



DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES
Shavige Malleswara Hills, Kumaraswamy Layout, Bengaluru

DSCDS/IRB/2022-23/04

Date: 17-04-2023

Time: 11.30AM to 12-30PM.

Venue: Board Room

Minutes of Meeting

An IRB meeting was conducted on 17 04 2023 at Board Room with Dr. Savita A M as member secretary who addressed the gathering. Discussions were held regarding the post graduate synopsis presentation details and submissions. The dates for the upcoming RDSC meet were discussed. The following members attended the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Savita A M	Professor & Head - Periodontics	Member Secretary
3.	Dr. Ramnarayan B K	Prof & Head - Oral Medicine & Radiology	Member
4.	Dr. Shobha ES	Prof & Head - Implantology	Member
5.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
6.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
7.	Dr. Avinash J	Professor & Head - Public Health Dentistry	Member
8.	Dr. Krishnanand PS	Prof & Head - Oral Pathology	Member
9.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
10.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
11.	Dr. Sunil S	Professor - Periodontics	Member
12.	Dr. Aravind M	Professor - Orthodontics	Member
13.	Dr. Gargi S Murthy	Reader - Pedodontics	Member
14.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
15.	Dr. Veena Paj S	Reader - Conservative Dentistry	Member

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16.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof – Physiology	Member
17.	Dr. Pallavi N	Senior Lecturer –	Member
18.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
19.	Dr. Preethi P	Senior Lecturer –Oral Medicine & Radiology	Member
20.	Dr. Brunda	Senior Lecturer – Prosthodontics	Member
21.	Dr. Suchitra M P	Senior Lecturer – Orthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer – Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer – Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. To create a submission performa for submission of PG/UG/Faculey synopsis
2. Plan the date for RDSC meet 2023
3. Allotment of duties for the upcoming RDSC

Action taken:

- The RDSC meet was decided to be conducted on the 4th and 5th May 2023
- Student/ faculty submission guidelines were mailed to the respective departments
- Circular regarding presentations were made and mailed in the common groups


Dr. Savita A M

Member Secretary
IRB-DSCDS


Dr. Hemanth M

Chairperson
IRB-DSCDS



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DSCDS/IRB/2022-23/05

Date: Time: 12.00PM to 12.30PM.

Venue: Board Room

Minutes of Meeting

An IRB meeting was conducted on 28/04/2023 at Board Room with Dr. Savita A M as member secretary who addressed the gathering. Roles and duties were assigned for the upcoming RDSC meet scheduled on 4th and 5th of May 2023. The dates for the upcoming IEC meet were discussed. The following members attended the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Savita AM	Prof & Head - Periodontology	Member Secretary
3.	Dr. Ramnarayan B K	Prof & Head - Oral Medicine & Radiology	Member
4.	Dr. Shobha ES	Prof & Head - Implantology	Member
5.	Dr. Prashanth M T	Prof & Head - Oral & Maxillofacial Surgery	Member
6.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
7.	Dr. Avinash J	Professor & Head - Public Health Dentistry	Member
8.	Dr. Krishnanand PS	Prof & Head - Oral Pathology	Member
9.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
10.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
11.	Dr. Sunil S	Professor - Periodontics	Member
12.	Dr. Aravind M	Professor - Orthodontics	Member
13.	Dr. Gargi S Murthy	Reader - Pedodontics	Member
14.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
15.	Dr. Veena Pal S	Reader - Conservative Dentistry	Member
16.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof - Physiology	Member
17.	Dr. Pallavi M	Senior Lecturer -	Member

H. M.
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18.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
19.	Dr. Preeti P	Senior Lecturer –Oral Medicine & Radiology	Member
20.	Dr. Brunda	Senior Lecturer – Prosthodontics	Member
21.	Dr. Suchitra M P	Senior Lecturer – Orthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer – Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer – Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. To discuss further details about the upcoming RDSC meet scheduled on 4th and 5th May 2023
2. To plan the Institutional Ethical meet

Action taken:

- Individual duties assigned for the RDSC meet 2023
- IEC meet tentatively to be held on 22nd May 2023


Dr. Savita AM
Member Secretary
IRB-DSCDS


Dr. Hemant M
Chairperson
IRB-DSCDS





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DSCDS/IRB/2022-23/06

Date: 04/05/2023 and 05/05/2023

Time: 09:00 AM - 04:00 PM

Venue: Seminar Hall, Department of Orthodontics, 5th Floor

Minutes of Meeting

An IRB meeting was conducted on 04/05/2023 and 05/05/2023 at Seminar Hall, Department of Orthodontics, fifth floor with Dr. Savita AM as member secretary. The meeting was addressed by Dr. Hemanth M, Principal and chairperson RDSC. The post graduate students from all departments presented the synopsis to the committee. The expert's comments and suggestions were noted after the synopsis evaluation and mailed to the respective guides and departments for corrections. The following members attended the meet.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr Savita A M	Prof & Head Periodontics	Member Secretary
3.	Dr. Gangabaraiah	Research Head	Member
4.	Dr. Ravi Shirahatti	Research Methodologist - Public Health Dentistry	Member
5.	Dr. Ramnarayan B K	Internal Subject Expert- Oral Medicine and Radiology	Member
6.	Dr. Mahesh D R	Internal Subject Expert- Oral Medicine and Radiology	Member
7.	Dr. Bafaji	Oral Medicine and Radiology- External Subject Expert	Member
8.	Dr Avinash J	Public Health Dentistry- Internal Subject Expert	Member
9.	Dr Smitha Kulkarni	Public Health Dentistry- Internal Subject Expert	Member
10.	Dr. Rekha .R	Public Health Dentistry- External Subject Expert	Member
11.	Dr Prashanth N T	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
12.	Dr Shobha E S	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
13.	Dr. Rajnikanth B.R	Oral And Maxillofacial Surgery- External Subject Expert	Member
14.	Dr Vedavathi B	Conservative Dentistry- Internal Subject Expert	Member
15.	Dr Dharam H	Conservative Dentistry- Internal Subject Expert	Member
16.	Dr. Gautham S	Conservative Dentistry- External Subject Expert	Member
17.	Dr Sarandha D L	Prosthodontics- Internal Subject Expert	Member


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18.	Dr. Smitha Sharan	Prosthodontics- Internal Subject Expert	Member
19.	Dr. Girish	Prosthodontics- External Subject Expert	Member
20.	Dr. Sunil S	Periodontics- Internal Subject Expert	Member
21.	Dr. Shivaprasad B.M	Periodontics-External Subject Expert	Member
22.	Dr. Aravind M	Orthodontics- Internal Subject Expert	Member
23.	Dr. Prashanth C.S	Orthodontics- External Subject Expert	Member
24.	Dr. Krishnanand P S	Oral Pathology- Internal Subject Expert	Member
25.	Dr. Gargi	Pedodontics - Internal Subject Expert	Member
26.	Dr. Kavitha M	Pedodontics - Internal Subject Expert	Member
27.	Dr. A. Anantharaj	Pedodontics - External Subject Expert	Member
28.	Dr. Suchitra M P	Senior Lecturer – Orthodontics	Member
29.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
30.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
31.	Dr. Deepthi	Senior Lecturer –Conservative Dentistry	Member
32.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
33.	Dr. Savani	Senior Lecturer –Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. 18 post graduate synopsis presentations were done during the RDSC meet
2. The comments/ suggestions from the external experts, research head and the internal experts were noted

Action taken:

- The experts suggestions and corrections were mailed to the respective students and guides for resubmission
- The IEC meet was planned to be held tentatively on 22nd May 2023


Dr. Savita A M
Member Secretary
IRB-DSCDS


Dr. Hemanth M
Chairperson
IRB-DSCDS


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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
04-05-2023 & 06-05-2023

			Dentofacial Orthopedics	Different Age Groups- A Cone-Beam Computed Tomography Study"
12.	Dr. Aparna	Dr. Aravind M	Orthodontics And Dentofacial Orthopedics	Assessment Of Change In Mandibular Bony Trabecular Structure In Individuals Subjected To Fixed And Removable Functional Appliances Using Fractal Dimension Analysis.
13.	Dr. Shyama Pramod	Dr. Aravind M	Orthodontics And Dentofacial Orthopedics	Assessment Of Safe Zones For Buccal Shelf Screw Placement On Mandibular Buccal Shelf Area In Various Age Groups - A Cone Beam Computed Tomography Study.
14.	Dr. Disha Shah	Dr. Ramnarayan B K	Oral Medicine And Radiology.	Developing And Validating An Artificial Intelligence Algorithm For Localization Of Inferior Alveolar Nerve Canal In Cbct Scans.
15.	Dr. Sahin Sahafam Mollick	Dr. Savita A M	Periodontology	Assessment Of Correlation Of Red Complex Bacteria In Saliva And Gingival Crevicular Fluid(Gcf) Using Multiplex Real Time - Polymerase Chain Reaction(Rt-PCR) In Subjects With Periodontitis.
16.	Dr. Bindu D.R	Dr. Archana R Nair	Periodontology	Comparative Evaluation Of Two Minimally Invasive Techniques For The Treatment Of Interdental Papillary Reconstruction Using Injectable Pct And 5% Hyaluronic Acid Gel - A Randomized Controlled Clinical Trial
17.	Dr. J. Shirisha	Dr. Prashanth N.T.	Oral And Maxillofacial Surgery	Developing And Validating An Artificial Intelligence Algorithm For Planning Optimum Implant Diameter And Length- A Descriptive Study
18.	Dr. Anusha S L	Dr. Shobha E S	Oral And Maxillofacial Surgery	Assessment Of Topography Of Variation In Lingual Cortical Plate Thickness In Mesioangular And Horizontally Impacted Mandibular Third Molars Using Cone Beam Computed Tomography In Bengaluru Population - An Observational Study.
19.	Thejas	Dr Vidhya M A	Third Bds	Evaluation Of The Oral Microbiome In Gutka Users In Bangalore.
20.	Meghana Gaonkar	Dr Varadha Hiremath	Third Bds	Comparative Evaluation Of Cuspal Deflection In Class I Cavities In Premolars Restored With Two Novel Bioactive Restorative Materials - Activa Bioactive Restorative And Activa Pronto: An Invitro Study
21.	Monisha Y	Dr Smitha Sharan	Third Bds	Comparative Evaluation Of Shear Bond Strength Between Highly Cross-Linked Denture Teeth With Different High Impact Denture Base Resins. An Invitro Study.

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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
04-05-2023 & 06-05-2023

Sr No	Student Name	Guide	Department	Title
1.	Dr. Syeda Noor Ayesha N	Dr. Smitha Sharan	Prosthodontics Including Crown And Bridge	"Comparative Evaluation Of Dimensional Accuracy Of Four Different Implant Impression Materials On The Master Cast - An In Vitro Study"
2.	Dr. Diksha. B. T	Dr. Sarandha D L	Prosthodontics Including Crown And Bridge	"Comparative Evaluation Of Flexural & Impact Strength Of Two Maxillofacial Silicone Materials Silocrest Liquid Silicone Rubber(Lsr) With & Without Addition Of Pristine Graphene Flakes & Technovent(M511)- An Invitro Study"
3.	Dr. Priyanka H Hadlmani	Dr. Varadha Hiremath	Conservative Dentistry And Endodontics	A Spectrophotometric Analysis Of The Color Changing Ability Of Hydrogen Peroxide, Kiwi Fruit And Banana Peel Extracts - An Invitro Study
4.	Dr Nischitha A	Dr. Vedavathi B	Conservative Dentistry And Endodontics	Fracture Resistance Of Grossly Destroyed Mandibular Second Molars Restored With One Or Two Intraradicular Fibreposts-An Invitro Study.
5.	Dr Martin Joseph	Dr. Ranjini M A	Conservative Dentistry And Endodontics	Comparative Evaluation Of Microleakage In Class II Cavities Restored With Injection Moulding Technique Using Flowable Or Preheated Packable Bulk Fill Composite Resin As Gingival Increment By Dye Extraction Method - An invitro Concurrent Parallel Trial
6.	Dr. Harsh Shrey	Dr. Varadha Hiremath	Conservative Dentistry And Endodontics	Comparative Evaluation Of Smear Layer Removal Efficacy Of Three Different Intra- Canal Chelating Agents Using Scanning Electron Microscope- An In-Vitro Study
7.	Dr. Amreen Firdose	Dr. Ashok H K	Conservative Dentistry And Endodontics	Effect Of Premedication With Ibuprofen On Pain Perception In Patients During Root Canal procedure With Symptomatic Irreversible Pulpitis With Apical Periodontitis- A Randomized Clinical Trial.
8.	Dr. Raagul. K	Dr. Vedavathi B	Conservative Dentistry And Endodontics	Stress Distribution In Grossly Destroyed Mandibular 2 Nd Molars Restored With One Or Two Fibre Posts - A Finite Element Analysis.
9.	Dr. Abdul Naisam	Dr. Hemanth M	Orthodontics And Dentofacial Orthopedics	Identification And Quantitative Assessment Of Microplastic Detachment From Clear Aligners Made From Synthetic Polymers In Artificial Saliva With Different Increment Of Exposure - A Scanning Electron Microscopic Study.
10.	Dr. Rakshitha R	Dr. Hemanth M	Orthodontics And Dentofacial Orthopedics	Comparative Assessment Of The Stages Of Midpalatal Suture Maturation And Circum-Maxillary Suture Maturation- A Cone Beam Computed Tomography Study
11.	Dr. Ishani Biswas	Dr. Ramesh B	Orthodontics And	"Comparative Evaluation Of Thickness Of Infra-Zygomatic Crest For Bone- Screw Placement In

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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
04-05-2023 & 06-05-2023

22.	Yashika S Shinde	Dr Sangeetha R	Third Bds	Comparison Of Staining Efficacy Of Terminalia Chebula On The Ground Section Of Tooth And Bone With That Of Unstained Ground Section
23.	Bhavana B A	Dr Kavitha M	Third Bds	To Assess The Knowledge, Attitude, And Awareness Of Bruxism In Parents Of Children From 6 To 15 Years.
FACULTY PROPOSALS				
24.	Dr Sangeetha R	Oral Pathology And Microbiology		Effectiveness Of Structured Teaching Programme On Knowledge And Skills Pertaining To The Use Of Personal Protective Equipment Among Students In A Dental Institution In Bengaluru City- A Randomised Controlled Trial
25.	Dr Vidya M A	Oral Pathology And Microbiology		Molecular Vibrational Spectral Signatures Of Normal, Precancer Cancerous And Cancerous Oral Epithelial Tissues Coupled With Chemo Metrics Aided Differentiation
26.	Dr Smitha Sharan	Prosthodontics Including Crown And Bridge		Comparative Evaluation Of Trueness And Precision Of Five Intraoral Scanners In The Full-Arch Digital Implant Impression In Reproducing Multiple Implant Position With Scan Bodies: An In Vitro Study.
27.	Dr. Archana R Naik And Dr. Koduru Sravan	Periodontology		Comparative Evaluation Of Efficacy Of Lactoferrin- Multivitamin Combination Dentifrice With Triclosan-Zinc Citrate Dentifrice On Women Population In The Clinical Management Of Gingivitis: A Randomized Controlled Trial.


Dr. Savita A M

Member Secretary

IRB-DSCDS
Member Secretary

Institutional Committee
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Institutional Review Board

Research Development and Sustenance Committee Meeting 04-05-2023 & 05-05-2023

Reviewers' comments

Sl No	Name of the Presenter	Department	Title	Comments
1.	Dr. Amreen.	Conservative		Why ibuprofen? Randomization Clarity? Individuals/group/place as arbitrary method. Best method - individual randomization. Consent statement Mention volunteers in informed consent Randomized parallel comparison - open label trial CTRI registration (Submission) H1 - There may be a difference in pain No - there may be no difference Aim - assess instead of evaluate 3rd objective - need? mention placebo specifying placebo study design Randomized, parallel open labelled trial consent in inclusion criteria.

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Dr. Rani Shanthi
(online)

Approved
4/5/23

Revised
4/5

Restricting.

Signature

Signature



Gmail

in: sent



Comments from external experts - RDSC



Institutional Review Board, hr@qdsdc.edu.in

To,
Head of the Department
Dept. of Conservative Dentistry and Endodontics

Dear sir/Madam,

Hereby attaching the comments given by external experts to the synopsis presented in the RDSC meeting. Kindly do

Regards,
Team IRB

One attachment • Scanned by Gmail

docs of conservatism

Reply

Forward

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Rajiv Gandhi University of Health Sciences, Bangalore

2021-2022

Karnataka

M.D.S Conservative Dentistry and Endodontics

Synopsis for Registration of Dissertation

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SCIENCES

S.M. HILLS, K.S. LAYOUT, BANGALORE 560078

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**RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES,
BENGALURU, KARNATAKA.**

**PERFORMA FOR REGISTRATION OF SUBJECT FOR
DISSERTATION**

1	NAME OF THE CANDIDATE AND ADDRESS	Dr. AMREEN FIRDOSE POST GRADUATE STUDENT DEPARTMENT OF CONSERVATIVE DENTISTRY AND ENDODONTICS, DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES, KUMARSWAMY LAYOUT, BENGALURU-560078 KARNATAKA
2	NAME OF THE INSTITUTE	DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES . BANGALORE-560078 KARNATAKA.
3	COURSE OF STUDY AND SUBJECT	MASTER OF DENTAL SURGERY CONSERVATIVE DENTISTRY AND ENDODONTICS
4	DATE OF ADMISSION TO COURSE	25-11-2022
5	TITLE OF THE TOPIC	EFFECT OF PREMEDICATION WITH IBUPROFEN ON PAIN PERCEPTION IN PATIENTS DURING ROOT CANAL PROCEDURE WITH SYMPTOMATIC IRREVERSIBLE PULPITIS WITH APICAL PERIODONTITIS. A RANDOMIZED CLINICAL TRIAL.


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6. BRIEF RESUME OF THE INTENDED WORK

6.1 Need for the study:

Endodontic treatment is usually associated with pain. Managing the pain is fundamental for successful endodontic treatment.

Problem statement:

Most dental visits are intended for immediate relief of pain.¹ Pain during the root canal procedure is common, although the use of local anesthetic will reduce and lower the threshold of pain. Some patients experience pain even after successful nerve block and require supplemental nerve block.² In Endodontics, an important facet is pain control.³ Preoperative single oral dose of anti-inflammatory drugs can regulate the release of inflammatory mediators and reduce the amount of side effects compared with repeated doses of local anesthesia during the procedure.

Ibuprofen is an oral, non steroidal anti-inflammatory drug. The efficacy of ibuprofen results from its ability to competitively inhibit both cyclo-oxygenase (COX) isoforms COX-1 and COX-2.¹³

There are a number of studies performed for evaluation of the use of nonsteroidal anti-inflammatory drugs (NSAIDs) for the purpose of pain management on post-endodontic pain. Exploration of available literature to the best of our knowledge and found no study to evaluate pain perception during the procedure. Hence this study aims to evaluate, clinically, the effectiveness of pre-medication with single oral dose of ibuprofen on pain perception in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.


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Research Question:

Is there a difference in pain perception with premedication of Ibuprofen in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis?

Research Hypothesis:

There may be a difference in pain perception with premedication of Ibuprofen in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.

Null Hypothesis

There may be no difference in pain perception with premedication of Ibuprofen in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.


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6.2 Review of the literature:

1. A study was done to check inter individual genetic variation in analgesic response to cyclooxygenase inhibitory drugs. The results showed that ibuprofen inhibits both COX1 and COX2. It reduces expression of prostaglandins and therefore may help in reduction of pain perception. ¹

2. A study was conducted to investigate the effect of preoperative ibuprofen (800mg) on PGE2 levels in patients undergoing periodontal surgery. Patients who were undergoing surgery in two contralateral quadrants were given ibuprofen (800mg) 60 minutes before one surgery and placebo for the other. They found that mean tissue levels of PGE2 given in the ibuprofen group were significantly suppressed, exhibiting more than 95% reduction. One might conclude that since ibuprofen reduces the amount of prostaglandins there might be an increase in effectiveness of local anesthesia. ²

3. A randomized controlled clinical trial was done to compare the effect of ibuprofen and photomodulation on post operative pain after endodontic treatment. The results showed that Ibuprofen was responsible for reducing postoperative endodontic pain. ³

4. A study was done to demonstrate efficacy of pain control following non-surgical root canal treatment using ibuprofen or a combination of ibuprofen and acetaminophen in a randomized, double-blind, placebo study. The results showed that there was significant pain reduction in the ibuprofen group. ⁴


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6.3 AIM

To assess the pain perception with premedication of Ibuprofen and Placebo in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.

6.4 OBJECTIVES OF THE STUDY:

1. To assess pain perception with premedication of Ibuprofen in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.
2. To assess pain perception with premedication of Placebo in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.
3. To compare the pain perception with premedication of Ibuprofen and Placebo in patients during root canal procedure with symptomatic irreversible pulpitis with apical periodontitis.
4. To compare gender distribution for pain perception.

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7. MATERIALS AND METHOD:

7.1. Source of Data:

60 subjects aged 18 to 60 years, both male and female diagnosed with symptomatic irreversible pulpitis with apical periodontitis of mandibular molars will be randomly selected from Department of Conservative Dentistry and Endodontics, Dayananda Sagar College of Dental Sciences, Bangalore.

Study Design: Randomized comparative parallel double blinded study design.

Duration of the study: 18 months.

Specimen size determination:

The total specimen size is 60 with 30 in each group.

Analysis: A priori: Compute required sample size.

Input: Tail(s) = Two

Effect size $d = 0.80$ [Christopher et al, 2011]

α err prob = 0.05

Power $(1 - \beta \text{ err prob}) = 0.80$

Allocation ratio $N2/N1 = 1$

Output: Noncentrality parameter $\delta = 2.8844410$

Critical $t = 2.0085591$

Df = 50

Sample size group 1 = 26

Sample size group 2 = 26

Total sample size = 52

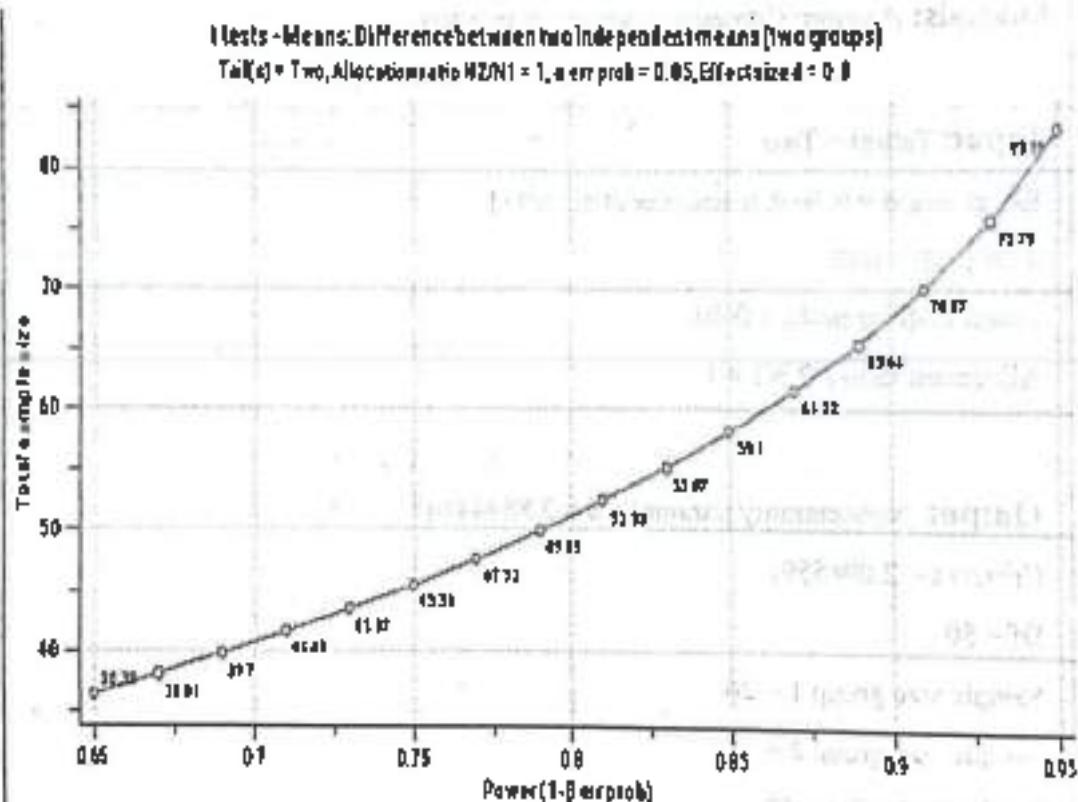
Actual power = 0.8074866

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The sample size for the present study was estimated using GPower software (latest ver. 3.1.9.7; Heinrich-Heine-Universität Düsseldorf, Düsseldorf, Germany).

The sample size estimation was performed at 5% alpha error ($\alpha = 0.05$), with an effect size of 80% [Based on the findings of the previous literature by Christopher et al, 2011 anticipating a mean differences in VAS scores between 2 groups] & the power of the study at 80%, demonstrated that a minimum of 52 subjects will be needed for the present study, which will be rounded off to 60 subjects. So, each group will consist of 30 samples.

POWER ANALYSIS CURVE



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7.2 Criteria for Specimen Selection:

The data collected for this study is subject to the inclusion/exclusion criteria using the CRF (case record form) specially developed for the study.

Inclusion criteria:

- All subjects who volunteer to participate with informed written consent and require non-surgical endodontic therapy with symptomatic irreversible pulpitis with apical periodontitis.
- Age 18 to 60 years.

Exclusion criteria:

- Subjects who have taken analgesic or anti-inflammatory drugs within 24 hours of initiation of root canal treatment.
- Subjects with known allergy to NSAIDs.
- Pregnant subjects.
- Immune-compromised subjects.
- Subjects with occlusal disorders.
- Periodontitis.
- Subjects with following systemic disorders:
 - 1) Asthma and severe bronchospasm.
 - 2) Active GI diseases.
 - 3) Renal diseases.
 - 4) Hepatic diseases.

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Materials required:

- Subjects matching inclusion criteria.
- Endo-Frost; Coltene- Whaledent, Langenau, Germany
- Ibuprofen 400mg
- Placebo- Starch tablets
- 2% lidocaine HCl (LA)
- Visual Analog Scale (VAS)
- High speed handpiece (NSK Japan)
- Endo-access burs
- Endodontic hand files
- Root ZX (J Morita Corp, Tokyo, Japan)
- 0.9% Normal saline
- Protaper rotary files (Dentsply Maillefer)
- 3% Hypochlorite solution
- 17% EDTA
- R C Cal (Prime Dental Products pvt. Ltd)



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METHODOLOGY

Subjects diagnosed with symptomatic irreversible pulpitis with apical periodontitis will be selected. The diagnosis will be confirmed by a cold test performed with cold spray (Endo-Frost; Coltene- Whaledent Langenau, Germany) applied on the occlusal surface of the tooth for 5 seconds with the aid of a cotton swab. If the result is positive, the subject will experience pain and if upon removal of the stimulus the discomfort will linger, the tooth will be eligible for the study. A periapical radiograph will be used to assess the periapical status of teeth. Radiograph with widening of lamina dura without any periapical lesion will be included in the study. All subjects will receive a detailed description of proposed treatment and informed written consent will be taken from the subjects participating in the study. Detailed patient case history including the following information will be recorded : age and gender of subjects, pulp and periapical status, preoperative pain status will be recorded. Pre-operative pain is an important factor that can influence the outcome of the study, and it will be measured using VAS to compose the baseline data. Subjects will be instructed to use a VAS and will be asked to mark the highest level of pre- operative pain they experience. VAS is a horizontal line, 10 cm in length. The numerical values of the pain levels will then be converted to verbal scale of mild , moderate , severe, intense, and unbearable pain. Only subjects with a VAS score more than 3 will be included in the study.

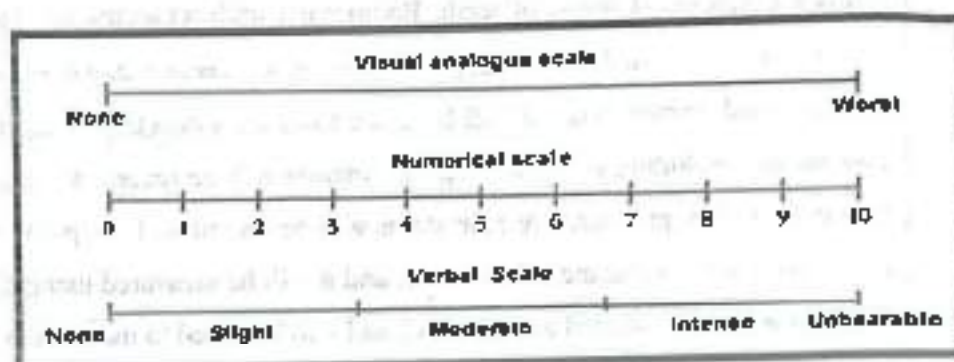
Randomisation: A total of 60 subjects will be randomly allocated in two groups containing 30 each. Computer generated random sequence allocation will be obtained to randomize the subjects. A coin is tossed to allocate the subjects to study and control groups respectively. The sequence will be preserved by a 3rd person. Whenever an eligible subject walks into the department the opaque envelope on top is opened and based on the number present in the envelope the subject will be allocated to the respective group by the 3rd person. Hence randomized double blinded allocation is done.

The medications will be administered 30 minutes before beginning the endodontic treatment. Subjects in group 1 will be administered Ibuprofen and subjects in group 2 with placebo- starch tablets. Each subject will be given an inferior alveolar nerve block with a 1.8ml solution of 2% lidocaine HCl with 1:80,000 epinephrine. After onset of action of anesthesia access opening with occlusal reduction will be done. Working length will be determined by both radiograph and apex locator using a 10 K-File, and


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subsequently, the canals will be cleaned and shaped. Copious irrigation with 0.9% normal saline and 3% hypochlorite will be used between each file throughout the entire procedure. After instrumentation is completed, intracanal medicament will be placed and the access opening will be closed.

Subjects will again be asked to mark the highest level of pain they experience during treatment. If any subject experiences intense pain during any stage of the procedure supplemental nerve blocks will then be administered until a pain-free procedure is achieved. The amount of supplemental nerve block administered will be documented along with the case sheet report.




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 Bangalore - 560 078

STATISTICAL ANALYSIS

Statistical Package for Social Sciences [SPSS] for Windows Version 22.0 Released 2013. Armonk, NY IBM Corp., will be used to perform statistical analyses.

Descriptive Statistics:

The data collected for this study will be analyzed as follows:

- a. All categorical variables will be presented in the form of frequency tables along with percentages.
- b. The qualitative variable is summarized as mean and standard deviation or median/ interquartile range.
- c. The estimates will be presented by 95% confidence interval.
- d. The results will be presented graphically.

Inferential Statistics:

Independent Student T test / Mann Whitney Test [Based on Data Distribution] will be used to compare the mean VAS scores between 2 groups before and during the RCT procedure.

Paired t test / Wilcoxon Signed Rank [Based on Data Distribution] test will be used to compare the mean VAS scores between before and after the RCT procedure in each group.

Z test will be used to compare the gender distribution between 2 groups.

The level of significance will be set at $P < 0.05$.

And any other relevant test, if found appropriate during the time of data analysis will be dealt accordingly.

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7.3 Does the study require any investigation or intervention to be conducted on patients or other humans or animals? If so, please describe briefly.

Yes, this is a randomized clinical trial study. The study will be done on human subjects. The subjects participating in this study will be given ibuprofen oral dose and placebo and informed consent will be taken (Annexure III). Consent of the subjects for the intended research would be obtained using an informed consent letter which is enclosed as Annexure III.

7.4 Has ethical clearance been obtained from your institution in case of 7.3?

Permission from the institutional ethical committee is awaited.

20.07.2016


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8. REFERENCES

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ANNEXURE III

DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES ,KUMARASWAMY LAYOUT
BENGALURU-560078,KARNATAKA

INFORMED CONSENT FORM

**EFFECT OF PREMEDICATION WITH IBUPROFEN ON PAIN PERCEPTION IN
PATIENTS WITH SYMPTOMATIC IRREVERSIBLE PULPITIS WITH APICAL
PERIODONTITIS DURING ROOT CANAL PROCEDURE- A RANDOMIZED
CLINICAL TRIAL.**

I, _____ the undersigned, give my consent for the dental treatment /investigation to be performed on myself under local anesthesia deemed suitable. I have been explained about the procedure and the risks involved in the treatment in a language I can understand. I am willing to participate voluntarily in the study for research and publication purposes. I have been assured that the confidentiality will be maintained. Hence I give my consent to participate in the study.

Witness's signature	Researcher's signature	Participant's signature

Researcher's name: Dr. Amreen Firdose

Address-Dayananda Sagar College of Dental Sciences

Shavige Malleshwara Hills, Kumaraswamy Layout, Bangalore-560078

Phone No- 9380863597

For any queries or problems pertaining to this research, the following people may be contacted.

Dr. Chandrashekhar Janakiram (Review Board Member)

Dr. Hemanth .M -9845459666


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ಅನುಬಂಧ III

ದಯಾನಂದ ಸಾಗರ್ ಕಾಲೇಜ್ ಆಫ್ ಡೆಂಟಲ್ ಸೈನ್ಸಸ್, ಕುಮಾರಸ್ವಾಮಿ ಲೇಔಟ್
ಬೆಂಗಳೂರು-೫೬೦೦೭೮, ಕರ್ನಾಟಕ

ಮಾಹಿತಿ ನೀಡಿದ ಒಪ್ಪಿಗೆ ನಮೂನೆ

ಅಪಿಕಲ್ ಅವರ್ತಕ ಉರಿಯೂತದೊಂದಿಗೆ ರೋಗಾಲಕ್ಷಣದ ಬದಲಾಯಿಸಲಾಗದೆ ಪರ್ಟಿಸಿಸೊಂದಿಗೆ ಮೂಲ ಕಾಯವೆ
ಕಾರ್ಯವಿಧಾನದ ಸಮಯದಲ್ಲಿ ರೋಗಿಗಳಲ್ಲಿ ನೋವು ಗ್ರಹಿಕೆಯ ಮೇಲೆ ಐಬುಪ್ರೊಫೇನ್‌ನೊಂದಿಗೆ ಪೂರ್ವಭಾವಿ
ಪರಿಣಾಮ- ಯಾದೃಚ್ಛಿಕ ಸ್ಪಿರಿಟ್ ಅಧ್ಯಯನ

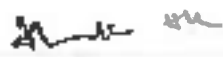
ಕೆಳಗೆ ನಹಿ ಮಾಡಿರುವ ನಾನು, _____ ಸೂಕ್ತವೆಂದು ಪರಿಗಣಿಸಲಾದ ಸ್ಥಳೀಯ ಅರಿವಳಿಕೆ
ಅಡಿಯಲ್ಲಿ ನನ್ನ ಮೇಲೆ ದಂತ ಚಿಕಿತ್ಸೆ / ತನಿಖೆ ನಡೆಸಲು ನನ್ನ ಒಪ್ಪಿಗೆಯನ್ನು ನೀಡುತ್ತೇನೆ. ನನಗೆ ಅರ್ಥವಾಗುವ
ಭಾಷೆಯಲ್ಲಿ ಚಿಕಿತ್ಸೆಯಲ್ಲಿ ಒಳಗೊಂಡಿರುವ ಕಾರ್ಯವಿಧಾನ ಮತ್ತು ಅಪಾಯಗಳ ಬಗ್ಗೆ ನನಗೆ ವಿವರಿಸಲಾಗಿದೆ.
ಸಂಶೋಧನೆ ಮತ್ತು ಪ್ರಕಟಣೆ ಉದ್ದೇಶಗಳಿಗಾಗಿ ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಸಿದ್ಧನಿದ್ದೇನೆ. ಗೌಪ್ಯತೆಯನ್ನು
ಕಾಪಾಡುವುದಾಗಿ ಭರವಸೆ ನೀಡಿದ್ದಾರೆ. ಅದ್ದರಿಂದ ನಾನು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನನ್ನ ಒಪ್ಪಿಗೆಯನ್ನು
ನೀಡುತ್ತೇನೆ.

ನಾಕ್ಷಿ ನಹಿ	ಸಂಶೋಧಕರ ನಹಿ	ಭಾಗವಹಿಸುವವರ ನಹಿ

ಸಂಶೋಧಕರ ಹೆಸರು: ಡಾ.ಅಮರೀನ್ ಡಿಡೋನ್
ವಿಳಾಸ-ದಯಾನಂದ ಸಾಗರ್ ಕಾಲೇಜ್ ಆಫ್ ಡೆಂಟಲ್ ಸೈನ್ಸಸ್
ಶ್ಯಾವಿಗೆ ಮಲ್ಲೇಶ್ವರ ಬೆಟ್ಟಗಳು, ಕುಮಾರಸ್ವಾಮಿ ಲೇಔಟ್, ಬೆಂಗಳೂರು-೫೬೦೦೭೮
ದೂರವಾಣಿ ಸಂಖ್ಯೆ-೯ ೩೮೦೮೬ ೩೫೯೨

ಈ ಸಂಶೋಧನೆಗೆ ಸಂಬಂಧಿಸಿದ ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳು ಅಥವಾ ಸಮಸ್ಯೆಗಳಿಗಾಗಿ, ಈ ಕೆಳಗಿನ ಜನರನ್ನು
ಸಂಪರ್ಕಿಸಬಹುದು.
ಡಾ. ಚಂದ್ರಶೇಖರ ಜಾನಕಿರಾಮ್ (ಪರಿಶೀಲನಾ ಮಂಡಳಿ ಸದಸ್ಯ)
ಡಾ. ಹೇಮಂತ್ .ಎಂ — ೯೮೪೫೪೫೯೬೬೬


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9	SIGNATURE OF THE CANDIDATE	
10	REMARKS OF THE GUIDE	Clinically relevant & timely
11	11.1 NAME AND DESIGNATION OF THE GUIDE	DR. ASHOK H. K READER, DEPARTMENT OF CONSERVATIVE DENTISTRY AND ENDODONTICS, DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES, BENGALURU-560078
	11.2 SIGNATURE	
	11.3 NAME AND DESIGNATION OF THE CO GUIDE	DR. AMBI C SENIOR LECTURER, DEPARTMENT OF CONSERVATIVE DENTISTRY AND ENDODONTICS, DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES, BENGALURU-560078
	11.4 SIGNATURE	

	11.5 HEAD OF THE DEPARTMENT	DR VEDAVATHI B, MDS HEAD OF THE DEPARTMENT DEPARTMENT OF CONSERVATIVE DENTISTRY AND ENDODONTICS, DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES, BENGALURU-560078
	11.6 SIGNATURE	<i>Vedavathi B</i>
12	12.1 REMARKS OF THE CHAIRMAN AND THE PRINCIPAL	<i>Satisfactory</i>
	12.2 SIGNATURE	<i>H</i>

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DSCDS/IRB/2022-23/07

Date: 12/05/2023

Time: 02:00 PM - 03:00 PM

Venue: Seminar Hall, Department of Orthodontics, 5th floor

Minutes of Meeting

An IRB meeting was conducted on 12/05/2023 at Seminar Hall, Department of Orthodontics, fifth floor with Dr. Savita A M as member secretary. The PG synopsis corrections submission and other details were discussed. The IEC meet was scheduled to be on the 22nd may 2023 and duties for the same were discussed.

Sl. No.	Name	Designation	Members
1.	Dr. Hemant M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Savita A M	Prof & Head - Periodontics	Member secretary
3.	Dr Ramnarayan B K	Internal Subject Expert- Oral Medicine and Radiology	Member
4.	Dr. Mahesh D R	Internal Subject Expert - Oral Medicine and Radiology	Member
5.	Dr Avinash J	Public Health Dentistry- Internal Subject Expert	Member
6.	Dr Smitha Kulkarni	Public Health Dentistry- Internal Subject Expert	Member
7.	Dr Prashanth N T	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
8.	Dr Shobha E S	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
9.	Dr Vedavathi B	Conservative Dentistry- Internal Subject Expert	Member
10.	Dr Dharam H	Conservative Dentistry- Internal Subject Expert	Member
11.	Dr Sarandha D L	Prosthodontics- Internal Subject Expert	Member
12.	Dr Smitha Sharan	Prosthodontics- Internal Subject Expert	Member
13.	Dr Sunil S	Periodontics- Internal Subject Expert	Member
14.	Dr Arvind M	Orthodontics- Internal Subject Expert	Member
15.	Dr Krishnanand P S	Oral Pathology- Internal Subject Expert	Member
16.	Dr. Gargi	Pedodontics - Internal Subject Expert	Member
17.	Dr. Kavittha M	Pedodontics - Internal Subject Expert	Member
18.	Dr. Pallavi N	Senior Lecturer - periodontics	Member


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19.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer –Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer –Prosthodontics	Member
22.	Dr. Suchitra M P	Senior Lecturer – Orthodontics	Member
23.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
24.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
25.	Dr. Deepthi	Senior Lecturer –Conservative Dentistry	Member
26.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
27.	Dr. Sravani	Senior Lecturer –Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. To discuss the upcoming IEC meet
2. To discuss submission of corrections to research lead and IRB

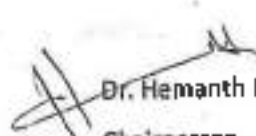
Action taken:

- Duties allotted for the upcoming IEC meet 2023
- Circular regarding the above mailed
- IEC invites sent to all members


Dr. Savita A M

Member Secretary

IRB-DSCDS


Dr. Hemanth M

Chairperson

IRB-DSCDS


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DSCDS/IRB/2022-23/08

Date: 22/05/2023

Time: 09:00 AM - 04:00 PM

Venue: Seminar Hall, Department of Orthodontics, 5th Floor

Minutes of Meeting

An Institutional Ethical Meet was conducted on 22/05/2023 at Seminar Hall, Department of Orthodontics, fifth floor with Dr. Savita A M as member secretary. The meeting was addressed by Dr. Chandrashekhar Jankiram, chairperson IEC. The post graduate students from all departments presented the synopsis to the ethical committee. The committee member's comments and suggestions were noted after the synopsis evaluation and mailed to the respective guides and departments for corrections. The following members attended the meet.

Sl. No.	Name	Designation	Members
1.	Dr Chandrashekhar Jankiram	Chairperson	Member
2.	Ms. Priya Ketkar	Advocate	Member
3.	Mr Seidhara	Social Scientist	Member
4.	Dr N Rajeswari	Basic Medical Scientist	Member
5.	Dr Vasundara K	Pharmacologist	Member
6.	Dr Tara Madhusudhan	Sociologist	Member
7.	Mrs Nagesh Puraolk	Lay Person	Member
8.	Dr. Savita A M	Member Secretary	Member secretary
9.	Dr Ramnarayan B K	Internal Subject Expert- Oral Medicine and Radiology	Member
10.	Dr. Mahesh D R	Internal Subject Expert- Oral Medicine and Radiology	Member
11.	Dr Avinash J	Public Health Dentistry- Internal Subject Expert	Member
12.	Dr Smithe Kulkarni	Public Health Dentistry- Internal Subject Expert	Member
13.	Dr Prashanth N T	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
14.	Dr Shobha E S	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
15.	Dr Vedavathi B	Conservative Dentistry- Internal Subject Expert	Member
16.	Dr Dharam H	Conservative Dentistry- Internal Subject Expert	Member
17.	Dr Sarandha D L	Prosthodontics- Internal Subject Expert	Member


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18.	Dr. Smitha Sharan	Prosthodontics- Internal Subject Expert	Member
19.	Dr. Savita A.M	Periodontics- Internal Subject Expert	Member
20.	Dr. Sunil S	Periodontics- Internal Subject Expert	Member
21.	Dr. Aravind M	Orthodontics- Internal Subject Expert	Member
22.	Dr. Krishnanand P S	Oral Pathology- Internal Subject Expert	Member
23.	Dr. Gargi	Pedodontics - Internal Subject Expert	Member
24.	Dr. Kavitha M	Pedodontics - Internal Subject Expert	Member
25.	Dr. Pallavi	Senior Lecturer-Periodontics	Member
26.	Dr. Brunda	Senior Lecturer- Prosthodontics	Member
27.	Dr. Ranjini	Senior Lecturer- Conservative Dentistry	Member
28.	Dr. Preethi P	Senior Lecturer- Oral Medicine and Radiology	Member
29.	Dr. Suchitra M P	Senior Lecturer - Orthodontics	Member
30.	Dr. Afshan	Senior Lecturer - Orthodontics	Member
31.	Dr. Prajwal P	Senior Lecturer - Orthodontics	Member
32.	Dr. Deepthi	Senior Lecturer -Conservative Dentistry	Member
33.	Dr. Nayana	Senior Lecturer -Public Health Dentistry	Member
34.	Dr. Sravani	Senior Lecturer -Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. To evaluate the ethical concerns of the post graduate student synopsis

Action taken:

- Ethical committee members comments and suggestions pertaining to the synopsis mailed to the respective guides and students from all departments for corrections
- Ethical certificates to be issued post submission of corrections by students


Dr. Savita A.M

Member Secretary

IRB-DSCDS


Dr. Hemant M

Chairperson

IRB-DSCDS


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DSCDS/IRB/2023-24/01

Date: 11-11-2023

Time: 02.30PM to 03.30PM.

Venue: Board Room

Minutes of Meeting

An IRB meeting was conducted on 11-11-2023 at Board Room with Dr. Afshan SW as member secretary. The meeting was addressed by Dr. Hemanth M, Principal and Chairperson RDSC. The Committee reconstitution was discussed with fresh members as discussed with the Principal, respective HOD's. A calendar of events to be prepared was discussed. The following members attended the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer- orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member


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17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof - Physiology	Member
18.	Dr. Kavitha M	Senior Lecturer- Pedodontics	Member
19.	Dr. Ranjini	Senior Lecturer - Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer -Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer -Prosthodontics	Member
22.	Dr. Afshan	Senior Lecturer - Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer - Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer -Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer -Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer -Periodontics	Member

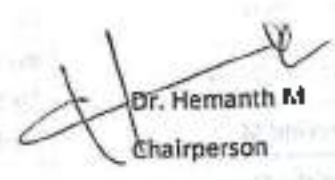
Agenda and points of the meeting are mentioned below:

1. To discuss on reconstitution of experts as the term is 2 years
2. To assign roles and responsibilities to core committee members
3. To prepare calendar of events for the academic year 2024
4. Proposal to conduct IRB meetings thrice a year
5. Proposal to conduct a research methodology workshop for faculty and new students

Action taken:

- New committee members listed and appointment letters to new experts sent
- Roles and responsibilities assigned
- A calendar of events prepared and to be discussed in future meeting


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


Dr. Hemanth M
Chairperson
IRB-DSCDS


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Shavige Matteswara Hills, Kumaraswamy Layout, Bengaluru

DSCDS/IRB/2023-24/02

Date: 24-11-2023

Time: 02.30PM to 03.30PM

Venue: Board Room

Minutes of Meeting

An IRB meeting was conducted on 24-11-2023 at Board Room with Dr. Afshan SW as member secretary. The meeting was addressed by member secretary. A discussion ensued regarding the rules for submission and a sample presentation for submission needs to be prepared and to be circulated for reference. Valuable inputs were provided on improving the quality of research. All the agendas of the meeting were discussed and work scheduling done. The RDSC meet was decided to be conducted on the 31st Jan and 1st Feb 2024.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer, orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smktha Kulkarni	Reader- Public Health Dentistry	Member

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17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof – Physiology	Member
18.	Dr. Kavitha M	Senior Lecturer- Pedodontics	Member
19.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer – Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer – Prosthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer – Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer – Public Health Dentistry	Member
26.	Dr. Scavani	Senior Lecturer – Periodontics	Member

Agenda and points of the meeting are mentioned below:

- Proposal to conduct the Research Development and Sustenance Committee meet on the 31st Jan and 1st Feb 2024
- To prepare rules for synopsis submission and research proposals
- To discuss and intimate Heads of departments and guides regarding PG synopsis submission schedule.
- To propose that all faculty research work to be submitted for ethical clearance during the scheduled IRB meetings for the academic year
- Submission of status of research work to IRB thrice a year

Action taken:

1. RDSC meet confirmed to be conducted on the 31st Jan and 1st Feb 2024
2. A template prepared for submission of research work status to IRB
3. RDSC meet invites sent to all experts and research methodologist
4. Appointment letters sent to experts.


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


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Kumaraswamy Layout,
Bangalore - 560 078.

Dr. Hamanth M
Chairperson
IRB-DSCDS



DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES
Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru

DSCDS/IRB/2023-24/03

Date: 18-12-2023

Time: 02.30PM to 03.30PM.

Venue: Board Room

Minutes of Meeting

An IRB meeting was conducted on 18-12-2023 at Board Room with Dr. Afshan SV as member secretary. The members discussed about the submission of PG synopsis. Also a discussion related to the budget 2024 was done and inputs taken from all members of the committee.

A plan was framed to conduct an interdepartmental meet between the IRB and the Artificial Intelligence Department DSI

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer- orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi S	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member

[Signature]
Principal

Dayananda Sagar College
Kumaraswamy Layout



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17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof – Physiology	Member
18.	Dr. Kavitha M	Senior Lecturer- Pedodontics	Member
19.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer –Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer –Prosthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer –Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer –Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. To conduct the RDSC meet on the 31st Jan and 1st Feb 2024 and preparations regarding the same
2. Prepare the budget for IRB 2024

Action taken:

- PG synopsis sent to the external experts and research head
- Budget 2024 prepared
- Plan conceptualized to conduct the interdepartmental meet between IRB and the artificial intelligence department


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


Dr. Hemanth M
Chairperson
IRB-DSCDS


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OSCD/IRB/2023-24/04

Date: 16-01-2024

Time: 02.30PM to 03.30PM

Venue: Board Room

Minutes of Meeting

An IRB meeting was conducted on 16-01-2024 at Board Room with Dr. Afshan SW as member secretary. A core committee meeting was conducted on 16th Jan 2024 and all members of the committee were present. All the agendas related to this meeting were discussed. Meeting details were finalized. The below members were present at the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer- orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member


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17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof – Physiology	Member
18.	Dr. Kavitha M	Senior Lecturer- Pedodontics	Member
19.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer –Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer –Prosthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer –Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer –Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. Core committee meeting with agenda regarding the PG synopsis submission to IRB and further to be sent to the external subject experts and research methodologist
2. To discuss the preparations for the ROSC meet

Action taken:

- Synopsis submission rules sent to the heads of the departments and subject guides.

Dr. Afshan Saman W
Member Secretary
IRB-DSCDS

Dr. Hemanth M
Chairperson
IRB-DSCDS

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DSCDS/IRB/2023-24/05

Date: 23-01-2024

Time: 09.00AM to 12-30PM.

Venue: seminar hall, orthodontics department, 5th floor

Minutes of Meeting

An IRB meeting was conducted in collaboration with the department of artificial intelligence and machine learning on 23-01-2024 to discuss the feasibility of research projects organized and to review Dental research studies in collaboration with Artificial intelligence. The current research projects of 6 post graduate students related to artificial intelligence were discussed and reviewed. The below members were present at the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer- orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member
17.	Dr. Mohamed Nizam Al Deen	Asst Prof - Physiology	Member

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	Shali		
18.	Dr. Kavitha M	Senior Lecturer- Periodontics	Member
19.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer –Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer –Prosthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer –Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer –Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. IRB Interdepartmental meet with AI dept to discuss the feasibility of research projects organized and to review Dental research studies in collaboration with Artificial intelligence

Action taken:

- Proposed to conduct more AI studies in the near future

Dr. Afshan Saman W
Member Secretary
IRB-DSCDS

Dr. Hemant M
Chairperson
IRB-DSCDS

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DSCDS/IRB/2023-24/06

Date: 24-01-2024

Time: 02.00PM to 03.00PM.

Venue: seminar hall, orthodontics department, 5th floor

Minutes of Meeting

A Core committee meeting was conducted on 24th Jan 2024 and all members of the committee were present. All the agendas related to this meeting were discussed. Meeting details finalized. All duties were allotted to members. The committee discussed the proposed date to conduct the IEC meet. The below members were present for the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer- orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth N T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member
17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof - Physiology	Member

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18.	Dr. Kavitha M	Senior Lecturer- Pedodontics	Member
19.	Dr. Ranjini	Senior Lecturer – Conservative Dentistry	Member
20.	Dr. Preethi P	Senior Lecturer –Oral Medicine & Radiology	Member
21.	Dr. Brunda	Senior Lecturer –Prosthodontics	Member
22.	Dr. Afshan	Senior Lecturer – Orthodontics	Member
23.	Dr. Prajwal P	Senior Lecturer – Orthodontics	Member
24.	Dr. Deepthi	Senior Lecturer –Conservative Dentistry	Member
25.	Dr. Nayana	Senior Lecturer –Public Health Dentistry	Member
26.	Dr. Sravani	Senior Lecturer –Periodontics	Member

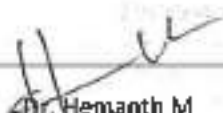
Agenda and points of the meeting are mentioned below:

1. To allot duties for upcoming RDSC meet
2. To plan the ethical committee meet in February
3. To send IEC invites to the committee members

Action taken:

- IEC meet was proposed to be conducted in the month of march
- IEC invites to be sent to the ethical members


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


Dr. Hemant M
Chairperson
IRB-DSCDS


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DSCOS/IRB/2023-24/07

Date: 31/01/2024 and 01/02/2024

Time: 09:00 AM - 04:00 PM

Venue: Seminar Hall, Department of Orthodontics, 5th Floor

Minutes of Meeting

An IRB meeting was conducted on 31/01/2024 and 01/02/2024 at Seminar Hall, Department of Orthodontics, fifth floor with Dr. Afshan Saman W as member secretary. The meeting was addressed by Dr. Hemanth M, Principal and chairperson RDSC. The post graduate students from all departments presented the synopsis to the committee. The expert's comments and suggestions were noted after the synopsis evaluation and mailed to the respective guides and departments for corrections. The following members attended the meet.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior Lecturer - Orthodontics	Member Secretary
3.	Dr Savita A M	Prof & Head Periodontics	Member
4.	Dr. Gangabaraiah	Research Head	Member
5.	Dr Ravi Shirahatti	Research Methodologist - Public Health Dentistry	Member
6.	Dr Ramnarayan B K	Internal Subject Expert- Oral Medicine and Radiology	Member
7.	Dr. Mahesh D R	Internal Subject Expert- Oral Medicine and Radiology	Member
8.	Dr. Rakesh N	Oral Medicine and Radiology- External Subject Expert	Member
9.	Dr Avinash J	Public Health Dentistry- Internal Subject Expert	Member
10.	Dr Smitha Kulkarni	Public Health Dentistry- Internal Subject Expert	Member
11.	Dr. Harikiran A G	Public Health Dentistry- External Subject Expert	Member
12.	Dr Prashanth N T	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
13.	Dr Shobha E S	Oral And Maxillofacial Surgery- Internal Subject Expert	Member
14.	Dr. Sunil Vasudev	Oral And Maxillofacial Surgery- External Subject Expert	Member
15.	Dr Vedavathi B	Conservative Dentistry- Internal Subject Expert	Member
16.	Dr Dharam H	Conservative Dentistry- Internal Subject Expert	Member
17.	Dr. Anitha Kumari	Conservative Dentistry- External Subject Expert	Member

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18.	Dr Sarandha D L	Prosthodontics- Internal Subject Expert	Member
19.	Dr Smitha Sharan	Prosthodontics- Internal Subject Expert	Member
20.	Dr. Ravishankar krishna	Prosthodontics- External Subject Expert	Member
21.	Dr Archana	Periodontics- Internal Subject Expert	Member
22.	Dr. Sucheta	Periodontics-External Subject Expert	Member
23.	Dr Aravind M	Orthodontics- Internal Subject Expert	Member
24.	Dr. Lakmikanth S M	Orthodontics- External Subject Expert	Member
25.	Dr Krishnanand P S	Oral Pathology- Internal Subject Expert	Member
26.	Dr. Kavitha M	Pedodontics - Internal Subject Expert	Member
27.	Dr. Brunda	Senior Lecturer- Prosthodontics	Member
28.	Dr. Ranjini	Senior Lecturer - Conservative Dentistry	Member
29.	Dr. Preethi P	Senior Lecturer - Oral Medicine and Radiology	Member
30.	Dr. Prajwal P	Senior Lecturer - Orthodontics	Member
31.	Dr. Deepthi	Senior Lecturer - Conservative Dentistry	Member
32.	Dr. Nayana	Senior Lecturer - Public Health Dentistry	Member
33.	Dr. Sravani	Senior Lecturer - Periodontics	Member

Agenda and points of the meeting are mentioned below:

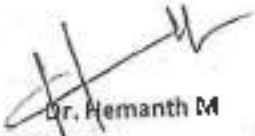
1. 17 post graduate and 02 undergraduate synopsis presentations were done during the RDSC meet
2. The comments/ suggestions from the external experts, research head and the internal experts were noted

Action taken:

- The experts suggestions and corrections were mailed to the respective students and guides for resubmission


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


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Dayananda Sagar College of Dental Science,
Kumaraswamy Layout,
Bangalore - 560 078.


Dr. Hemanth M
Chairperson
IRB-DSCDS



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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
31-01-2024 & 01-02-2024

SL NO	STUDENT NAME	GUIDE	DEPARTMENT	TITLE
1.	Dr J Poornima	Dr. Ashok H K	Department Of Conservative Dentistry And Endodontics	Influence Of Different Rotary File Systems On Pericervical Dentine Thickness In Premolars With Truss Access - A Cone Beam Computed Tomography Analysis
2.	Dr. Parikshit P Sanni	Dr. Dharam Hinduja	Department Of Conservative Dentistry And Endodontics	Comparative Evaluation Of Antimicrobial Efficacy Of Sodium Hypochlorite, Octenidine Dihydrochloride And Chitosan Nano Particles With And Without Laser Activation In Root Canals Infected With Enterococcus Faecalis - An In-Vitro Study
3.	Dr. Shreya K N	Dr. Vedavathi B	Department Of Conservative Dentistry And Endodontics	Stress Distribution In Endodontically Treated Hypertarodont Mandibular 2 Nd Molars Restored With Different Post Endodontic Restorations Using Finite Element Analysis.
4.	Dr. Aathira	Dr. Vedavathi B	Department Of Conservative Dentistry And Endodontics	A Comparative Evaluation Of Fracture Resistance Of Endodontically Treated Mandibular 2 Nd Molars With Truss Access Restored Using Different Bulkfill Composite Resin Materials- An In-Vitro Study
5.	Dr Divyashri Dyavappa	Dr. Ranjini M A	Department Of Conservative Dentistry And Endodontics	Comparative Evaluation Of Fluoride Uptake By Dentine From Two Bulk-Fill Composite Restorations At Two Different Time Intervals By Scanning Electron Microscopy(Sem) - Energy Dispersive X-Ray(Edx) Analysis - An In-Vitro Study
6.	Dr M.K Mrinmalini	Dr. Varadha Hiremath	Department Of Conservative Dentistry And Endodontics	*Assessment Of Antimicrobial Efficacy Of Calcium Hydroxide And Chlorhexidine Intracanal Medicament With And Without Chitosan Nanoparticle


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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
31-01-2024 & 01-02-2024

				Incorporation Against Enterococcus Faecalis And Candida Albicans At Different Time Intervals- An In-Vitro Study "
7.	Dr. Aman Prasad Saha	Dr. Hemanth M	Orthodontics	"Assessment And Comparison Of The Stress Pattern And Displacement Of Mandibular Dentition When Subjected To 3 Force Of Varying Vectors And Magnitude In Relation To Center Of Resistance Of Mandibular Dentition During En-Masse Distalization: A Finite Element Study"
8.	Dr. Prachi Kamble	Dr. Hemanth M	Orthodontics	Prediction Of Correlation Between The Upper Pharyngeal Airway And The Placement Of Mandible In Relation To The Cranial Base, Followed By Its Cephalometric Validation Using 3 Artificial Intelligence
9.	Dr. Neha Patil	Dr. Aravind M	Orthodontics	Effect Of Pilot Hole Size On Micromotion And Stability Of Mini Screw Implant: A Numerical Simulation Followed By An In Vitro Validation Study.
10.	Dr. Poukhan Panmei	Dr. Shivaprasad G	Orthodontics	Prediction Of Maturity Stages Of The Middle Phalanx Of The Third Finger Based On Mandibular Canine Calcification And Cervical Vertebrae Maturity Stages Followed By Its Clinical Validation - An Artificial Intelligence Study.
11.	Dr. Theertha Sasidharan	Dr. Aravind M	Orthodontics	"Quantitative Assessment And Correlation Of Sclerostin Production In Gingival Crevicular Fluid In Individuals Subjected To Segmental Canine Retraction With Different Magnitude Of Retraction Forces - An In vivo Experimental Study"

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(Recognized by Dental Council of India, New Delhi)

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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
31-01-2024 & 01-02-2024

12.	Dr. Shrisha .A .P	Dr. Sarandha D L	Department Of Prosthodontics Including Crown And Bridge	"Comparative Evaluation Of Internal Fit And Marginal Fit Of Lithium Disilicate Single Crowns Obtained From Conventional And Digital Impression - An In vitro Study"
13.	Dr. Kaveesha Misra	Dr. Sreeharsha Tv	Department Of Prosthodontics Including Crown And Bridge	"A Study To Compare The Accuracy Of Digital Implant Impression With Conventional Open Tray Implant Impression - An In Vivo Study "
14.	Dr. Divya .K.	Savita, A.M	Department Of Periodontology	Comparative Assessment Of Injectable Platelet Rich Fibrin And Xenograft (Sticky Bone) With Advanced Platelet-Rich Fibrin Plus For The Treatment Of Horizontal Bone Defect In Periodontitis By Assessing Gingival Thickness And Bone Fill, A Randomized Controlled Clinical Trial
15.	Dr. Sangamithra. N	Dr. Ramasudhakar B K	Oral Medicine And Radiology	"Developing An Artificial Intelligence Algorithm For Gender Determination Using Maxillary Sinus Incone Beam Computed Tomography Scans"
16.	Dr. R.Sai Nikhil Reddy		Oral And Maxillofacial Surgery	Developing And Validating An Artificial Intelligence Algorithm For Measuring Optimum Bone Dimensions In Mandibular Anterior Region Between The Mental Foramen On Either Side Using Cone Beam Computed Tomography Scans - A Descriptive Study
17.	Dr. Deepak K Jayaprakashan		Oral And Maxillofacial Surgery	"Developing And Validating An Artificial Intelligence Algorithm For Determination Of Implant Sizes To Be Used In Mandible Using Cone Beam Computed Tomography Images"
18.	Dr. Indu K	Dr. Prashanth N.T.	Oral And Maxillofacial Surgery	Measurement Of Pain And Swelling After Dental Surgery By Using Facial Expression Drawings And Full Cup Test
19.	Dr. Jeff Patrick Dr. Malavikha V.	Dr. Shobha Es	Oral And Maxillofacial Surgery	Comparative Study To Assess The Variations In Blood Pressure And Anxiety In Normotensive Patients Undergoing Bilateral Extraction

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Kumarawaram
Bengaluru.

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COMMENTS FROM EXTERNAL EXPERTS-RDSC - info@rdscs.edu.in - Dayananda Sagar College of Dental Sciences Main



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LIST OF RESEARCH PROPOSALS- RGUHS STUDENT SYNOPSIS JAN 2024
31-01-2024 & 01-02-2024

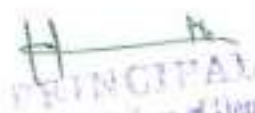
Kindly do

				Of Teeth Under Local Anesthesia With And Without Classical Music Therapy - A Split Mouth Study
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Dr. Afshan SW

Member Secretary

1RB-DSCDS


Principal
Dayananda Sagar College of Dental Sciences
KumaraSwamy Layout,
Bangalore - 560 078.

7/12/24, 3:35 PM

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COMMENTS FROM EXTERNAL EXPERTS-RDSC

Institutional Review Board, - info@dszeds.edu.in
To:
Head of the Department
Dept. of Periodontics

Dear sir/ma'am,

Herewith attaching the comments given by external experts to the synopsis presented at the RDSC meeting. Kindly do

Regards,

Tajana Singh

One attachment • Scanned by Gmail



Periodontics, - info@dszeds.edu.in
to me
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Institutional Review Board

Research Development and Sustenance Committee Meeting 31-01-2024 & 01-02-2024

Reviewers' comments

Sl No	Name of the Presenter	Department	Title	Comments
①	Divya K.	Periodontia	Ravi Sir { Suchetha A. man. { Harikiran Sir. {	- Sample Size estimation - verify. - have you mentioned about horizontal defect and PRF. ? - Penetration Depth ? - IMP can regenerate ? - how to fix the gingival thickness ? - how u measure the gingival thickness ? - gold standard in ? - intervention ? - to put CONSORT statement (consolidate Standards of reporting Trials). - how many types of standardization.
			H A PRINCIPAL Dayananda Sagar College of Dental Sciences Kumarawamy Layout, Bangalore - 560 078.	- how many CBCT scan are required ? - how many samples I mean how to be taken extra & this has to be mentioned in the study). - Informed consent. - Case record form.

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DEPARTMENT OF PERIODONTOLOGY

Corrections of Synopsis as per Research Development and Sustenance Committee, Reviewers Comments.

NAME: Divya K

TOPIC: Comparative Assessment of Injectable Platelet Rich Fibrin and Xenograft (sticky bone) with Advanced Platelet Rich Fibrin Plus for the treatment of Horizontal bone defect in Periodontitis by Assessing gingival thickness and Bone fill- A Randomized Controlled Clinical Trial.

1. Sample size estimation- verify

Sample size estimation has been verified and elaborated.

2. Have you mentioned about horizontal defect and PRF ?

Mentioned in a Review of Literature (reference no 1).

3. Penetration depth ?

Penetration depth of about 1-1.5mm has been mentioned in synopsis.

4. IMP can regenerate ?

Yes, IMP can regenerate by releasing cytokines and growth factors which further attract progenitor cells, enhancing revascularization and new bone regeneration and it is addressed in synopsis (reference no 7).

5. How to increase gingival thickness?

Gingival thickness can be increased by using platelet concentrates.

6. How you measure the gingival thickness?

Gingival thickness is measured by using CBCT scans of patients at baseline, 3rd, 6th months. Cross sections will be taken perpendicular to the arch at the interdental region where the intervention has been done.

The thickness of crestal gingiva in the interdental region will be measured in mm at three sites (as the buccolingual width of papilla is more in molar

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region) and is mentioned in synopsis (as the buccolingual width of papilla is more in molar region) and is mentioned in synopsis (page no 11).

7. Gold standard in 3 interventions ?

As we are conducting three different techniques , there is as such no gold standard in 3 interventions as per the literature available.

8. To put Consort statement (Consolidation standard of reporting trails)

Consort statement is added as Annexure.

9. How many types of Randomization?

Simple randomization

Stratified randomization

Block randomization

Block randomization is carried in our study and will be performed with computer assisted software for random allocation of subjects to any of the three groups.

Allocation concealment will be done by concealing the allocation sequence in an envelope by the person who is not involved in the study.

10. How many CBCT scans are required?

CBCT scans of all patients will be taken at baseline, 3rd, 6th months, Total number of samples taken are 60 so $60 \times 3 = 180$ CBCT scans are required.

11. Informed consent, case record form

Attached as Annexures .

Guide;

Dr Savita A M

Head & Associate Dean PG Academics

Department of periodontology, OSCDS


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**RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES BENGALURU,
KARNATAKA.**

**ANNEXURE PROFORMA FOR REGISTRATION OF
SUBJECT FOR DISSERTATION**

1.	NAME OF THE CANDIDATE AND ADDRESS (IN BLOCK LETTERS)	DR. DIVYA K POST GRADUATE STUDENT, DEPARTMENT OF PERIODONTOLOGY, DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES BENGALURU -560111 KARNATAKA.
2.	NAME OF THE INSTITUTION	DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES BENGALURU-560111
3.	COURSE OF STUDY AND SUBJECT	MASTER OF DENTAL SURGERY (M.D.S) IN PERIODONTOLOGY
4.	DATE OF ADMISSION TO COURSE	16-10-2023
5.	TITLE OF THE TOPIC	COMPARATIVE ASSESMENT OF INJECTABLE PLATELET RICH FIBRIN AND XENOGRAFT (STICKY BONE) WITH ADVANCED PLATELET-RICH FIBRIN PLUS FOR THE TREATMENT OF HORIZONTAL BONE DEFECT IN PERIODONTITIS BY ASSESSING GINGIVAL THICKNESS AND BONE FILL. A RANDOMIZED CONTROLLED CLINICAL TRIAL
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6. BRIEF RESUME OF THE INTENDED WORK

6.1 Need for the study:

Periodontitis is a chronic inflammatory disease that causes destruction of tooth apparatus attachment. In addition to decreasing bone height, periodontal disease modifies the morphologic characteristics of bone and causes several patterns of bone loss, with horizontal bone loss being the most frequent detrimental pattern¹.

As per the literature, the horizontal bone loss with a prevalence of 92.2% has received only 3.7% treatment modalities¹. Several treatment modalities have been attempted through the years including various bone grafts, combination of membrane and graft materials, use of enamel matrix protein and recombinant human bone morphogenic protein. Horizontal bone loss typically continues with soft tissue loss, making grafting challenging at the site.¹

The regenerative approach in dentistry frequently employs platelet concentrates (PCs) that are "autologous in origin" and have a high concentration of platelets, growth factors, and leukocytes².

As third-generation PC, based on the low-speed centrifugation concept (LSCC) such as advanced-PRF (A-PRF), advanced-PRF+ (A-PRF+), injectable-PRF (i-PRF), and titanium-PRF (TPRF) were introduced where in by reducing the relevant centrifugation force (RCF) for advances in PRF matrices with an enhanced number of inflammatory cells and platelets³. Thereby, histological analysis of A-PRF(1500rpm)² observed a significantly higher numbers of neutrophilic granulocytes, a leukocyte subfamily, compared to that of PRF³. The formulation of the A-PRF+ preparation is further enhanced by lowering the centrifugation speed (1300rpm) with a centrifugation time of eight minutes². A-PRF+ represents a more effective and faster regeneration and helps in the development of hard and soft tissue healing as well as pain alleviation.² i-PRF (Injectable PRF) is prepared with centrifugal speed of 3300 rpm for two minutes² and also being considered as a potential regenerative agent for improving the handling qualities of bone grafts in periodontal defects³, thereby sticky bone accelerates tissue healing and minimizes bone loss during healing period.⁵


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Intra-marrow penetration (IMP) or decortication is the intentional drilling of holes (1-1.5mm) traversing from the cortical bone directly inside of the cancellous bone⁶, which aids in releasing cytokines and growth factors which further attract progenitor cells, enhancing revascularization and new bone regeneration.⁷

Cone Beam Computed Tomography (CBCT) produces three dimensional anatomical images and also has the ability to collect and generate data at higher resolutions with relatively low radiation dose. CBCT in periodontology has been used in assessment of periodontal defect measurements, furcation involvement and evaluation of outcomes succeeding regenerative surgery. It has also been applied for visualizing and precisely measuring soft tissues of the periodontium⁸.

Hence an attempt is made to evaluate and compare sticky bone (i PRF + xenograft) with APRF+ in the treatment of horizontal bone defects in periodontitis by assessing gingival thickness and the bone fill using CBCT.

Problem statement:

Periodontal disease alters the morphologic features of bone, where in, it was observed that vertical bone loss with a prevalence of 7.8% has received 96.8% treatment options whereas horizontal bone loss, with an overwhelming prevalence of 92.2%, received only 3.2% treatment modalities.¹

As a human autologous product, A-PRF+ has the potential to improve periodontal repair and is effective in treating intra bony periodontal defects.² as well as sticky bone, may function as a framework or protective membrane, both externally and internally, to the periosteum and the alveolar bone. Further, it minimizes the micro and macro motility of the grafted bone, enabling favourable bone augmentation throughout the healing period without the use of a GBR membranes.⁴

Thus, an attempt is made to compare sticky bone (i PRF + xenograft) with APRF+ in the treatment of horizontal bone defects in periodontitis by assessing gingival thickness and the bone fill by using CBCT.


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Research Question:

Is A PRF+ more effective in improving gingival thickness and bone fill in horizontal bone defects associated with periodontitis when compared with sticky bone (i PRF + xenograft) ?

Null Hypothesis (H_0):

The use of APRF+ may not be effective in improving gingival thickness and the bone fill in horizontal bone defect associated with periodontitis when compared with sticky bone (i PRF+ xenograft) .

Research Hypothesis (H_1): -

The use of APRF+ may be effective in improving gingival thickness and bone fill in horizontal bone defect associated with periodontitis when compared with sticky bone (i PRF+ xenograft) . *

5.2 Review of the literature:

A randomized controlled clinical trial study was conducted for treatment of horizontal defect with and without platelet rich fibrin matrix in patients having moderate to deep periodontitis. The study comprised of 3 groups: Group A-open flap debridement (OFD), Group B (OFD+ intra marrow penetration), and Group C (OFD + IMP + PRFM). Radiographic assessments to measure the bone defect depth and fill percentage were done at baseline and 9 months after surgery using radio-visiography. The results revealed that after 9 months intergroup comparison of PPD(periodontal probing depth) and CAL(Clinical attachment loss) and defect fill percentage had statistically significant difference in group C as compared to group A and group B with $P < 0.05$ ¹

A Randomized Parallel Arm Clinical Trial was conducted to evaluate the efficacy of sticky bone in horizontal ridge augmentation with and without collagen membrane . In Group-I, the sticky bone and collagen membrane were placed in ridge-deficient sites and Group-II received only sticky bone. For Groups I and II, a Cone Beam Computed Tomography (CBCT) scan was performed prior to surgery and 6 months post-surgery. Horizontal Ridge Widths (HRW) were measured at the crest, 3 mm, and 6 mm levels perpendicular to the longitudinal axis of the alveolar crest via tomographic sections. The Vertical Bone Height

[VBH] of the ridge was measured from the crest to the mandibular canal. At the end of 6 months follow-up, A CBCT examination was performed to assess changes in the horizontal ridge width (HRW) and vertical bone height (VBH). A statistically significant increase in HRW ($p < 0.05$) was observed in both groups. The intergroup comparison revealed statistical significance ($p < 0.05$) with respect to HRW and KTW (Keratinized tissue width) at the 6-month follow-up. Sticky-bone (Xenogenic-bone graft + i-PRF) served as a promising biomaterial in achieving better horizontal bone width gain. Injectable-platelet rich fibrin (iPRF) faced with a bone substitute (sticky bone) has heralded the way for advancing the outcomes of bone regeneration.⁴

In a randomized controlled trial, 20 periodontitis patients with 20 defects were randomly allotted into two groups: group I open flap debridement (OFD) and A-PRF, group II OFD, intra marrow debridement, and A-PRF. Clinical parameters recorded were plaque index (PI), gingival index (GI), and clinical attachment level (CAL) probing depth. Radiographic parameters were defect depth, defect resolution, and change in alveolar crest height. Values were tabulated and subjected to statistical analysis. Paired and unpaired t-tests were performed for intra and intergroup comparisons. ($P < 0.05$) was set as statistically significant in probing pocket depth. Intragroup comparisons showed a significant reduction ($P < 0.05$) in probing pocket depth, GI, PI, gain in CAL, and greater bone fill in both the groups from baseline to 6 months postoperative. Intergroup comparisons were not statistically significant ($P > 0.05$). Both treatment modalities stand good, but utilization of IMP along with A-PRF results in effective regenerative outcome in intra bony defects because of its stimulation of osteogenic properties.⁵

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A study was conducted to investigate the contribution of Intra marrow penetration (IMP) to the outcomes of open flap debridement (OFD) treatment of Intra bony defects. Sites were randomly assigned into one of three groups: negative control group (OFD alone), test group (OFD+IMP), positive control group (Nano-crystalline hydroxyapatite granules NCHA). At baseline, there were no statistically significant differences between groups. At 6 months, all groups showed improvements, in terms of clinical and radiographic parameters. The test group showed greater clinical and radiographic improvement compared to the negative control group. Therefore, the addition of IMP to an OFD procedure used to treat Intra bony periodontal defects (ID) could result in significant improvement of clinical outcomes in well maintained patient.⁶

A review of literature on soft tissue thickness determination using CBCT in periodontics stated that most of the publications are in vitro studies or retrospective analysis. Also, comparison of CBCT with the clinical and conventional methods in an adequate sample size, for comparing its efficacy of measuring palatal soft tissue thickness is lacking.⁷

6.3 Objectives of the study:

1. To assess Gingival thickness and the bone fill using Open Flap Debridement (OFD) plus APRF+ and Intra marrow bone penetration in horizontal bone defects associated with periodontitis by using Cone Beam Computed Tomography
2. To assess Gingival thickness and the bone fill using Open Flap Debridement (OFD) plus sticky bone (i PRF+ xenograft) and intra marrow bone penetration in horizontal bone defects associated with periodontitis by using Cone Beam Computed Tomography.
3. To assess Gingival thickness and the bone fill by Open Flap Debridement (OFD) and intra marrow bone penetration in horizontal bone defects associated with periodontitis by using Cone Beam Computed Tomography.
4. To compare Gingival thickness and bone fill between Open Flap Debridement plus APRF+ and Intra marrow bone penetration, Open Flap Debridement plus sticky bone (i PRF+ xenograft) and Intra marrow bone penetration and Open Flap Debridement plus intra

1
marrow bone penetration in horizontal bone defects associated with periodontitis by using Cone Beam Computed Tomography.

7. MATERIALS AND METHODS:

7.1 Source of data:

Subjects reporting to the Department of Periodontology, Dayananda Sagar College of Dental Sciences and Hospital, Bengaluru

7.2 Method of collection of data:

A brief case history will be recorded and an informed consent will be obtained from all the subjects

Study design: Randomized Comparative Parallel Open Study Design

Sample size determination

Analysis: A priori: Compute required sample size

Input:

Effect size $f = 0.6$ α err

prob = 0.05

Power $(1 - \beta \text{ err prob}) = 0.8$

Numerator df = 10

Number of groups = 3 Number of

covariates = 1

Output:

Noncentrality parameter $\lambda = 19.440000$

Critical F = 2.0261430

Denominator df = 50

Total sample size = 54

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Actual power = 0.8028330

The sample size has been estimated using the G Power software v. 3.1

Considering the effect size to be measured (f) at 60% power of the study at 80% and the margin of the error at 5%, the total sample size needed is 54. Anticipating 10% attrition during the follow up periods, the sample size is increased to 60, So, each group will consist of 20 samples.

Criteria for Case Selection:

Inclusion criteria:

1. Periodontitis – stage 2 or 3 (As per AAP 2017 classification)
2. Probing pocket depth 6 to 8 mm
3. Sites with horizontal bone defects as seen in digital radiographs

Exclusion criteria:

1. Patients with history of any drug allergy
2. Patient with systemic diseases
3. Pregnant and lactating mothers
4. Smokers ,alcoholics and drug abusers
5. Patients who received periodontal therapy 6 months prior to study

Materials required clinical armamentarium:

1. Mouth mirror
2. UNC-15 probe
3. Sickle explorer
4. Tweezer

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5. Periodontal surgical instruments
6. Surgical gloves and disposable mouth mask
7. Local anesthetic agent
8. 2 ml and 10 ml syringe
9. BP blade
10. Area specific curettes
11. Suture materials (3-0 silk sutures)
12. Test material- sticky bone
13. Micro motor (straight hand piece)
14. Round carbide bur (1mm diameter)
15. Periodontal pack
16. Bio-oss bone graft
17. i-PRF tube (yellow tube)
18. A-PRF+ tube (red tube)

Method of preparation of Sticky bone:

Preparation of i-PRF

A 10 ml Blood sample will be taken from the patients forearm and collected in a nonsilicacoated yellow cap tube of 10 ml. i-PRF is prepared by spinning at 3300 rpm for two minutes² of centrifugation. The tube obtained after completion of centrifugation shows two different layers with superficial layer being clear liquid PRF and bottom layer being RBCs. The clear fluid is extracted using syringe and then mixed with xenograft which is allowed to rest for five to ten minutes for polymerization in order to produce sticky bone. The advantage of using sticky bone is that the graft becomes embedded in the matrix of PRF, that itself will stabilize the bone graft. It can be molded or cut into desired shape and can be packed easily to the defect site.

Preparation of A- PRF+

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A 10 mL of blood sample will be taken from the patients forearm and collected in a glass tubes with red cap. A-PRF + is prepared by spinning at 1300 rpm for 8 minutes². Once the centrifugation is completed, translucent white fluid filled with a clot in the center and the remnants of the blood in the bottom of the test tube will be visible.⁵

Intra-marrow penetration

Intra-marrow penetration will be performed interdentally on the cortical defect bone with micromotor handpiece and a round surgical bur of 1mm diameter with copious irrigation of water until the cancellous bone is exposed.

Permission :

Permission will be taken for selection and collecting the samples from subject obtained from:

- 1) Head of the Department of Periodontology, Dayananda Sagar College of Dental Sciences(DSCDS).
- 2) Principal, Dayananda Sagar college of Dental Sciences and Hospital, Bengaluru.
- 3) Institutional review board, Dayananda Sagar college of Dental Sciences.

Informed consent:

Consent will be obtained from subjects participating in the study after explaining the purpose and the procedures involved in the study in a language that is understandable by the participants.

Randomization :

Block randomization will be performed with computer assisted software for random allocation of the subjects to any of the three groups as stated below. The intervention group as follows:

Group A	Open flap debridement + Intra marrow penetration
Group B	Open flap debridement + Intra marrow penetration + A PRF +
Group C	Open flap debridement + Intra marrow penetration + sticky bone (I PRF + xenograft)

Allocation concealment will be done by concealing the allocation sequence in an envelope by the person who is not involved in the study

Soft tissue Measurements:

CBCT scans of all patients will be taken at baseline, 3rd and 6months using Kodak CS 9600 with small fov and voxel size of 0.2mm and exposure parameters of 60-90kv and 512mA.

Cross sections will be taken perpendicular to the arch at the interdental region where the intervention has been done.

The thickness of crestal gingiva in the Interdental region will be measured in mm at three sites (as the buccolingual width of papilla is more in molar region)¹¹

Hard tissue Measurements

The level of alveolar crest will be calculated using CBCT at baseline, after 3 months and 6 months. At baseline the distance from the CEJ (Cemento enamel junction) to the base of the defect (BD) will be measured (CEJ to BD), distance from the alveolar crest (AC) to base of the defect (BD) will be measured (AC to BD) Post-operative measurement from CEJ to the alveolar crest (AC) will be done (CEJ to AC) after three months and six months. The

Horizontal component will be measured by subtracting the distance (CEJ to BD) from (CEJ to AC). The standardization of radiographic interpretations will be done by an radiologist.⁵

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STATISTICAL ANALYSIS:

The data collected for this study will be analysed statistically as follows:

Descriptive Statistics:

All categorical variables will be presented in the form of frequency tables along with percentages. The quantitative variables will be described using Mean $\pm$ SD/Median (IQR) based on the verification of normality assumption. The estimates like Mean/Proportion/Difference in means/ Difference in proportions will also be expressed with 95%Confidence Interval. Wherever necessary the data will be presented graphically.

Inferential Statistics:

For comparing the i- PRF xenograft (sticky bone) plus intra-marrow penetration with APRF+ and intra-marrow penetration in the treatment of horizontal bone defects in periodontitis by measuring Gingival thickness and Bone fill

One -way Analysis of Variance (ANOVA) will be applied following the post-hoc test, if the data of the three groups follow normality assumptions. If not, Kruskal-Wallis test will be applied with post-hoc test related to Kruskal-Wallis test. The comparison within the group for each of groups separately measured at baseline, 3months, 6months will be analysed using repeated measures of ANOVA/Friedman's test subject to normality assumption. The results will be considered statistically significant whenever $P \leq 0.05$

The validation of the CBCT will be assessed by Intra and Inter class correlation co-efficient

7.3 DOES THE STUDY REQUIRE ANY INVESTIGATIONS OR INTERVENTIONS TO BE CONDUCTED ON PATIENTS OR OTHER HUMANS OR ANIMALS? IF SO, PLEASE DESCRIBE BRIEFLY

YES,

- Surgical intervention for Placement of Sticky bone and APRF + and Intra-marrow penetration in patients with periodontitis is required.
- Radiovislography


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- Blood Investigation

7.4 Has ethical clearance been obtained from your Institute ?

, Awaiting for the ethical clearance.

LIST OF REFERENCES:

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ANNEXURE 1 DEPARTMENT OF PERIODONTOLOGY

HISTORY PROFORMA

Date:

Patient's name:

O.P.no.:

Age/Sex:

Occupation:

Address:

Phone no.:

Chief complaint:

History of Presenting Illness:

Past Dental History:

Medical History:

Drug History:

Family History:

Personal History:

Habits:

Parafunctional Habits:

Oral Hygiene Habits:
Tooth Brushing:

Age of the brush:

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Type of the brush

Methods:

Horizontal ☐

Vertical ☐

Circular ☐

Frequency of brushing:

Estimated time spent:

Other aids:

Dental Floss ☐

Tooth pick ☐

Interproximal brushes ☐

Mouthwash ☐

General Physical Examination:

Extra-Oral Examination:

Facial Symmetry:

Temporomandibular Joint

Tenderness ☐

Clicking ☐

Jaw Deviation ☐

Lymph nodes:

Lips:

Halitosis:

Intra-Oral Examination:

Soft-Tissue Examination:

Buccal Mucosa:

Tongue:

Palate

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[Signature]

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BLEEDING ON PROBING			
EXUDATE			

POSITION			
SURFACE TEXTURE			
SIZE			
SHAPE			
CONSISTENCY			
CONTOUR			
TEETH	$\begin{array}{r} 8 \ 7 \ 6 \ 5 \ 4 \\ 8 \ 7 \ 6 \ 5 \ 4 \end{array}$	$\begin{array}{r} 3 \ 2 \ 1 \ 1 \ 2 \ 3 \\ 3 \ 2 \ 1 \ 1 \ 2 \ 3 \end{array}$	$\begin{array}{r} 4 \ 5 \ 6 \ 7 \ 8 \\ 4 \ 5 \ 6 \ 7 \ 8 \end{array}$
COLOUR			
CONTOUR			
CONSISTENCY			
SIZE			
SURFACE TEXTURE			
POSITION			
EXUDATE			
BLEEDING ON PROBING			

HARD TISSUE EXAMINATION:

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No. of teeth present:

Missing teeth:

Occlusal examination:

Classification:

Overjet:

Overbite:

Trauma from occlusion:

Supraeruption:

Crossbite:

Proximal contacts:

Wasting diseases:

Attrition:

Abrasion:

Erosion:

Dental deposits:

Calculus:

Stains:

Dental caries:

Restored teeth:

Investigations:

Radiographic:

Radiographic Interpretation


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Lab Investigations:

Haematological:

Biopsy:

Bacterial smear:

Diagnosis:

Prognosis:

Overall:

Individual:

TREATMENT PLAN


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[illegible]

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18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

[illegible]

18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

ANNEXURE 3

RECORD OF CLINICAL PARAMETERS AFTER 3 MONTHS

PROBING POCKET DEPTH:

A mouth mirror and a periodontal probe (UNC 15 probe) will be used. The probe will be inserted between the tooth and the gingiva, and the sulcus depth or pocket depth will be noted against the measuring lines. The direction of the probe during insertion should, whenever possible be in the same plane as the long axis of the tooth.

18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

CLINICAL ATTACHMENT LEVEL:

A mouth mirror and a periodontal probe (UNC 15 probe) will be used. The probe will be inserted between the tooth and the gingiva, and the level of attachment loss will be noted against the measuring lines. When recession of the gingival margin is present, the CAL is calculated by adding the probing depth to the gingival margin level. When the gingival margin is coronal to the CEJ, the CAL is calculated by subtracting the gingival margin level from the probing depth.

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(AS MEASURED USING CBCT)

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ಜೋಡಣೆ 6

ಭಾಗವಹಿಸುವಿಕೆ ಮಾಹಿತಿ ನಮೂನೆ

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿ: ಡಾ. ದಿವ್ಯಾ ಕೆ ಮಾರ್ಗದರ್ಶಿ: ಡಾ. ಸವಿತಾ ಎ ಎಮ್
(ಪ್ರತಿ ಭೇದ ಮತ್ತು ಮುಖಾಂತರ ಸಭೆ, ಅಸೋಸಿಯೇಟ್ ಡೋನ್-ಸ್ಕಾ ತಕ್ಕೊತ್ತ ರ
ಅಧಿಕಾರಿಯರುಗಳು. ಸಹ ಮಾರ್ಗದರ್ಶಿ: ಡಾ. ಪರ್ಮಿ ರೊ ರೋತಿ ಪಾಟೀಲ್
ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ : ದಯಾನಂದ ಸ್ನೇಹ ಕಾಲೋಜು ಆಫ್ ಡಂಟಲ್ ಸೈನ್ಸಸ್,
ಬೆಂಗಳೂರು, ಕರ್ನಾಟಕ. ಭಾಗವಹಿಸುವಿಕೆ ಮಾಹಿತಿ:

ಒಂದು ಗಳ ದವ್ಯ ಮತ್ತು ಮೂಳೆ ತುಂಬುವಿಕೆಯನ್ನೂ ನಿರೂಪಿಸುವ ಮೂಲಕ
ಹಿರಿಯಂಟ್ಟಿಟಿಸ ನಲ್ಲಿ ಸಮ ತಲ ಮೂಳೆ ದೋಷದ ಚಿಕಿತ್ಸೆ ಗಾಗಿ ಸುಧಾರಿತ ಪರ್ಮಿ ರೊ ರೋತಿ
ಲೆಟಿಭರಿತ ಫೈಬ್ರೋ ನಾ ಜೋತೆ ಗೆ ಚುಚ್ಚು ಮದ್ದಿ ನ ಪರ್ಮಿ ರೊ ರೋತಿ ಲೆಟಿ ಸಮ
ಯದರ್ ಫೈಬ್ರೋ ನಾ ಮತ್ತು ಕೂ ನೋಗಾಣು ಘಟ (ಚಿಗುಟಾದ ಮೂಳೆ) ತು ಲರ್ನತಮ ಕ
ಮೌಲಯ ಮಾಪಾಣ ಶೋಷಾರ್ಕಯ

ಯದ್ಯಚೊ ಕನಿಯಂತೋ ತ

ಕೂ ನಿಕಲ್ ಪರ್ಮಿ ಯೋಗ್ ಮುಂಬ ಅಧಿಕಾರಿಯರಲ್ಲಿ ಭಾಗವಹಿಸು: ನಿಮಮ ನಾ
ಆಹ್ವಾನಿಸ್ಸಿ ಗಿದೆ.

ಈ ದಾಖ್ಲೆ ನಿಮಗೆ ಅಧಿಕಾರಿಯರದ ಬಗ್ಗೆ ಅಗತ್ಯ ವಿರುವ ಎಲ್ಲಾ

ಮಾಹಿತಿಯನ್ನೂ ಒದಗಿಸುತ್ತದೆ ದಯವಿಟ್ಟು ಇದನ್ನೂ ವಿಚಾರಿಸಿ

ರಿಕೆಯಿಂದ ಓದಬೋಕು. ಅದರಲ್ಲಿ ನಿಮಮ ಭಾಗವಹಿಸುವಿಕೆಯ ಏನನ್ನೂ

ಒಳಗೊಂಡಿರುತ್ತದೆ

ದೆ ಮುಂಬದನ್ನೂ ನಿ ರೋವು

ಅಂತರಮಾಡಿಕೊಂಡಿದ್ದರಿಂದ ರೋ ರೋರಿ ಮುಂದು ಬಿಡು ತಪ್ಪಿ ಸಿಕಳ್ಳಿ. ನಿ ರೋವು ಯವುದೆ
ರೋ ಪರ್ಮಿ ಶ್ವಾ ಗಳನ್ನೂ ಹಂದಿ ದಿ ರೆ, ನಿ ರೋವು ಒಪಿಪ್ ಗೆಗೆ ಸಿತಿ ಮಾಡುವ
ಮೊದಲು ದಯವಿಟ್ಟು ನಮಮ ನಾ ಕೆ ರೋತಿ ತೊಳೆ ದುಕಳ್ಳಿ.

ಪುರ ಜಯ ಮತ್ತು ಉದದ ಗಿ ರಿ ರೋರಾ:

ಪೆರಿಯಡಾಂಟಿಟಿಸ ಎನ್ನಾ ವುದು ಉರಿಯೂತದ ಸೊ ತಿಯಾಗಿದ್ದು, ಇದು ಹಲ್ಲಿ ನ ಸುತ್ತ
ಲಿ ನ ಅಂಗಾಂಶಗಳ ನಾಶಕೂ ಕಾರವೂ ಗುತ್ತದೆ. ಈ ಸೊ ತಿಯ ಹಲ್ಲಿ ನ ಚಲನಶೀಲತೆಗೂ
ಕಾರವೂ ಗುತ್ತದೆ ಏಕೆಂದರೆ ಇದು ಚಿಕಿತ್ಸೆಗೆ ನೋಡದಿದ್ದು ಲ್ಲಿ ಹಲ್ಲಿ ನ ಸುತ್ತ ಮುತ್ತಲಿ ನ

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ಮೂಳೆ ನಷ್ಟ ದಿಂದ ಉಂಟಾಗುತ್ತದೆ. ಮೂಳೆ ನಷ್ಟ ವು ವಿವಿಧ ನಮೂನೆಗಳು. ಒಂದ ಕೂಡಿವೆ, ಇದರಲ್ಲಿ ಸ್ವಮೂರ್ನ ಜನಸಂಖ್ಯಾ ಯಲ್ಲಿ ಫಿಟ್ (ಸಮತಲ) ಪರೋ ಕಾರವು ಹೆಚ್ಚು? ಸ್ವಮೂರ್ನ ವಾ ಗಿದೆ. ಆದಾಗೂ ಈ ರೀತಿಯ ಮೂಳೆ ನಷ್ಟ ದ ಮೂದರಿಯಲ್ಲಿ ಮೂಳೆ ಮರುರಚನೆಯ ಹಲವಾ ರು ಕಾರಣಗಳಿಂದಾಗಿ ಸ್ಪಧಿಸುವುದು ಕಷ್ಟ ವ್ಯಗಿದೆ. ಆದು ರಿಂದ ನಮಮ ರೊಂದ 10 ಮಿ. ರಕತ ವನ್ನಾ ತ್ತಗೈದುಕುಂಡು ಮೂಳೆ ಕಸಿಯಂದಿಗೆ ಬರಸಿ ಅವನ್ನಾ ಮೂಳೆ ದೋಷಿಲ್ಲಿ ಇರಿಸಲಾಗುತ್ತದೆ. ಇದನ್ನಾ ಜಿಗುಟಾದ ಮೂಳೆ ಎಂದು ಕರೆಯಲಾಗುತ್ತದೆ ಮತ್ತು ತ ಇದು ಮೂಳೆ ರಚನೆಯನ್ನಾ ಸಿ ಹೆಚ್ಚು ಸುತ್ತದೆ.

ವಿಧಾನ:

ನೋವು ಭಾಗವಹಿಸಲು ಒಪ್ಪೋ ದರೆ, ಚಿಕಿತ್ಸಾ ಯ ಬಗ್ಗೆ ನಮಗೆ ವಿವರಿಸಲಾಗುವುದು. ಪೂವ್ಯ ಆಪೆ ರೊ ರೋಟಿವ್ 080 ರ ರೋಡಯೊ ರೋಗೊ ಫ್ ತ್ತಗೈದುಕಳಳ ಲಾಗುವುದು. ನಂತರ ನೋವು ಸುಪಾ ಮತ್ತು ತ ಸಬ್ ಜಿಂಗ್ ಕ್ವಿವಲ್ ಸ ರೊ ರೋಲಿಂಗ್ (ಡೋಪ್ ಕೊ ರೊ ರೋನಂಗ್) ಗೆ ಒಳಗಾಗಬೋಕು ಹಾ ಗೂ ನಾಲಯೊ ಮತ್ತು ತ ಆರು ವಾ ರಗಳ ನಂತರ ಮರುಪಾ ಯಬೋಕು. ನಂತರ ನೋವು ಇವುಗಳಲ್ಲಿ ಯವುದಾದರೊ ಒಂದು.

ಚಿಕಿತ್ಸಾ ಗೆ ಒಳಪ್ಪು ತಿತ ರೊ ರೋರಿ (APRF) / ಜಿಗುಟಾದ ಮೂಳೆ / ಇಂಟಾ ಮಾರೋ ವೆನೆಟಾ ರೊ

ರೊ ರೋಶನ್ / ಒಪ್ಪಾ

ಫಿಟ್ ಡಬ್ಬೊ ಡಮ ರೊಂಟಾ ಆಂಟಿಬಯೊ ರೋಟಿಕ ಸ ಮತ್ತು ತ ನೋವು ನವಾ ರಕಗಳನ್ನಾ

ನೋಡಿ ಮತ್ತು ತ ಹೊಲಿ ಗೆ ತ್ತಗೈಯಲು ಏಳು ದಿನಗಳ ನಂತರ ಕರೆ ಮಾಡಲಾಗುತ್ತದೆ. ಕೊ ನಕಲ್ ಮತ್ತು ತರೆ ರೋಡಯೊ ರೋಗೊ ಫ್ ಕಲ್ ಬದಲಾವಣೆಗಳನ್ನಾ ಜೊ ಶೋಲಿ ಸಲು 12 ವಾ ರಗಳು ಮತ್ತು ತ 24 ವಾ ರಗಳ ನಂತರ ನಮಮ ನ್ನಾ ಮತ್ಸತ ಕರೆ ಮಾಡಲಾಗುತ್ತದೆ. ಈ ಅಧಾ ಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಯಾವುದ ರೋ ಜೊ ಹ್ವರವನ್ನಾ ಒದಗಿಸಲಾಗುವುದಿಲ್ಲ. ಆದರೆ ಈ ಶ್ವಕ್ಷಣಿಕ ಅಧಾ ಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವ ನಮಮ ಪರೊ ಯತ್ತ ವು ಹೆಚ್ಚು?

ಮೌಲಾ ಯತಮಾ ಗಿರುತ್ತದೆ ಮತ್ತು ತ ಪರೊ ಶರಿಸಿಸಲ್ಪ ಡುತ್ತದೆ. ಅಧಾ ಯನದ ಕುರಿತು ಯಾವುದ ರೊ ಸಮಯದಲ್ಲಿ ಯಾವುದ ರೋ ಪರೊ ಶು ಯನ್ನಾ ಕ ರೋಳಲು ನಮಗೆ ಸಾಾ ಗತವಿದೆ. ನಮಮ ಭಾಗವಹಿಸುವಿಕೆಯ ಸಂಪೂರ್ಣವಾಗಿ ಸ್ಪ ಯಂವೆ ರೊ ರೋರಿತಮಾ ಗಿರುತ್ತದೆ. ಯಾವುದ ರೊ ಸಮಯದಲ್ಲಿ ಅಧಾ ಯನದಲ್ಲಿ ಪಾಲೆ ಕಳ ಲು ಅಥವಾ ನಲ್ಲಿ ಸಲು ಹಾ ಗೂ ನರಾಕರಿಸಲು ನೋವು ಸ್ಪ ತಂತೂರಾಗಿರುತ್ತೂ ರೊ ರೋರಿ. ನಮಮ

ಭಾಗವಹಿಸುವಿಕೆ ಮತ್ತು ತ ವೈಯಕ್ತಿಕ ಕ ವಿವರಗಳನ್ನೂ ಗೌಪ್ಯವಾಗಿರಿಸಿ ಮಾಹಿತಿಯಾಗಿ
ನವ್ಯಹಿಸಲಾಗುತ್ತದೆ. ಅಧಾ ಯನದ ಫಲಿತಾಂಶಗಳನ್ನೂ ಹೀಗೆ ಕೆಯಲ್ಲಿ ಪೋ
ಕಟಿಸಬಹುದು ಅಥವಾ ನಮಮ ಗುರುತಿಸುವ ವಿವರಗಳನ್ನೂ
ಬಹಿರಂಗಪಾ ಸದ ವ್ಯಜ್ಞ ನಕ ಪಿ ಯ ಕೆಯಾಗಿ ಪೋ ಸುತ ತಪ್ಪು ಸಬಹದು.

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಯ ಹೆಸರು ಮತ್ತು ವಿಳಾಸ:

ಡಾ. ದಿವ್ಯಾ ಕೆ

ಸುಸ್ತಿ ತಕತತ ರ ವಿದ್ಯಾಂಶ ಧಾರ್,

ಪೆರಿಯಡಾಂಟಾಲಜಿ ವಿಭಾಗ ದಯಾನಂದ

ಸ್ಕೂಲ್ ಕಾಲೋಜ್ ಆಫ್ ಡೆಂಟಲ್

ಸೈನಸ್ ಸ್, ಬಂಗಳೂರು- 560078, ಸಂಪಾಕ ಸಂಖ್ಯಾ :

7034625259.

ಅಧಾ ಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವಾಗ ನೋವು ಯಾವುದೇ ರೋ ಕುಂದುಕರತಗಳನ್ನೂ ಅನಾ
ಭವಿಸಿದರೆ, ಈ ಸಂಖ್ಯಾ ಗೆ ಕರೆ ಮಾಡಲು ಮುಕತ ವಾಗಿದೆ:

ಡಾ. ಚೋಮಯ್ಯರಾಯ ಶಾ ರೋಟೊ ಪಿ (ಅಧಾ ಕರು, ಸಂಶೋಧ ಕ ನೈತೂ ಕ ಸಿಮ
ತೂ) - 948178957

ಡಾ. ಹೆ ರೋಮಂತ್.ಎಂ (ಅಧಾ ಕರು, ಸಂಶೋಧಾ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ತ ಪ್ರೊ ರೋಪ್ಪ
ನಮ್ಮ) 9845459666.

ಡಾ.ಗಂಗವೋರಯ್ಯ (ಸಂಶೋಧಾ ಮುಖೋಪ್ಪ ಸಿ, ಡೆವಿಸಿಡ್ ಡೆವಿಸ್) -9880428875


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ANNEXURE 7

DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES

BENGALURU

"Comparative assessment of Injectable platelet rich fibrin and xenograft (sticky bone) with advanced platelet-rich fibrin plus for the treatment of horizontal bone defect in periodontitis by assessing gingival thickness and bone fill. A Randomized Controlled Clinical Trial

Name of the investigator

Dr Divya K

Post graduate student

Department of periodontology

DSCDS

INFORMED CONSENT

Guided by

Dr. Savita. A.M

Professor, Head and Associate Dean Pg studies

Department of periodontology

DSCDS

I, _____ the undersigned, give my consent for the dental investigation and treatment procedures to be performed on myself. I have been informed about the procedure and risk involved, in a language I can understand.

Participant's

Name

Participant's signature

Date and time:

H A

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ಚೋಡಣೆ 7

**ದಯಾನಂದ ಸಾರ್ವಕಾಲಿಕೋಚ್ ಆಫ್ ಡಂಟಲ್ ಸೈನ್ಸಸ್ ನಾ
ಬಂರ್ಲಗರು**

"ಜಿ ಜುಕಿ ಮದಿಯ ನಪೊ ರೊ ರೋಟ್ ಲಟ್ ಸಮ್ಯದಿ ಫೆ ಸೈಮೊ ನ್ ಮತು ತ ಕಸ ನೋಗೊ
ಫ್ (ಜಿಗುಟಾದ ಮೂಳೆ) ಜೊತ್ಸಗೆ ಸುಧಾರಿತ ಪೊ ರೊ ರೋಟ್ ಲಟ್ ಸಮ್ಯದಿ ಫೆ ಸೈಮೊ
ನ್ ಜೊತ್ಸಗೆ ಒಸದುಗಳ ವಪ್ಪೊ ಮತು ತ ಬೋನ್ ಫ್ಲಲ್ ಅನ್ನಾ ನಣಾಯಿಸುವ ಮೂಲಕ
ಪೊ ಯಾಂಟಾರೊ ಸೈಟಸ್ ನಲ್ಲಿ ಸಮತಲ ಮೂಳೆ ದೋಷಿ ಚಿಕಿತ್ಸೆ ಗಗಿ ತು ಲನಾತಮ ಕ
ಮೌಲಾ ಮಾಪಾಂ . ಯಾದ್ಯಚೊ ಕ ನಯಂತಿ ತ ಕೊ ನಕಲ್ ಪಾಪೊ ದೊ ರೋಗ

ತನಖ್ಯಾಧಿಕಾರಿಯ ಹೆಸರು

ಮಾಗರ್ದರ್ಲಾನ ನಿ ರೋಡಿದವರು

ಡಾ ದಿವ್ಯಾ ಕೆ

ಡಾ ಸಿರಿ ತಾ ಎ ಯುಂ ಸ್ನಾ ತಕೋತ್ತ

ರ ವಿದಾರ್ಥಿ

ಪೊ ಧಾಯ ಪಾಂ ಮತ್ತು ಮುಖಾಂ ಸಧ

ಡವಾಟಮ ರೋಂಟಾರೋಂಟ್ ಆಫ್ ಪೊ ಯಾಂಟಾಲಜಿ

ಡವಾಟಮ

ರೋಂಟಾರೋಂಟ್ ಆಫ್ ಪೊ ಯಾಂಟಾಲಜಿ

ಮಾಹಿತಿ ನಿರೆ ಕಿ ರೋಡಿದ ಒಪ್ಪಿ ಗೆ

ನಾನಾ _____ ಕೆಳಗೆ ಸಹಿ ಮಾಡದೊ ರೊ ರೋನೆ, ನನ್ನ ಮೋಲ
ನಡಸಬೋಕಾದ ದಂತ ತನಖಾಂ ಮತು ತ ಚಿಕಿತ್ಸಾ ವಿಧಾನಗಳಿಗೆ ನನ್ನ ಒಪ್ಪೊ ಗೆಯನ್ನಾ
ನೋಡುತ್ತೆತ ರೊ ರೋನೆ. ನನಗೆ ಅರ್ಥವಾ ಗುವ ಭಾಷೆಯಲ್ಲಿ ಕಾಯಾವಿಧಾನ ಮತು ತ
ಅಪಾಯದ

ಬಗೊ ನನಗೆ ತಿಳಿಸಲಾಗಿದೆ.

ಭಾಗವಹಿಸುವವರ ಹೆಸರು:

ಭಾಗವಹಿಸುವವರ ಸಹಿ: ದಿನಾಂಕ

ಮತು ತ ಸಮಯ:

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CONSORT CHART

ENROLLMENT

Number of Subjects will be assessed regarding their eligibility

Subjects with Horizontal

defects will be randomized (Block randomization)

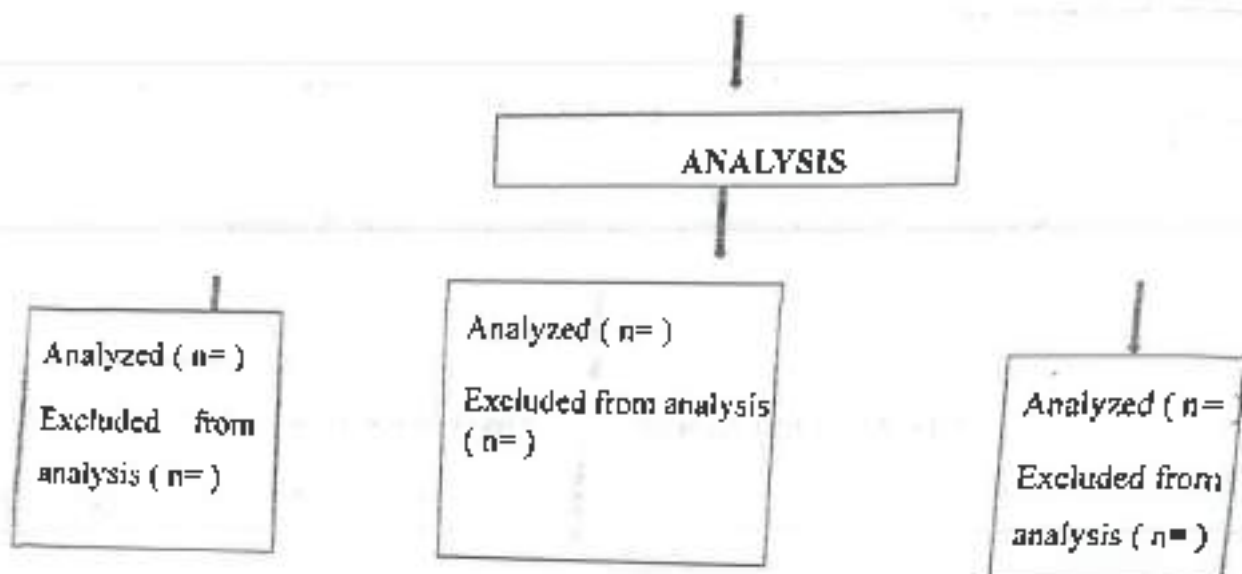
ALLOCATIONS

Group 1	Group 2	Group 3
Allocation to intervention	Allocation to intervention	Allocation to intervention
(OFD +IMP)	(OFD +IMP+ sticky bone)	(OFD +(MP+ APRF+)
Received allocated intervention (n =)	Received allocated intervention (n =)	Received allocated intervention (n =)

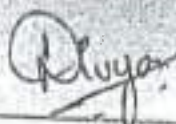
FOLLOW UP

Follow up done on 3 rd and 6 th months Patients lost follow up=	Follow up done on 3 rd and 6 th months Patients lost follow up=	Follow up done on 3 rd and 6 th months Patients lost follow up=

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Kumarsawari, Bangalore - 560 075

9. SIGNATURE OF THE CANDIDATE	
10. REMARKS OF THE GUIDE	An innovative approach to regenerate bone as well as to improve gingival thickness
11. NAME AND DESIGNATION OF GUIDE (IN BLOCK LETTERS)	DR. SAVITA A.M. PROFESSOR AND HEAD, ASSOCIATE DEAN PG STUDIES DEPARTMENT OF PERIODONTOLOGY DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES BENGALURU-78
SIGNATURE	
12. NAME AND DESIGNATION OF CO- GUIDE (IF ANY)	
SIGNATURE	
13. HEAD OF THE DEPARTMENT	DR. SAVITA A.M. PROFESSOR , ASSOCIATE DEAN PG STUDIES DEPARTMENT OF PERIODONTOLOGY DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES BENGALURU-78
SIGNATURE	
14. REMARKS OF THE CHAIRMAN AND THE PRINCIPAL	 PRINCIPAL Dayananda Sagar College of Dental Kumaraawamy Layout, Bangalore - 560 078
SIGNATURE	



DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES
Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru

DSCDS/IRB/2023-24/08

Date: 06-03-2024

Time: 02.00PM to 03.00PM.

Venue: seminar hall, orthodontics department, 5th floor

Minutes of Meeting

A Core committee meeting was conducted on 6th march 2024 and all members of the committee were present. All the agendas related to this meeting were discussed. The meeting was addressed by the member secretary. The committee discussed the submission details for UG research grants by RGUHS. The following members were present for the meeting.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer- orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth M T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member
17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof - Physiology	Member

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18.	Dr. Venkatesubramaniam	Prof and Head - Pedodontics	Member
19.	Dr. Kavitha M	Senior Lecturer- Pedodontics	Member
20.	Dr. Ashwin P	Prof - Periodontics	Member
21.	Dr. Ranjini	Senior Lecturer - Conservative Dentistry	Member
22.	Dr. Preethi P	Senior Lecturer -Oral Medicine & Radiology	Member
23.	Dr. Brunda	Senior Lecturer -Prosthodontics	Member
24.	Dr. Afshan	Senior Lecturer - Orthodontics	Member
25.	Dr. Prajwal P	Senior Lecturer - Orthodontics	Member
26.	Dr. Deepthi	Senior Lecturer -Conservative Dentistry	Member
27.	Dr. Nayana	Senior Lecturer -Public Health Dentistry	Member
28.	Dr. Sravani	Senior Lecturer -Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. Core committee meet to discuss RGHS STS UG proposals
2. To plan and conduct the RDSC meet for new proposals & IEC meet

Action taken:

- Circular passed regarding the submission criteria and synopsis details to be discussed with research head before 10th march 2024
- RDSC meet planned on the 11th march 2024 followed by the IEC meet on 16th april 2024


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


Dr. Hemanth M
Chairperson
IRB-DSCDS


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DSCDS/IRB/2023-24/09

Date: 11-03-2024

Time: 10:00 am

Venue: Lecture hall -1

Minutes of Meeting

An IRB meeting was conducted on 11-03-2024 at Lecture hall -1 with Dr. Afshan S W as member secretary. The meeting was addressed by Dr. Hemanth M, Principal and chairperson RDSC. The post graduate students from all departments presented the synopsis to the committee. The expert's comments and suggestions were noted after the synopsis evaluation and mailed to the respective guides and departments for corrections. The following members attended the meet.

Sl. No.	Name	Designation	Members
1.	Dr. Hemanth M	Principal, Prof & Head - Orthodontics	Chairperson
2.	Dr. Afshan Saman W	Senior lecturer orthodontics	Member Secretary
3.	Dr. Savita AM	Asso- Dean PG Academics Prof & Head- periodontology	Member
4.	Dr. Ramnarayan B K	Asso- Dean Administration Prof & Head - Oral Medicine & Radiology	Member
5.	Dr. Mahesh D R	Reader- Oral Medicine & Radiology	Member
6.	Dr. Prashanth K T	Prof & Head - Oral & Maxillofacial Surgery	Member
7.	Dr. Shobha ES	Prof & Head - Implantology	Member
8.	Dr. Sarandha DL	Prof & Head - Prosthodontics	Member
9.	Dr. Avinash J	Vice-Principal Professor & Head - Public Health Dentistry	Member
10.	Dr. Krishnanand PS	Asso- Dean UG Academics Prof & Head - Oral Pathology	Member
11.	Dr. Vedavathi B	Prof & Head - Conservative Dentistry	Member
12.	Dr. Dharam H	Professor- Conservative Dentistry	Member
13.	Dr. Prashanth NT	Professor - Oral & Maxillofacial Surgery	Member
14.	Dr. Aravind M	Professor - Orthodontics	Member
15.	Dr. Smitha Sharan	Reader - Prosthodontics	Member
16.	Dr. Smitha Kulkarni	Reader- Public Health Dentistry	Member

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17.	Dr. Mohamed Nizam Al Deen Shah	Asst Prof - Physiology	Member
18.	Dr. Venkatasubramaniam	Prof and Head - Pedodontics	Member
19.	Dr. Kavitha M	Senior Lecturer - Pedodontics	Member
20.	Dr. Ashwin P	Prof - Periodontics	Member
21.	Dr. Ranjini	Senior Lecturer - Conservative Dentistry	Member
22.	Dr. Preethi P	Senior Lecturer - Oral Medicine & Radiology	Member
23.	Dr. Brunda	Senior Lecturer - Prosthodontics	Member
24.	Dr. Afshan	Senior Lecturer - Orthodontics	Member
25.	Dr. Prajwal P	Senior Lecturer - Orthodontics	Member
26.	Dr. Deepthi	Senior Lecturer - Conservative Dentistry	Member
27.	Dr. Nayana	Senior Lecturer - Public Health Dentistry	Member
28.	Dr. Sravani	Senior Lecturer - Periodontics	Member

Agenda and points of the meeting are mentioned below:

1. DA undergraduate synopsis presentations were done during the RDSC meet
2. The comments/ suggestions from the subject experts, research head and guides were noted

Action taken:

- The experts suggestions and corrections were mailed to the respective students and guides for resubmission


Dr. Afshan Saman W
Member Secretary
IRB-DSCDS


Dr. Hemanth M
Chairperson
IRB-DSCDS


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(Recognized by Dental Council of India, New Delhi)

Accredited A+ Grade by NAAC

LIST OF RESEARCH PROPOSALS- RGUHS STUDENT GRANTS MARCH 2024

SL NO	STUDENT NAME	GUIDE	TITLE
1.	Ms. Vasunita S	Dr. Shobha. E. S	Effectiveness And Hemodynamic Response After Injection Of Lignocaine With Or Without Adrenaline In Patients Undergoing Bilateral Extractions Of Mandibular Posterior Teeth - A Comparative Study
2.	Ms. Sekrutha	Dr Smita Sharan	Comparative Evaluation Of Antifungal Efficacy Of Zirconium Dioxide Nanoparticles In Heat Polymerized Denture Base Resin- An In Vitro Study.
3.	Ms. Ananya C	Dr Archana R Naik	Effect Of Curd, Saline And Saliva On The Tensile Strength Of Absorbable And Nonabsorbable Surgical Suture Materials - An In Vitro Study.
4.	Ms. Neva Pravasi	Dr. Krishnanand P S	Exploring The Locus Of Control Between Smokers And Non-Smokers Among Gig Workers-A Comparative Study
5.	Ms. Sanjana	Dr Vidya M A	Exploring The Relationship Between Tongue Scallopings And Obstructive Sleep Apnea: An observational Study.
6.	Ms. Thrishika M,	Dr. Sangeetha R,	Assessing The Efficacy Of Pine Oil In Comparison To Xylene As A Clearing Agent In Tissue Processing - A Comparative Study
7.	Ms. Sindhuashree M	Dr Dharam Hinduja	Evaluation Of Shade Of Anterior Teeth In A Specific Population Using Digital Spectrophotometer; An In Vivo Study
8.	Ms. Smriti	Dr Dharam Hinduja	Evaluation Of The Effect Of Multiple Sterilization Cycles On Cutting Efficiency Of Tungsten Carbide Bur, An In Vitro Study

Dated : 11-03-2024


Dr. Afshan SW

Member Secretary

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RGUHS STS 2024

Sl No	Name of Student and Guide	Title of the Study	Suggestions
41)	Ananya <u>III</u> BBS Guide: Dr. Archana	Eff. of used, green tea & saline on the tensile properties of absorbable & non absorbable suture material	⇒ <u>Study design</u> ⇒ <u>Aim & objective</u> How is the outcome variable measured? Obj-2. → why evaluate? largest difference ⇒ <u>Research question</u> Is there any difference ... ⇒ Subgroups are more for the duration of study ⇒ Absorbable and non absorbable be compared?? ⇒ Can saline be considered as control?

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Submission of Synopsis - info@decs.edu.in - Chyavanada Sagar College of Dental Sciences Mah



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Labels

Submission of Synopsis - Info



Dr. Archana R. Malik, archana@decs.edu.in

To me, Sonu

Hi Dr. Sir/Madam

I Dr. Archana Malik, from Para department am submitting the synopsis for UG Research grants after this would appreciate

hoping for a positive response

Thank you,

Respectfully,

Dr. Archana

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We will get back to you soon

Good luck!

We have received it.

Reply

Reply all

Forward

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BENGALURU, KARNATAKA.

ANNEXURE

PROFORMA FOR REGISTRATION OF SUBJECT FOR DISSERTATION

1.	NAME OF THE CANDIDATE AND ADDRESS (IN BLOCK LETTERS)	ANANYA C DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES, KUMARASWAMY LAYOUT, BANGALORE; 560078 KARNATAKA, INDIA
2.	NAME OF THE INSTITUTION	DAYANANDA SAGAR COLLEGE OF DENTAL SCIENCES, KUMARASWAMY LAYOUT, BANGALORE; 560078 KARNATAKA, INDIA
3.	COURSE OF STUDY	BDS (III year)
4.	DATE OF ADMISSION TO COURSE	10-02-2022
5.	TITLE OF THE TOPIC	"EFFECT OF CURD, GREEN TEA AND SALIVA ON THE TENSILE STRENGTH OF ABSORBABLE AND NONABSORBABLE SURGICAL SUTURE MATERIALS —AN INVITRO STUDY"

BRIEF RESUME OF THE INTENDED WORK

6.1 Need for the study:

The sutures are frequently used in periodontal minor and major surgical procedures, oral implantology, and oral surgery. Sutures serve to maintain tissue approximation until the wound attains sufficient tensile strength to prevent dehiscence. Correct closure and stabilization of surgical wound margins influence the success of the surgical procedure.

Within the oral cavity, the characteristics of the oral environment produce unique postoperative

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considerations. It is difficult to reduce mechanical forces across repair sites in the oral cavity. Many surgeons have attempted to limit tension at suture lines by using a liquid or soft diet that restricts chewing and unnecessary speech, whereas others have attempted to modify the chemical environment in the oral cavity by altering the patient's dietary intake. There is very little information regarding the tensile properties of absorbable and nonabsorbable 3-0 suture materials. Although we know the tensile strength of the suture material experimentally as mentioned by the manufacturer, we do not know its change when used orally in the presence of various food substances.

Hence, this study is to determine the effect of oral intake of fluids like curd, green tea and saliva on the tensile properties of absorbable and nonabsorbable 3-0 suture materials.

Problem statement:

Suturing in dentistry is different from suturing in other parts of the body because of the type of tissues involved, the constant presence of saliva, high tissue vascularization, and functions related to masticatory habits. Appropriate sutures require specific physical characteristics and properties, such as good tensile strength, dimensional stability, knot security, and sufficient flexibility to avoid damage to the oral mucosa.

In clinical situations like flap surgeries, regeneration procedures, and periodontal plastic surgeries where the tissue will not regain its preoperative strength and with more tension exerted on surgical flaps, consideration should be given to using a suture material that can retain long-term strength ranging from 10 to 14 days.

Research Question: Is there any difference on the tensile strength of surgical absorbable and nonabsorbable 3-0 suture materials after immersion in fluids like curd, green tea and saliva?

Null Hypothesis (H_0): There may be no effect on the tensile strength of surgical absorbable and nonabsorbable 3-0 suture materials after immersion in fluids like curd, green tea and saliva.

Research Hypothesis (H_1): There may be an effect on the tensile strength of surgical absorbable and nonabsorbable 3-0 suture materials after immersion in curd, green tea and saliva.

6.2 Review of the literature:

1) The study compares the use of silk and Teflon-coated multi-filament braided polyester threads sutures in split-mouth design for implant installation. Ten edentulous patients were surgically treated, and post-surgical samples were collected for microbiological testing. Results showed pronounced plaque accumulation for silk sutures, less comfortable intraoperative handling, and worse patient

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comfort compared to Teflon-coated polyester sutures. Bacterial adherence was slightly inferior to silk sutures, but not statistically significant.¹

2) A study on oral cavity sutures found that saliva and oral intake affect their tensile properties. Sutures exposed to saline, saliva, milk, or soy milk showed a significant interaction. Saliva-soaked sutures were weaker, while milk or soy milk had no significant difference. Suture selection should be based on repair demands and surgeon preference, with formula selection based on child's nutritional needs.²

3) The study evaluated the tensile strength of surgical absorbable and non-absorbable suture materials. 360 samples were tested in a simulated oral environment using an INSTRON machine. Results showed that absorbable sutures, like Catgut 5-0, showed maximum deterioration, while non-absorbable sutures, like Silk 4-0, showed maximum deterioration. The study concluded that polyglycolic acid 3-0 (absorbable sutures) and polypropylene 3-0 (non-absorbable sutures) are the preferred materials for periodontal surgeries.³

4) The study compared the hydrolytic degradation of two synthetic absorbable sutures, Dexons and Vicryl®, in buffer media of different pH levels. Vicryl sutures showed better retention of tensile strength than Dexon sutures, especially in physiological pH and high-alkaline conditions. However, Dexon sutures showed better retention in acidic mediums. The pH-dependent hydrolysis of Dexon and Vicryl sutures should be considered when selecting synthetic absorbable suture materials.⁴

5) Surgical sutures are crucial for wound closure, but their tensile strength can be compromised by edema. An in vitro study compared the tensile strength of commercial sutures, including black silk and vicryl, after immersion in fruit juices. Results showed vicryl sutures had the highest tensile strength and excellent knot holding capacity, while black silk had slightly lower strength. The study highlights the importance of evaluating suture materials' tensile strength in wound closure.⁵

6.3 Objectives of the study:

AIM

To determine the effect of various food substances on the tensile strength of absorbable and nonabsorbable suture materials.

Objectives of the study:

1. To assess the tensile strength of surgical absorbable and nonabsorbable suture materials (3-0) after immersion in curd, green tea and saliva.

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2. To compare the tensile strength of surgical absorbable and nonabsorbable suture materials (3-0) after immersion in curd, green tea and saliva.

7. MATERIALS AND METHODS:

7.1 Source of data:

Suture materials will be procured from the department of periodontology.

7.2 Method of collection of data

Period of study: 3 months.

Materials required:

- 3-0 absorbable surgical synthetic suture (Polyglactin 910 Vicryl)
- 3-0 nonabsorbable surgical suture (Black braided silk Merilak)
- Tensometer
- Green tea
- Saliva
- Curd

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SAMPLE SIZE : Sample size estimation is determined by G POWER software version 3.1

Keeping the effect size as 0.7 and α -error 0.05, no. of subgroups as 6, the total sample size is calculated as 36, with 5 samples in each group

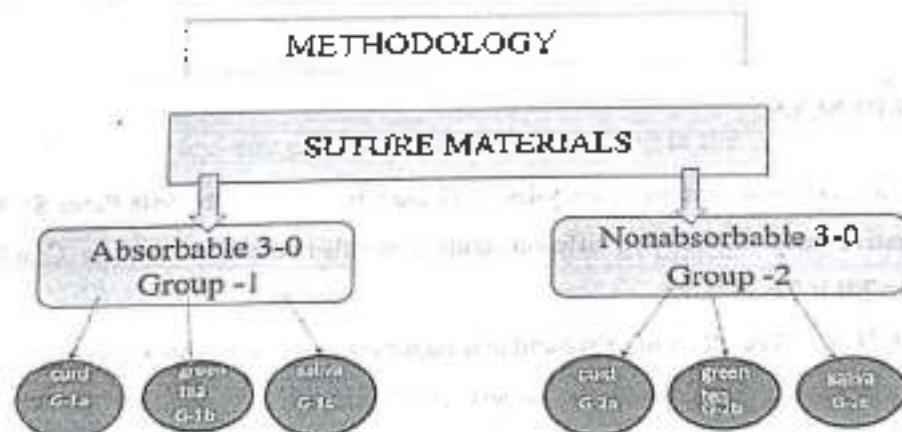
METHODS:-

The study will select two distinct types of suture materials, namely absorbable and non-absorbable, with a gauge of 3-0 that is commercially available. Four samples of each suture type will be kept for the study group. The suture samples will be tied over a pipe with a 1.5cm diameter to allow for a consistent loop. Once tied, sutures will be carefully slipped off the pipe.

Pre immersion: Tensile strength to be recorded of the selected absorbable and nonabsorbable 3-0 suture materials.

Post-immersion: the selected suture samples from each group will be immersed in three different vials containing either curd, green tea and saliva. The samples will be incubated at 37 degree Celsius. These immersion procedures will be carried out for 2 weeks.

At the end of their respective soaking periods, the sutures will be removed from their vials. Then tensometer will be used to measure the tensile strength of each material. It will be stretched to get the point of breakage, and breakage values will be collected for statistical analysis.



Immersion procedures carried out for 2 weeks. Pre and post immersion values will be recorded and analysed.

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STATISTICAL ANALYSIS :-

- a) ANOVA with post-hoc test / Kruskal Wallis test will be used to compare the means of the two groups.
- b) Paired t-test will be used to compare the means within each group.

Any relevant test, that is appropriate during the data analysis duration, it will be dealt accordingly.

7.3 Does the study require any investigation or interventions to be conducted on patients or other humans or animals? If so, please describe briefly:

NO

7.4: Has ethical clearance been obtained from your institution in case of 7.3?

Waiting for the ethical clearance.

LIST OF REFERENCES

- 1) Pons-Vicente O, Lopez Jimenez L, Gay-Escoda C, Sanchez Garces MA, Sala Perez S: A Comparative study between two different suture materials in oral implantology. Clin Oral Impl Res. 2011; 22: 282-288.
- 2) Robert E H. et al: The effect of saliva and oral intake on the tensile properties of sutures-An experimental study. Annals of plastic surgery. 2007; 3:58-59.
- 3) Minu Mathew et al: Evaluation of tensile strength of surgical absorbable and nonabsorbable suture materials -An invitro study. SBV journal of basic. 2018; 3:2-4.
- 4) Vasanthan A. et al: Comparing suture strengths for clinical application -A novel in vitro study. J periodontol. 2009; 4:80-84.
- 5) Anushya P, Balaji ganesh S, Jayalakshmi S: Evaluation of tensile strength of surgical absorbable and nonabsorbable suture materials after immersion in different fruit juices-An in

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vitro study. J. Adv. Pharm. Technol. Res. 2022; 1:13-15.

NAME AND ADDRESS OF THE PRINCIPAL INVESTIGATOR:

Ananya C

Third year undergraduate student

Dayananda Sagar College of Dental Sciences,

Bangalore- 560078

Contact no.: 8618880486.

If you feel any grievances while participating in the study, feel free to call on this number: Dr.

Chandrashekar. J (Chairperson, Institutional Ethical Committee)

Dr. Hemanth. M (Chairperson, Research Development and Sustenance Committee) - 9845459666. Dr. Nagesh. L (Member Secretary, Institutional Review Board) - 9844035470.

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