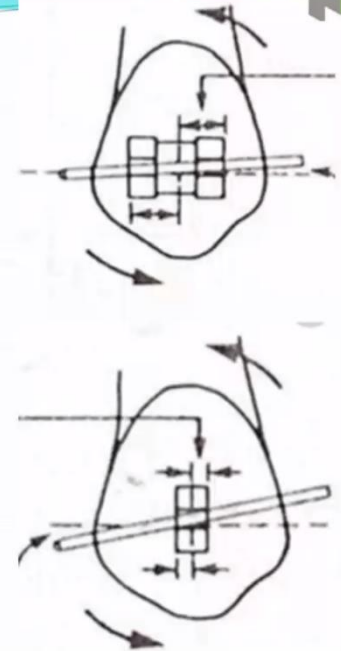


## WIDE BRACKET

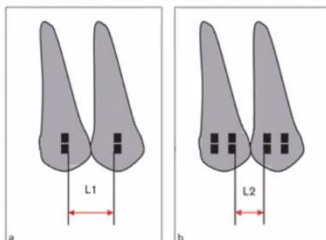
- Efficient in generating rigid force moment.
- It is particularly advantageous in extraction space closure by sliding mechanics (secure root paralleling).
- Apparently increase in bracket dimension will result in decrease inter bracket width.

## NARROW BRACKET

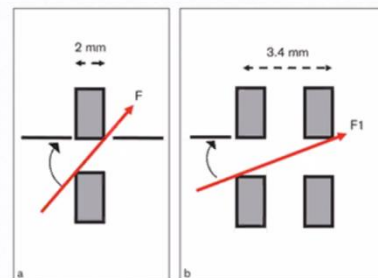
- Favorable for adequate inter bracket spam, force moment is however decreased.
- Not sufficient to displacement of severely positioned teeth



- ❖ Bracket width determine the length of moment arm ( half the width of the bracket).
- ❖ Wider bracket reduces both the force needed to generate the moment & contact angle- Advantageous for space closure by sliding.
- ❖ The maximum practical width of wide bracket is about half the width of the tooth.



The elasticity of the wire is higher with single brackets (a) because the distance between them is greater than the distance between the wide twin brackets (b). Therefore, the force applied to narrow brackets is less than the force applied to wide brackets.



The play of the wire in a narrow single bracket slot (a) is more than that in the wide twin bracket (b). The same size of wire would deliver less force (F) to the single bracket than the twin bracket (F1).





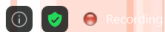
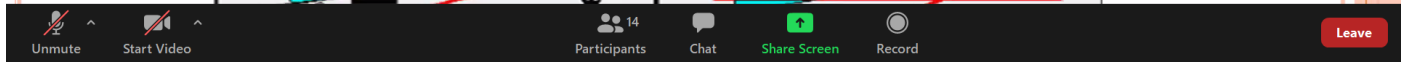
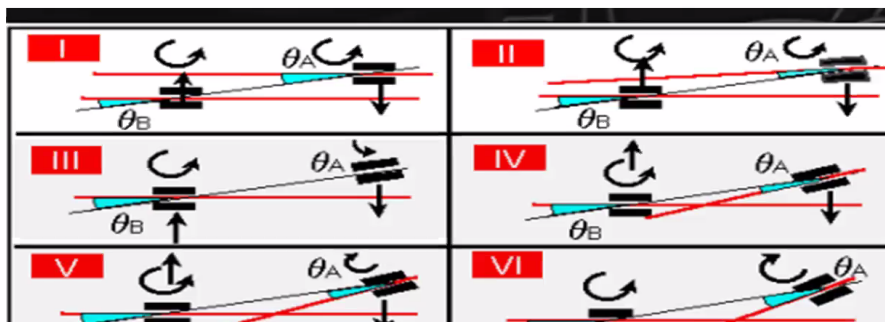
You are viewing Somya Wilson's screen

View Options



## BURTONE 6 GEOMETRIES

- The force system developed in a two-tooth segment when connected by a continuous straight wire is determined by the angles of the brackets with respect to the wire passing through the centers of the brackets and the interbracket distance.



You are viewing Somya Wilson's screen

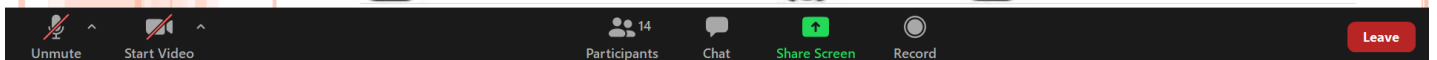
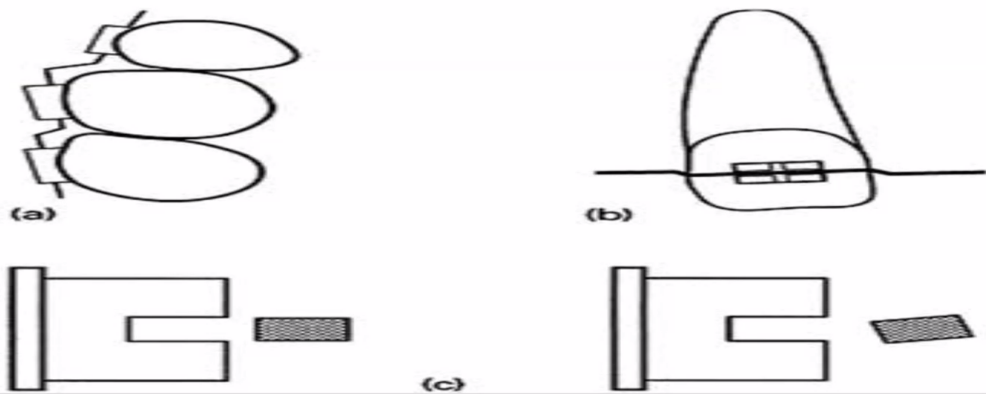
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## BENDS IN ORTHODONTICS

### INTRODUCTION

- Bends are placed at finishing stage, given both at the variations of individual tooth anatomy and bracket placement errors
- In this situation placing light flexible arch wire, increases treatment duration





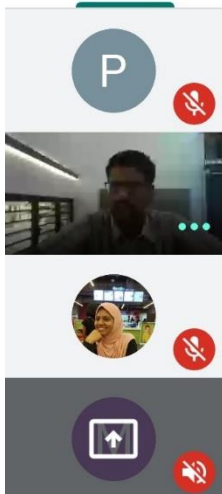
### History of dentofacial deformity treatment

- Before 1960s.
  - › Orthognathic surgery without orthodontic treatment
  - › Skeletal relationships were not satisfactorily improved
  - › Lack of occlusal interlocking -Unstable results
  - › Wire osteosynthesis

### Splint fabrication in Orthognathic Surgery

**Dr. Mukundan Vijayan**  
MDS, MOrth (Edin), FFD Orth (Ire), MOrth (Eng), MOrth (Glasg)  
Associate Professor  
Government Dental College, Alappuzha, Kerala

(67)



Priya Raymond (You)

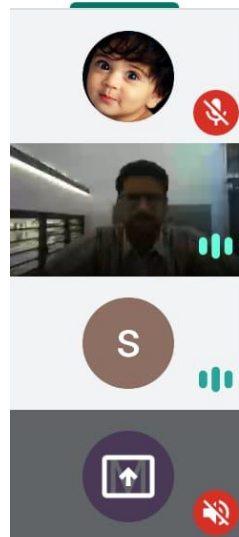
Mukundan Vijayan

rajia rhiyaz

Mukundan Vijayan

Also in the meeting (63)

(59)



varalakshmi raja (You)

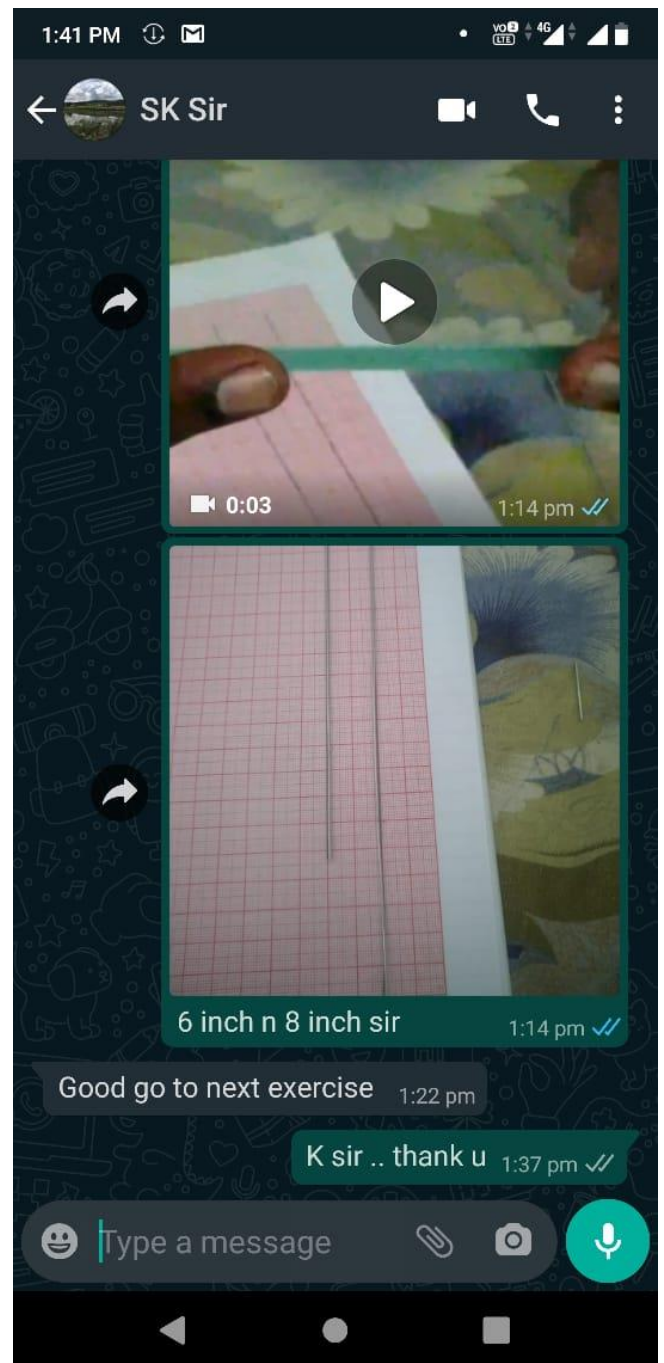
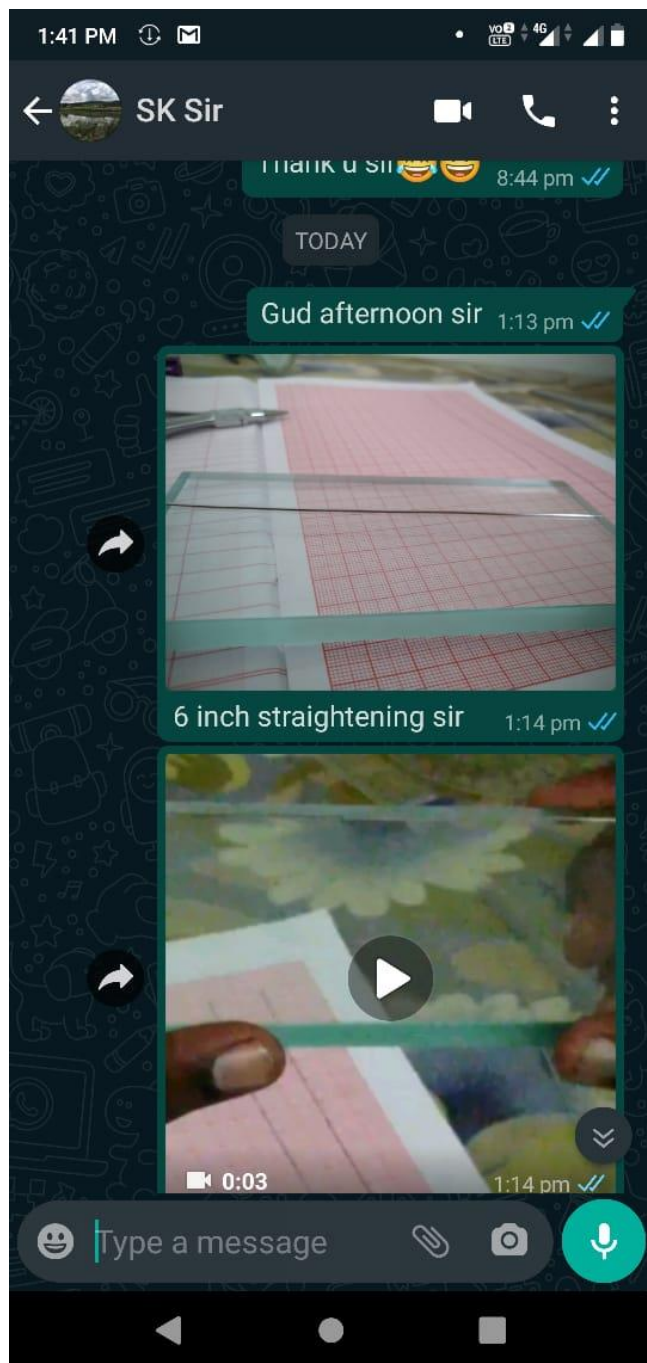
Mukundan Vijayan

sangeetha guhan

Mukundan Vijayan



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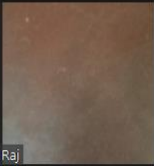



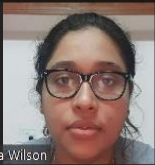


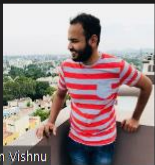

**Post Graduate academic schedule**

DATE	TOPIC	PRESENTER	PARTICIPANTS
01.07.20	CAD CAM Therapeutic Application in orthodontics	Dept Of Orthodontics	15



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Recording

 Gokul Raj	Baala Gopal	 Joshua Stalin	Varalakshmi Raja
 Saravanakumar Subramani...	 Nivethitha Bhaskar	Annamalai Orth...	 Somya Wilson
 Yamini Jeyaraj	 Navin N	Sagaya Mary	 Sriman Vishnu
Anitha Nallusamy	Priya Darshini	 Prema Anbarasu	



Recording

Remaining Meeting Time: 04:35



## Steps

CONVENTIONAL SPLINT FABRICATION

Patient impression-dental data

Cast fabrication

Model surgery

Splint fabrication

Handmade splint

CAD/CAM SPLINT FABRICATION

Patient CT-for skeletal data  
Intraoral scanning-for dental data

Virtual surgery  
Designing of splint

Splint printing

CAD/CAM splint



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DATE	TOPIC	PRESENTER	PARTICIPANTS
02.07.20	3D Application in Diagnosis & Treatment planning	Dept Of Orthodontics	14



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Zoom Meeting 40-Minutes

You are viewing Navin N's screen

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# 3D imaging system in orthodontic diagnosis and treatment planning

TEAM B

Unmute Start Video Participants Chat Share Screen Record Leave

Type here to search

15:17 02-07-2020

Participants (14)

Find a participant

- SM Sagaya Mary (Me)
- BG Baala Gopal (Host)
- P priyadarshini
- AN Anitha Nallusamy
- Annamalai Orthodontist
- Gokul Raj
- Joshua Stalin
- Navin N
- Nivethitha Bhaskar
- Prema Anbarasu
- Saravanakumar Subramanian
- Somya Wilson
- Sriman Vishnu
- VR Varalakshmi Raja



Invite

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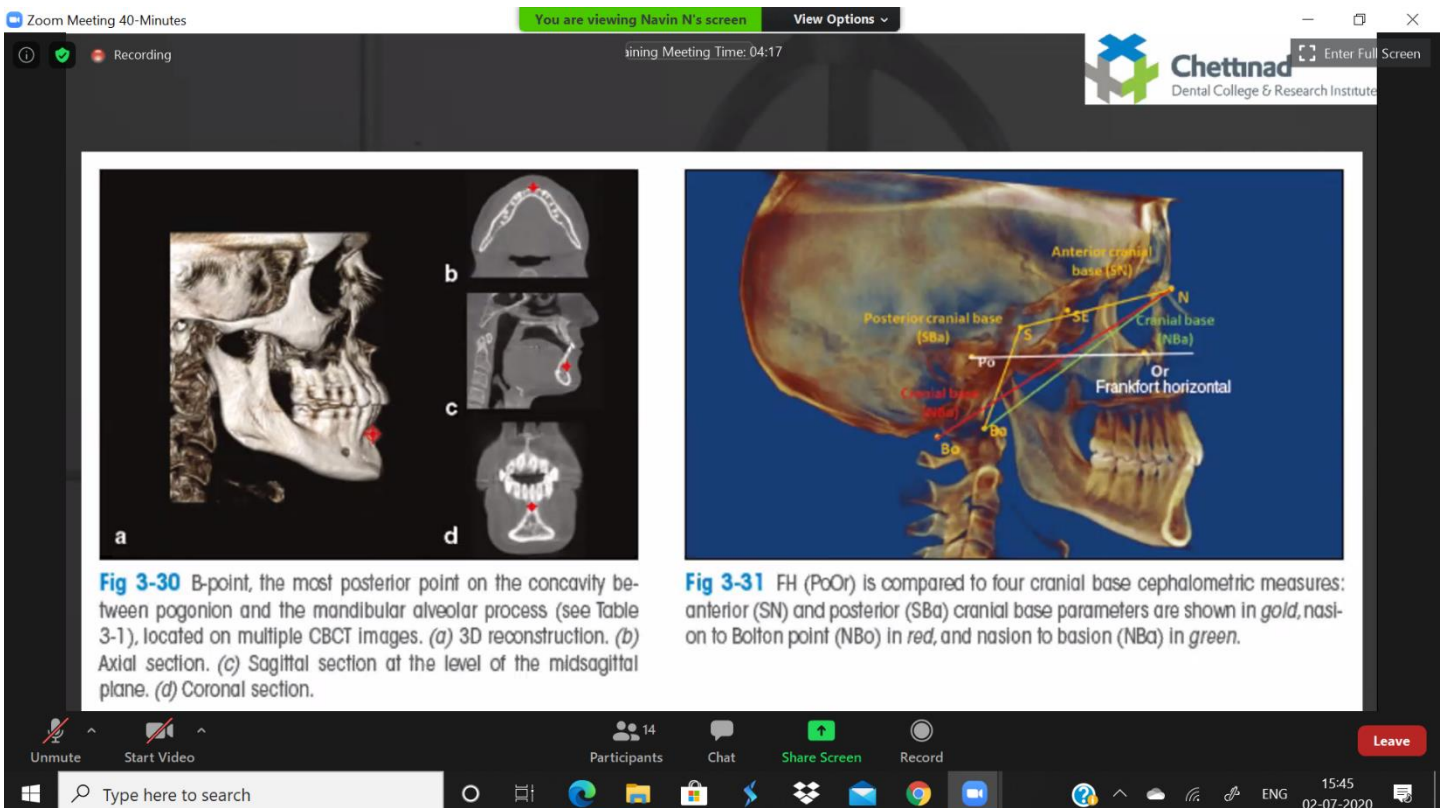
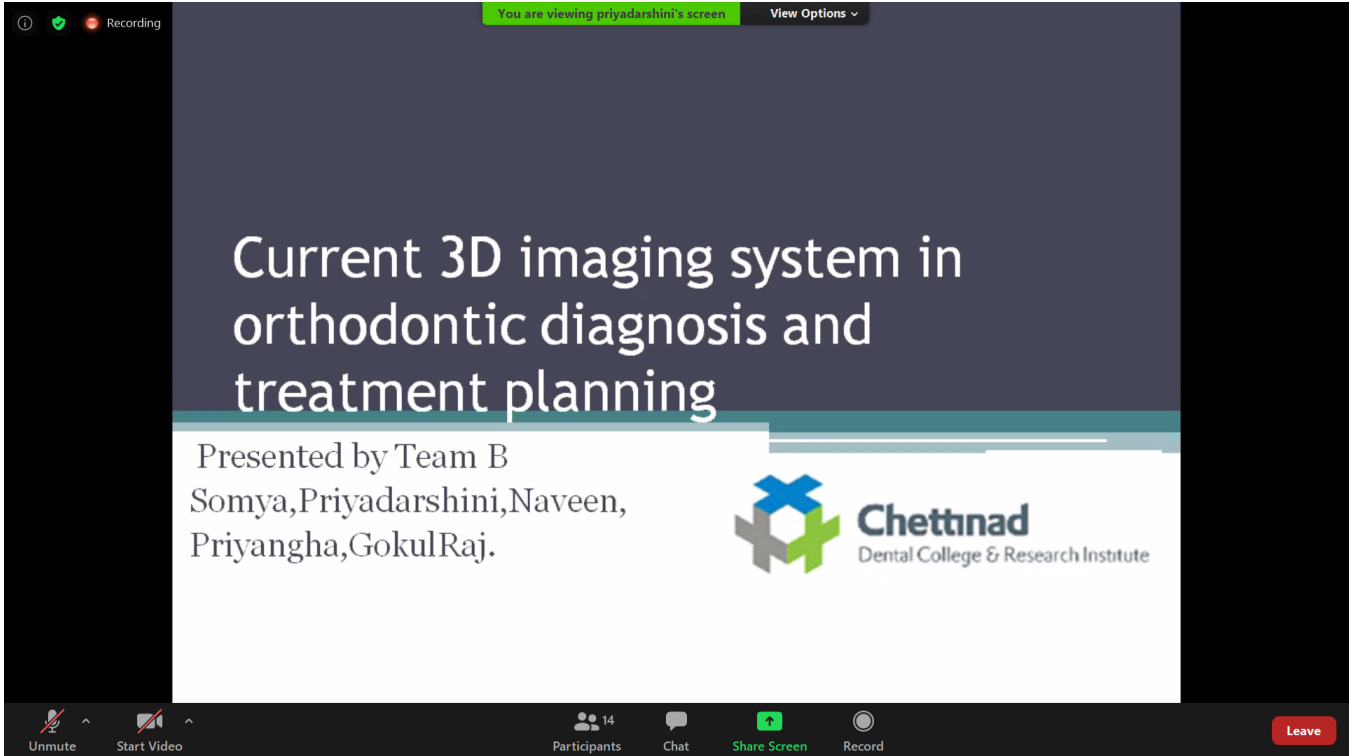
Raise Hand



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# Current 3D imaging system in orthodontic diagnosis and treatment planning

Presented by Team B  
Somya, Priyadarshini, Naveen,  
Priyanga, GokulRaj.





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DATE	TOPIC	PRESENTER	PARTICIPANTS
03.07.20	TMD & its Management	Dept Of Orthodontics	15



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Participants (15)

Find a participant

- SM Sagaya Mary (Me)
- Gokul Raj (Host)
- varu
- AN Anitha Nallusamy
- Annamalai PR
- BG Baala Gopal
- B Baalagopal
- Joshua Stalin
- Navin N
- P priyadarshini
- Priyanga Ravi
- Saravankumar Subramanian
- Somya Wilson
- Sriman Vishnu

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Recording

You are viewing VARU's screen  
Remaining meeting time: 05:03

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Speaker View

Exit Full Screen

Determination of the appropriate **type of splint therapy depends on the specific diagnosis of the temporomandibular disorder and a thorough understanding of the anatomy of the condyle/disk complex**

**Muscle incoordination** is determined by muscle palpation, joint loading, range-of-motion measurements, joint palpation, occlusal evaluation, painful symptoms in the facial muscles, headaches, limited ranges of motion, frequent joint inflammation, and occlusal interferences to CR; infrequent clicking on jaw movement also may be present.

Reversible if caught in time and treated with bite plane therapy or permissive splint therapy in Phase I (reversible treatment) and with appropriate Phase II therapy (additive or subtractive occlusal therapy, restorative dentistry, orthodontics, maxillofacial surgery, and segmental alveolar surgery) to restore balance from/to the CR position

Gokul Raj

Sagaya Mary

Navin N

Somya Wilson

Yamini Jeyaraj

Sriman Vishnu

Saravankumar...

priyadarshini

Joshua Stalin

Baala Gopal

VARU

Priyanga Ravi

Prema Anbarasu

Nivethitha Bhas...

Annamalai PR

Anitha Nallusamy

Unmute

Start Video

Participants 16

Chat

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## ARTICULAR SURFACES

Mandibular Fossa  
Articular Tubercle  
Articular Disk  
Mandibular Head

Participants: 14 Chat Share Screen Record Reactions Leave

Participants in grid: Gokul Raj, Sagaya Mary, varu, Navin N, Yamini Jeyaraj, Somya Wilson, Saravanakumar..., Baala Gopal, Baalagopal, Joshua Stalin, Annamalai PR, priyadarshini, Priyangha Ravi, Anitha Nallusamy

Recording You are viewing varu's screen View Options Speaker View Exit Full Screen

### STABILIZATION SPLINT:

Stabilization splint is also known as the superior repositioning splint, the Tanner appliance, the Michigan splint, the Fox appliance or the centric relation appliance. The stabilization splint is a hard acrylic splint that provides a temporary and removable ideal occlusion.

Providing an ideal occlusion by the use of splint therapy reduces abnormal muscle activity and produces neuromuscular balance.

#### Stabilization splint

Provides centric relation occlusion,  
Eliminates posterior interference,  
Provides anterior guidance and  
Stable occlusal relationships with uniform tooth contacts throughout the dental arch.

Participants: 15 Chat Share Screen Record Reactions Leave

Participants in grid: Gokul Raj, Sagaya Mary, varu, Joshua Stalin, Somya Wilson, Navin N, Yamini Jeyaraj, priyadarshini, Priyangha Ravi, Anitha Nallusamy, Annamalai PR, Sriman Vishnu, Saravanakumar..., Baalagopal, Baala Gopal



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DATE	TOPIC	PRESENTER	PARTICIPANTS
04.07.20	ALT - RAMEC	Dept Of Orthodontics	15



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# Alternate Rapid Maxillary Expansion and Constriction (Alt-RAMEC) protocol

TEAM B-Dr.Navin

Participants (15)

Find a participant

Participant	Status
SM Sagaya Mary (Me)	Microphone: Off, Video: Off
BG Baala Gopal (Host)	Microphone: On, Video: Off
Gokul Raj	Microphone: On, Video: Off
AN Anitha Nallusamy	Microphone: Off, Video: Off
Annamalai PR	Microphone: Off, Video: Off
Dr. Varu	Microphone: Off, Video: Off
Joshua Stalin	Microphone: Off, Video: Off
Navin N	Microphone: Off, Video: Off
Prema Anbarasu	Microphone: Off, Video: Off
P priyadarshini	Microphone: Off, Video: Off
Priyanga Ravi	Microphone: Off, Video: Off
Saravanakumar Subramanian	Microphone: Off, Video: Off
Sriman Vishnu	Microphone: Off, Video: Off
SUSHMITHA RAM	Microphone: Off, Video: Off

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Slide 2 of 10 "Urban" 64%



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① [Recording] You are viewing Gokul Raj's screen View Options

**INTRODUCTION TO EXPANSION APPLIANCE**

- Arch expansion is a method of gaining space
- An apparently looks complex procedure but it is relatively simple procedure in orthodontics
- The correction of transverse maxillary deficiency can be an important component of an orthodontic treatment plan
- Expansion of appliance was first achieved by emerson c. Angell in 1860 since he explained numerous expansion appliances with various force levels and duration of treatment


Unmute Start Video 15 Participants Chat Share Screen Record Leave

① [Recording] You are viewing Gokul Raj's screen View Options

❖ For centuries, Class III malocclusions have attracted more attention than other problems in orthodontics.

❖ Even in Renaissance portraits and paintings, Class III malocclusions appear to be a significant feature.

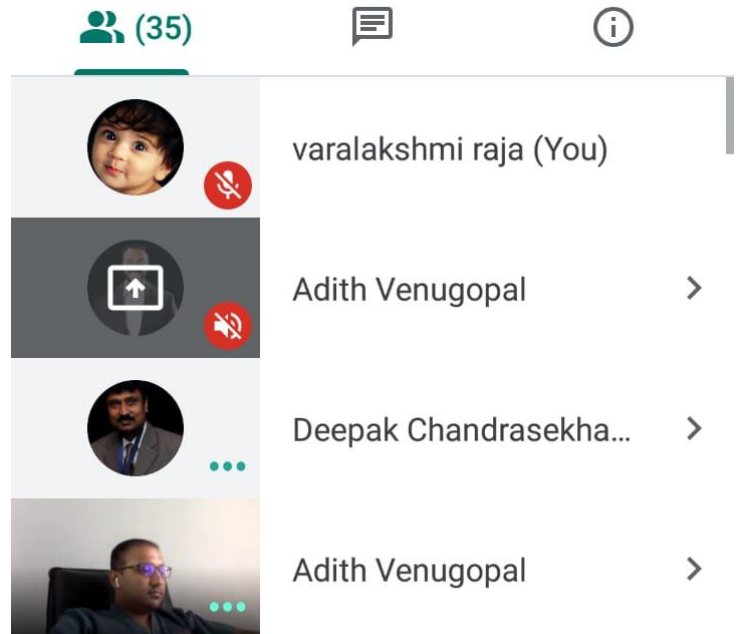
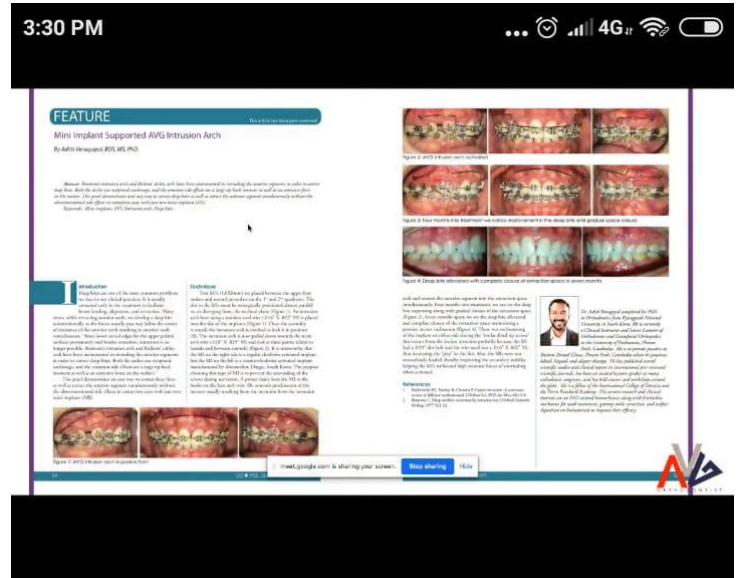
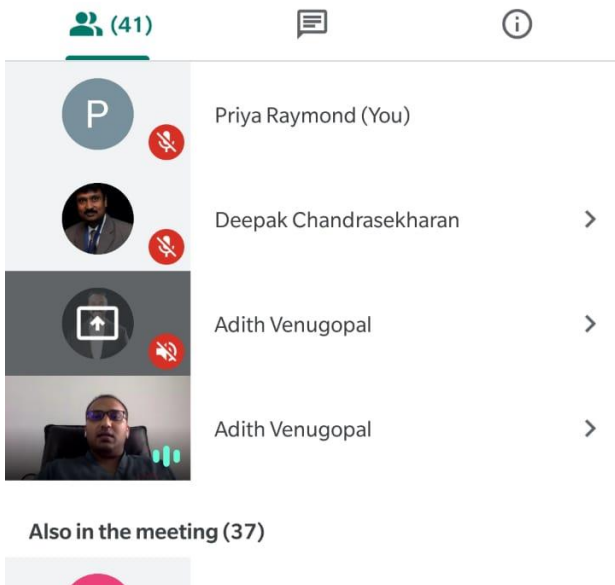
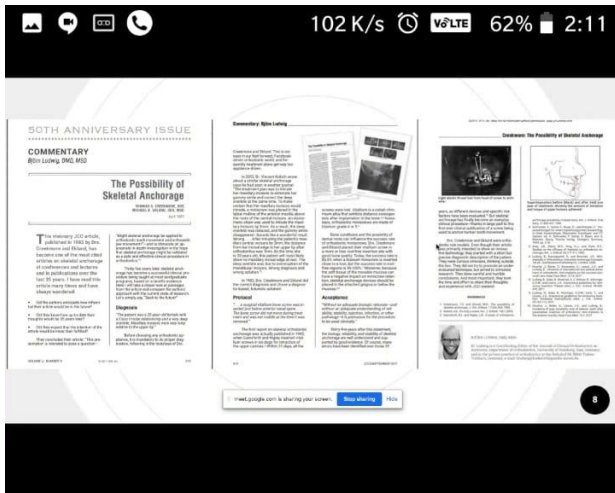
❖ These malocclusions, which are primarily etiologically caused by genetics, involve mandibular prognathism, maxillary retrognathism, or a combination of these two conditions



Unmute Start Video 15 Participants Chat Share Screen Record Leave



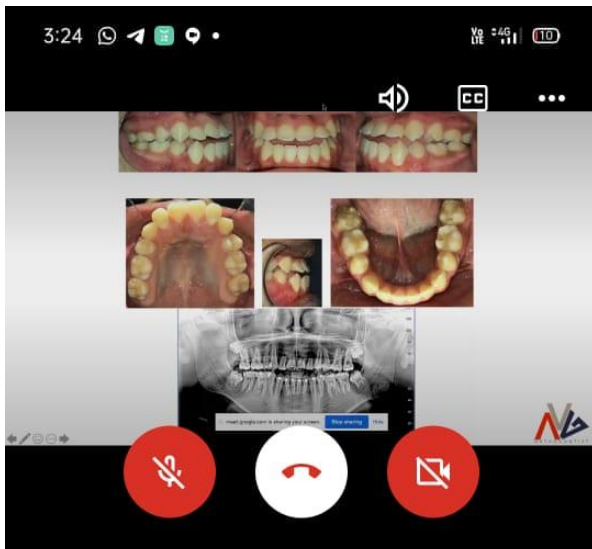
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- (34)
- naveen natarajan (You)
  - Adith Venugopal
  - Adith Venugopal
  - Subhiksha Chakkaravarthi

Also in the meeting (30)



## Maxillary molar vertical control with the use of transpalatal arches

John B. Wise, DDS,\* W. Bonham Magness, DDS,\* and John M. Powers, PhD\*  
Allen and Houston, Texas

These *p* values indicate that no statistical significance was observed for the regression analyses performed.

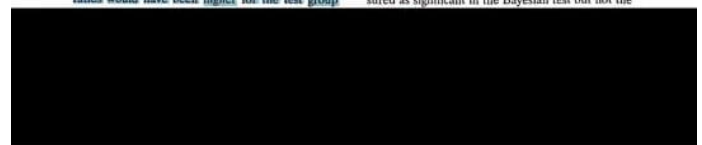
Table III summarizes the treatment procedures performed on the sample groups. Means and ranges of treatment times of different auxiliaries are reported, but no statistical analyses were performed to judge differences between groups.

### DISCUSSION

The pogonion and rotation ratios were attempts to quantify clinical significance as they relate to growth and treatment. If the upper molar had been held in place by the TPA, then it have theoretically grown more favorable. However, when one examines the condylar growth difference (measured as significant in the Bayesian test but not the

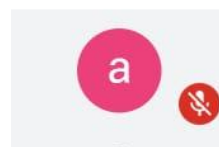
patients. The upper molar was held to 0.2 mm per year less eruption in the groups that wore TPAs, but this difference was not significant statistically. The pogonion and rotation ratios also showed a difference (with the control group having more favorable results), but again, these differences were not significant statistically.

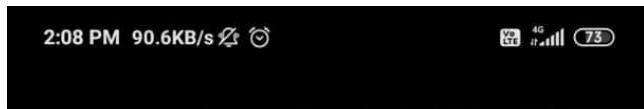
The difference of effective horizontal pogonion movement between groups (measured as significant in both the *t* test and the Bayesian test) was more favorable for the control group. This result is an unexpected one if the TPA is in fact helping to stimulate anterior-posterior growth as it inhibits



- (42)
- Anitha Nallusamy (You)
  - Adith Venugopal
  - shifin sainudeen
  - Adith Venugopal

Others in the meeting (38)



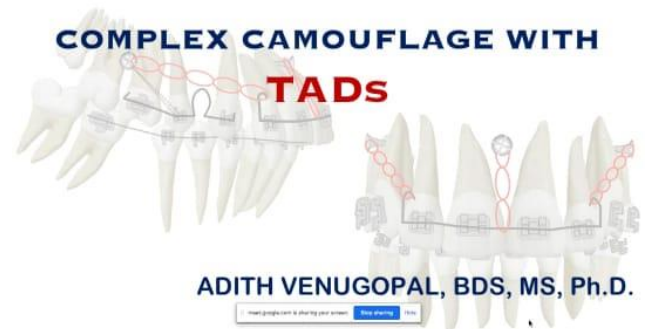


(40)



	Joshua Martin (You)	
	Adith Venugopal	>
	shifin sainudeen	>
	Adith Venugopal	>

Others in the meeting (36)



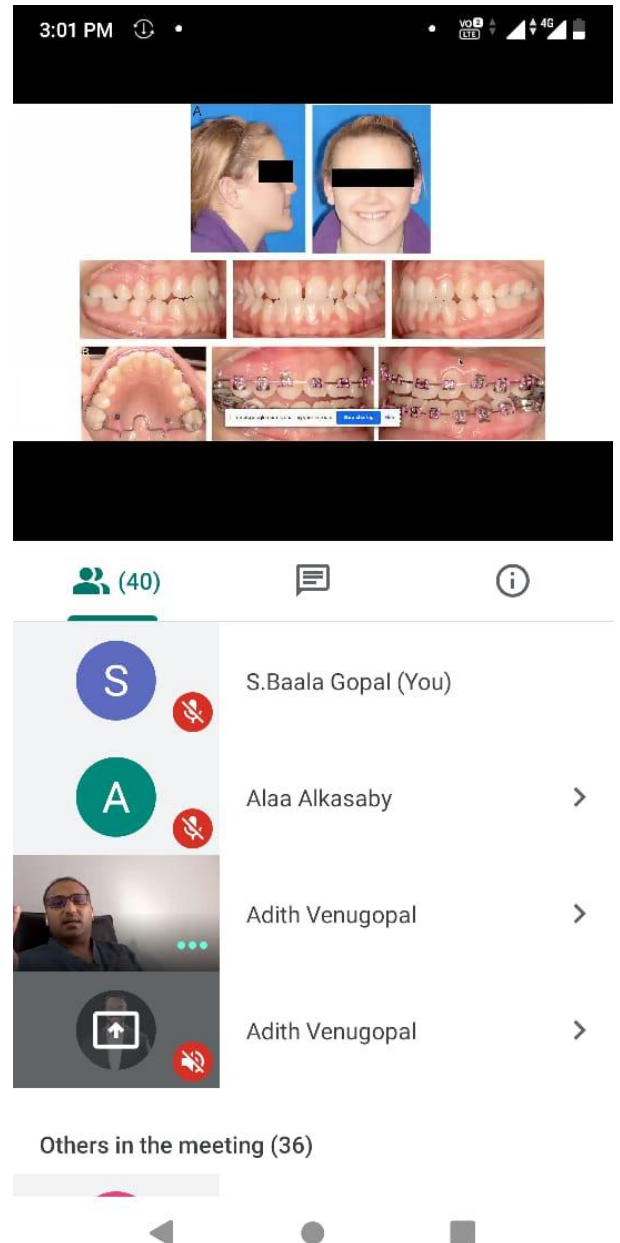
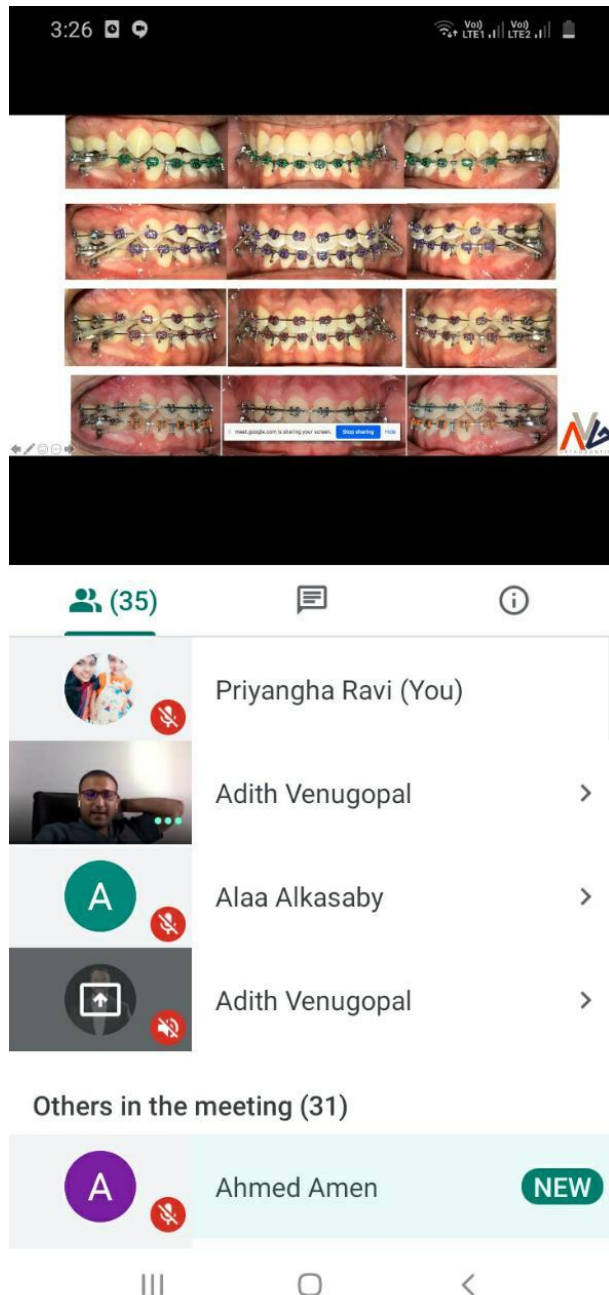
(34)



	Gokul Dpm (You)	
	Adith Venugopal	NEW
	Adith Venugopal	>
	Deepak Chandrasekharan	>

Others in the meeting (30)







DATE	TOPIC	PRESENTER	WEB LINK
29.06.2020	0.018 VS 0.022 SLOT  V & Step bend mechanics	Department of Orthodontics	<a href="https://drive.google.com/file/d/1jCCiq9df8Kl6WMBH-5qGvYMPwJgLC6bw/view?usp=sharing">https://drive.google.com/file/d/1jCCiq9df8Kl6WMBH-5qGvYMPwJgLC6bw/view?usp=sharing</a>  <a href="https://drive.google.com/file/d/1FHQINwt_tNjsEQtJeNppJoHnIR9G9j8Q/view?usp=sharing">https://drive.google.com/file/d/1FHQINwt_tNjsEQtJeNppJoHnIR9G9j8Q/view?usp=sharing</a>
30.06.2020	0.018 VS 0.022 SLOT  V & Step bend mechanics	Department of Orthodontics	<a href="https://drive.google.com/file/d/1WoxMEwyI_opxVk1sC77zFS7BABfxwfqP/view?usp=drivesdk">https://drive.google.com/file/d/1WoxMEwyI_opxVk1sC77zFS7BABfxwfqP/view?usp=drivesdk</a>  <a href="https://drive.google.com/file/d/1GTfWe3KviTh4cG2sp7QVhAZah1BxtjyX/view?usp=drivesdk">https://drive.google.com/file/d/1GTfWe3KviTh4cG2sp7QVhAZah1BxtjyX/view?usp=drivesdk</a>
01.07.2020	3D- THARAPEUTIC APPLICATION	Department of Orthodontics	<a href="https://drive.google.com/file/d/1TvijUaLcW8tNmz5K_1MbBRqDcK6bWcJE/view?usp=sharing">https://drive.google.com/file/d/1TvijUaLcW8tNmz5K_1MbBRqDcK6bWcJE/view?usp=sharing</a>  <a href="https://drive.google.com/file/d/1OkDP_rqBeAk3DiF9uhAsdj7hfGLhOn5p/view?usp=sharing">https://drive.google.com/file/d/1OkDP_rqBeAk3DiF9uhAsdj7hfGLhOn5p/view?usp=sharing</a>
02.07.2020	3D – DIAGNOSIS & TREATMENT PLANNING	Department of Orthodontics	<a href="https://drive.google.com/file/d/1M7tEaoEAaHjVeg3aUlwvVTdee61E7Kz/view?usp=drivesdk">https://drive.google.com/file/d/1M7tEaoEAaHjVeg3aUlwvVTdee61E7Kz/view?usp=drivesdk</a>  <a href="https://drive.google.com/file/d/1GSKSVaHIEWdFS8V86c7OAm7ty59WD3eJ/view?usp=drivesdk">https://drive.google.com/file/d/1GSKSVaHIEWdFS8V86c7OAm7ty59WD3eJ/view?usp=drivesdk</a>
03.07.2020	TMD & ITS MANAGMEN T	Department of Orthodontics	<a href="https://drive.google.com/file/d/1jZnldOgC5laCI3OkOKY610DQDzLGqK/view?usp=sharing">https://drive.google.com/file/d/1jZnldOgC5laCI3OkOKY610DQDzLGqK/view?usp=sharing</a>  <a href="https://drive.google.com/file/d/17a120mxM_3uT1zDM77Q5C7v7aum-Kdka/view?usp=sharing">https://drive.google.com/file/d/17a120mxM_3uT1zDM77Q5C7v7aum-Kdka/view?usp=sharing</a>  <a href="https://drive.google.com/file/d/15a2MnNcqrH1jB_Wq8ub-c2og1E95uSoM/view?usp=sharing">https://drive.google.com/file/d/15a2MnNcqrH1jB_Wq8ub-c2og1E95uSoM/view?usp=sharing</a>  <a href="https://drive.google.com/file/d/1GRSJv_1xjml1y7h7QWxmELqZ7yNpJhge/view?usp=sharing">https://drive.google.com/file/d/1GRSJv_1xjml1y7h7QWxmELqZ7yNpJhge/view?usp=sharing</a>
04.07.20	ALT RAMEC	Department of Orthodontics	<a href="https://drive.google.com/file/d/1517au30DGu6Ldo6N6Q6jMTTd2bTwVHba/view?usp=drivesdk">https://drive.google.com/file/d/1517au30DGu6Ldo6N6Q6jMTTd2bTwVHba/view?usp=drivesdk</a>  <a href="https://drive.google.com/file/d/1KSRTYwUeOXGNSZQcm9Jbu-VkfU1hVxH/view?usp=drivesdk">https://drive.google.com/file/d/1KSRTYwUeOXGNSZQcm9Jbu-VkfU1hVxH/view?usp=drivesdk</a>