



PINS & POSTS

AN OFFICIAL NEWS LETTER OF IACDE



VOLUME - IV

May - August 2019 (12 Pages)

ISSUE - II

ACTIVITIES - Page 3-4

ACADEMICS - Pages 5 to 8

REST-ORE-TAINTMENT - Page 10

CALENDAR - Page 11

IACDE 2ND ZONAL CONFERENCE

Zone - 3

26th – 27th August 2019

The IACDE 2nd North Zone, 3rd Post Graduate Convention was held at KGMU on the 26th and 27th of August, 2019. Dr. A P Tikku, was the organizing Chairman and Dr. Anil Chandra, the conference organizing secretary.

The conference was inaugurated by the Hon'ble Deputy Chief Minister of Uttar Pradesh, Dr. Dinesh Sharma, the chief guest, who welcomed the participants and reiterated the Government's commitment towards achieving oral health for all.

Dr. Anil Kohli, the guest of honor, used his opening remarks to guide all the dental professionals and students into becoming more empathetic to the patients.

This two day scientific extravaganza was attended by faculty members, post graduates and research scholars from all of north India. The conference mustered more than 400 attendees.

The Scientific sessions were au courant with latest technological advancements in the field and proficient research. There were eminent guest speakers and a total of 300 plus scientific paper and poster presentations.

The conference concluded with a night of music and dance at the Banquet held at the convention centre, KGMU Lucknow.



Zone - 2

2nd- 4th August 2019

The 2nd IACDE Zonal conference held for the first time at Raipur from 2nd Aug to 4th Aug 2019 was well appreciated. The organising committee headed by Dr Rana Varghese, Dr Yogesh Sahu, Dr Rashmi Nair and their team worked relentlessly towards making the event a huge success.

A total of 250 registrations were done covering the different states of Zone 2. This conference was mainly focussed to provide a scientific treat to the students. There were four preconference courses organized by Dr Srikumar GPV. These courses were well attended by the students. There were 130 papers and 124 posters presentations by the students hereby increasing the scientific value of the conference.

The event was graced by the presence of Dr Dibyendu Majumdar, President – DCI, Dr Ashu Gupta EC member-DCI. A banquet night was organized as a part of recreation for the delegates and students. We hope that all the delegates and students have taken back good memories.



Zone - 4

9th- 10th August 2019

The 2nd Zonal Conference was conducted on 9th and 10th August 2019 at A B Shetty Memorial Institute of Dental Sciences, Nitte (Deemed to be University), Deralakatte, Mangaluru.

The conference was inaugurated by the Honourable Chancellor of Nitte (Deemed to be University) Sri N Vinaya Hegde. Sri Rajkiran Rai, Managing Director and CEO of the Union Bank of India was the Chief Guest. Dr Girish Parmar, President IACDE, Dr Mohan Bhuvaneshwaran, Honorary General Secretary of IACDE and Dr Roopa Nadig, President of ACE-Karnataka conveyed their greetings.

The Oration lecture was delivered by Dr Thimappa Hegde, Director Neurosciences, Narayana Health titled 'From Breakdown to Breakthrough – Inspiration from Neurosurgical Practice'. The first official publication of ACE- Karnataka, Journal of Aesthetics, Conservative Dentistry and Endodontics was also released in the session.

Dr Mithra N Hegde, Secretary, ACE-Karnataka, Chairperson, Organizing Committee welcomed the gathering. Dr Kundabala M, Secretary, Organizing Committee proposed the Vote of thanks. Dr Vandana Sadananda, Joint Secretary, ACE-Karnataka, Organizing Co-ordinator, Organizing Committee compered the programme.

The ACE-Karnataka Lifetime Achievement Award 2019 was bestowed to Dr Sreenivasa Murthy for his distinctive contribution to the field of Conservative Dentistry and Endodontics.

The keynote lectures was delivered by Lt Col Sonali Sharma, Dr Vivek Hegde, Dr Mohan Bhuvaneshwaran and Dr Sarjeev Singh Yadav, Dr Shishir Singh, Dr S Balagopal and Dr Jaganathan, Dr Sunil Eraly, Dr Manikandan R and Dr Prahlad Saraf.

Case vignette session was moderated by Dr Roopa Nadig with expert panelists comprising of senior clinicians and academicians.

To continue to reach out and establish relationships agreeing on a strategy of co-operation and co-ordination with academia and industry to exercise greater stewardship of resources session titled 'Industry Technology Platform – Demonstration and Hands on' was organized for the students which provided exposure regarding the latest materials and techniques available. 20 sessions were held for 20 students each with no registration fees.

Two Pre-Conference courses were conducted at A B Shetty Memorial Institute of Dental Sciences, Nitte (Deemed to be University), Deralakatte, Mangaluru.

The awards in the paper and e-poster sessions were awarded to 22 best paper and 33 best e-poster awards.

The ACE-Karnataka Awards 2019 were conferred to the following members in various categories: Academic Excellence Award, Distinguished Researcher Award, Clinical Excellence Award, Early Career Award, Young Achiever's Award Postgraduate Category, Young Achiever's Undergraduate Category Award.



STUDENT EXCHANGE PROGRAMME 2019 - ARMY COLLEGE OF DENTAL SCIENCES



**Dr. Anil Chandra**

Acknowledged by American Association of Endodontists

Dr. Anil Chandra, Professor, Faculty of Dental Sciences, King George's Medical University, Lucknow delivered guest lecture at American Association of Endodontics Conference held at Montreal, Canada in April, 2019.

He has also been accepted as a Speaker at next Conference of AAE at Nashville, Tennessee, USA on April, 2020.

**Dr. Kundabala**

Dr. Kundabala, Professor, Department of Conservative Dentistry and Endodontics, Manipal College of Dental Sciences, Mangalore, has been awarded "ACE- KARNATAKA ACADEMIC EXCELLANCE AWARD" for exceptional caliber and dedication to the field of Conservative Dentistry and Endodontics at the 2nd South Zonal Conference 2019 held at Mangalore from August 9th- 10th 2019.

**Dr. Aditi Jain,**

has completed 7 half marathons in Raipur, Ahmedabad, Austin, Dallas (Texas), Mumbai and completed 13, 10kms run.

She is also ambassador for pinkathon at Raipur with Milind Soman and is instrumental in spreading awareness of breast cancer in females.

**Trainer Certification by FKG**

Dr. Neeraj Malhotra was awarded a CERTIFIED TRAINER by FKG Denta SA, at MIES 2018, Faculty of Dentistry, Mahidol University, Bangkok in 3D-endodontics system XP-Endo instruments & Total Fill Bio-ceramic obturation.

2nd North Zone Conference 2019 (Zone 3)**12 Selected Paper for National Conference**

| S No. | Name | IACDE No | TOPIC | COLLEGE |
|-------|--|--------------|--|--|
| 1. | DR PREETI RASTOGI DR ARUN BARANWAL | 5553 | APICAL SEALING OF TWO RECENT ROOT CANAL SEALER USING DYE PENETRATION - A STEREOMICROSCOPIC STUDY | CAREER POSTGRADUATE INSTITUTE OF DENTAL SCIENCES, GHAILLA. |
| 2. | DR KEERTHANA | 5471 | COMPARISON OF 2D AND 3D RADIOGRAPHY IN DIAGNOSIS AND TREATMENT PLANNING OF ROOT CANAL TREATED TEETH WITH PERIAPICAL LESION- A CASE SERIES. | POSTGRADUATE INSTITUTE OF DENTAL SCIENCES, ROHTAK |
| 3. | DR RITIKA YADAV | 4754 | TO EVALUATE THE EFFICACY OF GUIDED TISSUE REGENERATION IN THE HEALING OF APICOMARGINAL DEFECTS: A RANDOMIZED CONTROLLED TRIAL WITH 3D ANALYSIS USING CBCT | POSTGRADUATE INSTITUTE OF DENTAL SCIENCES, ROHTAK. |
| 4. | DR KREENA | 4683 | THE EFFECT OF DIFFERENT BENCH TIME ON SURFACE HARDNESS OF A COMPOSITE RESIN- AN INVITRO STUDY | NATIONAL DENTAL COLLEGE, MOHALI. |
| 5. | DR SAUMYA JOHRI DR JYOTSANA AGARWAL | 6989 6988 | 3D PRINTING IN ENDODONTICS: FABRICATION OF THE FUTURE. | KING GEORGE'S MEDICAL UNIVERSITY, LUCKNOW |
| 6. | DR S. GOPI. PAWAN SUDHIR | 6305 | A STUDY OF EXTERNAL APICAL ROOT RESORPTION AND VITALITY IN PATIENTS TREATED WITH FIXED ORTHODONTIC THERAPY | ARMY DENTAL CENTRE RESEARCH AND REFERRAL, DELHI |
| 7. | DR JYOTI DD DR NEHA JASRASARIA | 7001 7002 | AN UNUSUAL BILATERAL DENTAL ANOMALY OF MANDIBULAR SECOND MOLAR | KING GEORGE'S MEDICAL UNIVERSITY, LUCKNOW |
| 8. | DR SUMIT SHARMA | 6310 | EVALUATION FOR ISOMETRIC FORCE OF THE CRANIOCERVICAL FLEXOR MUSCLE BY USING CUSTOMMADE LOAD CELL DEVICE: A COMPARATIVE ANALYSIS. UNRAVELLING THE MYSTICS OF MAXILLARY MOLARS | ARMY DENTAL CENTRE RESEARCH AND REFERRAL, DELHI. |
| 9. | DR SARVESHWARI SINGH | 5825 | COMPARATIVE EVALUATION OF MICROLEAKAGE WITH TOTAL-ETCH, UNIVERSAL AND NANO ADHESIVE SYSTEMS IN CLASS V COMPOSITE RESTORATIONS: AN IN VITRO STUDY | SARDAR PATEL POST GRADUATE INSTITUTE OF MEDICAL SCIENCES. |
| 10. | DR ANU VASHISHT | 5847 | EVALUATION AND COMPARISON OF SYSTEMIC OXIDATIVE STRESS PRE AND POST ROOT CANAL THERAPY USING MDA AS SALIVARY BIOMARKER: A CLINICAL STUDY | SCHOOL OF DENTAL SCIENCES, SHARDA UNIVERSITY. |
| 11. | DR TANU MAHAJAN | 4814 | EVALUATION OF OXIDATIVE STRESS IN SALIVA BEFORE AND AFTER ENDODONTIC THERAPY | ITS DENTAL COLLEGE, HOSPITAL AND RESEARCH CENTRE. |
| 12. | DR ANUPRIYA BHADORIA | 5432 | ANATOMIC VARIATIONS IN 3RD MOLARS IN MEERUT POPULATION: A CBCT BASED RETROSPECTIVE ANALYSIS | SUBHARTI DENTAL COLLEGE, MEERUT |

POSTER PRESENTATION SELECTED FOR NATIONAL CONFERENCE

| S No. | Name | IACDE Registration No. | College |
|-------|--|------------------------|--|
| 1. | DR. PRERNA GOEL | 6344 | Rungta College Of Dental Sciences And Research |
| 2. | DR. CHIGURUPATI SWETHA DR. KASTURI SRI RAM DR. PRAVEENA DARA | 6420 6413 6479 | PanneeyaMahavidyalaya Institute Of Dental Sciences And Research Center |
| 3. | DR. SOHAM DATTA | 6589 | Hidsar, Haldia, West Bengal |
| 4. | DR. BATTULA SAI MADHURI | 6437 | Army College Of Dental Sciences , Secunderabad |
| 5. | DR. NEELAM KUKREJA | 6328 | Maitri Dental College |
| 6. | DR. KALYAN LAD | 6360 | Maitri Dental College |
| 7. | DR. SWAGATA BANERJEE | 4882 | Kalinga Institute Of Dental Science |
| 8. | DR. MOUNIKA VEERAIYAN | 6587 | Gov Dental College, Afzalgunj, Hyderabad |
| 9. | DR. AISHWARYA BIRENDRA KUMAR SINGH | 6795 | Bhabha College Of Dental Sciences Bhopal |
| 10. | DR. TANMOY SAHA | 6646 | Guru Nanak Institute Of Dental Sciences And Research |
| 11. | DR. V.PAVAN KUMAR REDDY | 6548 | CKS Teja Institute Of Dental Sciences And Research, Tirupathi |
| 12. | DR. SONGA SUSHMITA NAIDU | 6503 | Hazariabag College Of Dental Sciences & Hospital, Jharkhand |
| 13. | DR. YADNESH DONDULKAR | 6560 | Chattisgarh dental College And Research Institute |
| 14. | DR. PARASA LOHITHA DR. RAYAPATI NAMRATHA | 6422 6417 | PanneeyaMahavidyalaya Institute Of Dental Sciences And Research Center |
| 15. | DR. VARNAN P.CHAKINALA | 6380 | Triveni Institute Of Dental Science Hospital And Research Centre |
| 16. | DR. SHRUTI SHARMA | 6685 | New Horizon Dental College and Research Institute |
| 17. | DR. KHUSHBOO JAIN | 6648 | Regional Dental College Guwahati |
| 18. | Dr G BinduMadhavi | 6762 | GSL Dental College |
| 19. | Dr Lalita Sameera Dr V Ganesh | 6608 6650 | St Joseph Dental College , Eluru |
| 20. | Dr Kaushiki Nikki | 6434 | Budha Institute of dental sciences and Hospital |

Zone 2 – 2nd Zonal Conference**PAPER PRESENTATION SELECTED FOR NATIONAL CONFERENCE**

| S No. | Name | IACDE Registration No. | College |
|-------|---------------------------------|------------------------|---|
| 1. | DR. GEETHA NISHAD | 5000 | Triveni Institute Of Dental Science Hospital And Institute |
| 2. | DR. SAIKAT CHATTERJEE | 4596 | Gurunak Institute Of Dental Science And Research |
| 3. | DR. NIKITA THAKUR | 4724 | Rungta College Of Dental Sciences And Research |
| 4. | DR. ANINDITA SAIKIA | 4652 | Regional Dental College Guwahati Assam |
| 5. | DR. SHIVANGI RATHORE | 4944 | Maitri Dental college |
| 6. | DR. MARUPAKA RASAGNA REDDY | 5424 | PanneeyaMahavidyalaya Institute Of Dental Sciences And Research Center |
| 7. | DR. SUSHMITHA ESH | 5691 | Dr. R. Ahmed Dental College And Hospital |
| 8. | DR. SARITA DASANI | 5706 | Chattisgarh dental College And Research Institute |
| 9. | DR. CHAVVA LAKSHMI CHARAN REDDY | 5417 | Panneeya Mahavidyalaya Institute Of Dental Sciences And Research Center |
| 10. | DR. DUNNALA LAKSHMI SOWJANYA | 5448 | Gdch Vijaywada |
| 11. | DR. SRIVALLI PODILI | 5592 | Sree Sai Dental College And Research Institute |
| 12. | Dr Nutan Mala | 4992 | Budha Institute of dental sciences and Hospital |
| 13. | Dr Gaurav Rampuri | 4964 | Hitkarini Dental College And Hospital |
| 14. | Dr Piyushi Mishra Tiwari | | RKDF |
| 15. | Dr Krupa Kapadia | 6441 | Aurobindo |

Composite Finishing Kit
Article No. 19050 50

Offer Price Rs. 3800 /-

After the composite has been polymerized, excess is removed and contours are prepared with yellow-ring tungsten carbide finishers. The composite is then smoothed and polished to a high lustre using TopGloss diamond-grit polishers.

Endo- Progress
Article No. 690016

Offer Price Rs. 190 /-

Dispodent
Tissue Injection Control

Features :

- The Endo Progress is an endodontic file holder which can accommodate all standard endo files and rotary instruments.
- The product is made by high quality material which can withstand autoclaving.

VIAI DENTAL

Shop Online: store.viaidental.com

For orders please contact Vijai Dental Deport Pvt. Ltd.
Mobile : 90940 25513
chennai@viaidental.com / www.viaidental.com



Dr. Mamta Kaushik
Editor

The Great 'ChaltaHai' attitude - The Indian mantra for mediocrity

Great spirits have always encountered opposition from mediocre minds. The mediocre mind is incapable of understanding the man who refuses to bow blindly to conventional prejudices and chooses instead to express his opinions courageously and honestly.

Albert Einstein

Why does India have a 'ChaltaHai' attitude? 'ChaltaHai' represents attitude like 'it is ok', 'let it be', 'this is good enough', 'what can I do', 'I don't care'.

The phrase 'ChaltaHai' reflects traits of laziness, non-botheration, tolerance to a large extent a lot of acceptance and resignation.

It makes one wonder if 'ChaltaHai' is one of the main reasons holding us back from reaching our true potential.

Around our homes, we see garbage heaps, violation of traffic signals, people making wrong turns, parking in wrong places, honking on roads at every opportunity.

India's 'ChaltaHai' attitude allows water taps to be left open, free bribery, sales of fake items, open electric wires, late comings, ignoring deadlines, break queues,... it's a long list.

In the dental world – from recruitments of staff, to paper presentations in conferences to verification of the information provided – we aren't equipped or trained to vet and check. Most of the time, it's a matter of 'its OK da', and the one who finds it not OK is labelled as difficult and frustrated.

The quack outside the railway station is also extracting teeth and pasting acrylic teeth as replacements. – chaltahai – some people can't afford treatment. It's ok for them. But, it is not OK for anyone. The Govt has established Govt hospitals and Health centers for such cases. It's paying a lot of money to its doctors to do their job. If every person employed for their job does what they're supposed to do in their stipulated work hours we should be able to solve a lot of not only our problems but the world's problems too.

I am myself a part of the attitude, though I speak and now am writing about it. I do not stop men from urinating against the walls. I let people trying to outsmart me in the queues by throwing a temper tantrum and rude behaviour, I further let them throw their

weight around others too. I do not object to the cattle on the roads – quite frankly I don't know whether it's allowed for the cattle to walk through which roads at what time?? We haven't made a separate place for cattle to walk and pastures for them to eat. There probably is no rule for the animals and the roads. And if there are any I am blissfully unaware of them.

Most of the time, I feel anger, I may not be able to implement my objections/opinions, and therefore, don't have the courage to go into a public brawl without any assistance. I fear that I may be asked to mind my own business. I also feel paucity of time on my hands if it gets large.

Yet for excellence and justice, we need to speak out. We need to be models of change in our society and India. We need to ask for better – better behaviour, better standards, better representatives.

Our willingness to embrace all atrocities as normal is holding us and our nation back from rising to its potential.

Education, particularly adult education for all, seems like a solution. It's not so important that the population earns a degree. That might take a long time. We need to be more civilized and well mannered.

Let's get together. The changes must be given more visibility. And there should be just law supporting the initiatives and correcting the unacceptable.

In short – good manners and civilized behaviour has to be imbued into the next and current generation at a grassroots level.

Accountability is important, from Govt projects to article publications to paper/poster presentations.

It's time we changed the chaltahai attitude of ours to nahinchalta and nahinchalana – it's not OK – I don't want to accept OK. I do not want a bad dug up road. I do not want to be labelled as a tough cookie. I do not want mediocrity in our nation, in our society, and our profession.

The challenge here is that 'Everything costs money. Funding a fight is a serious impediment for Indians.

The Internet is capable of creating networks that are helping people get aware of the 'nahinchalega'. As more and more Indians get on to the Internet, an earnest and concerted effort can be made to educate the nation and improve the attitude towards people, animals, public property and decency.

"Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek."

-Barack Obama

BEYOND DENTISTRY



We know **Dr. Yohan** as a dentist but the world knows him more as an actor, singer and artist. A dentist by day and a rock star by night, YohanChacko does more than just examine teeth. Singer, actor, adventure junkie and cartoon dubbing artist, he manages to take time out for a lot of things which probably most people can fit in their bucket list.

Before opening his clinic, Chacko was confused, he had to choose between dentistry and music. But he took his mother's advise and made dentistry his bread and butter, and music his jam

1. You have this immense love for composites, restorative dentistry. How and when did you start?

It started with understanding material science clearly in the first year of Post-Graduation. From then it was a love affair with its share of heartbreaks and ecstasy. In my journey with Resin Composite, there was a period between 2005 till 2016 when I lost my fondness for the material but then an accidental encounter with Dr David Clark renewed my interest and passion. Since then I've been pushing the limits with Composite.

2. More than a dentist you are known as a musician or an actor. How would you introduce yourself?

I rarely introduce myself as others jump ahead to do it on my behalf leaving me with an embarrassed smile. Nowadays I call myself an alsodontist.

3. Music or composite.... If you had to decide what would it be?

Hard to say. I am passionate about both but if I had to be extremely picky, it would be music. Composite feeds my mind but Music feeds my soul.

4. What drew you to music and theatre?

I grew up with music around me. My parents are both musical and as far as I remember we would always sit around every other evening with a music book, my dad on the clarinet, my mom, sister and brother singing while I tinkered on the

keyboard. Theatre was introduced to me in preparatory school and all through my school life I was on stage. This was followed by the yearly college play. Since 2009 I've been a regular on the Chennai stage doing about 3 – 4 plays a year.

5. What was the first show you did and when?

The first show was Christmas of 2009. The actor who was to play Joseph in a Christmas Musical called Anna of Nazareth took leave suddenly and someone in the group had heard me sing at a music competition in Chennai. They reached out to me and I said "Why not?"

6. Do you direct your shows too? Where do you get the scripts from? How long does it take to practice an entire play?

I started in 2011 co-directing a comedy play. The scripts are sourced from the web and depending on the difficulty level practice can take from one to six months.

7. Most of the times you go for negative roles.... any particular reason?

The hero is always likeable because the lines and songs are written in that way. People generally will not get scared or angry with the villain unless the actor takes that special effort to become believably evil. My best compliments have come from audience members who do not want to come on stage and shake my hand after the show.

8. What according to you is the scariest moment you had to deal with on stage?

I recall a play where the gun I was to use on stage was supposed to be kept at the entrance door to the scene but when I got there, I realised that someone had thrown it on to stage! I had to improvise, pretend I was in a drunken stupor so that I could stagger upto the point where the gun was. My heartbeat was probably heard by the audience seated in the first row.

9. Are you ever scared of losing your voice?

It is a constant worry and I have to prepare well before each show to see that it doesn't happen. My last show had me shouting a lot and the day after the last show I lost my voice.

10. Do you do theatre nationally and internationally?

My stage travels have taken me to Bangalore, Kochi and Pune within India. Last year I acted in a play that was staged in Chicago.

11. You are presently Head of Department at Asan Dental College. So how do you work around that schedule... teaching, practice and shows?

I maintain that if one looks at the word TIME, half of it is ME! I make time for myself and switch off from one thing when the time comes to do another. It's something that I've learned through practice and experience. Life is too varied to be stuck doing just one thing.



**SKILL DEVELOPMENT PROGRAMME,
TERNA DENTAL COLLEGE, NAVI MUMBAI**
24th and 25th August 2019

Indian Association of Conservative Dentistry & Endodontics organized a "Skill development programme on Clinical Application of Surgical Operating Microscope in Dentistry" which was hosted by the Department of Conservative Dentistry and Endodontics, Terna Dental College, Navi Mumbai. The 2-day workshop was conducted on 24th and 25th August 2019, had participation coming from all quarters, with 22 registrations including private practitioners, fresh graduates, senior academic staff and specialists from different branches including Paediatric dentistry, Prosthodontics & Oral Medicine and Radiology.

The programme began on 24th August with a lecture on magnification by Dr Vinod Kumar followed by a live demonstration of the use of microscope during the root canal procedure on a patient. This was followed by inauguration ceremony under the auspices of Dr Girish Parmar (President, IACDE) and Dr Ashu Gupta (Vice-President, IACDE). All delegates performed the root canal procedure on extracted teeth under microscope in the hands-on.

Day 2 began with a lecture by Dr Mohan Kumar on tooth preparation for indirect laminates and direct composite restorations under microscope. This was followed by demonstration of the procedures under magnification followed by hands-on by the participants. The microscopes were provided by Leica microsystems, Sanma Medicals and CricDental. Trade included participation from Shofu, India and Mani and Cric dental. Delegates were presented goodies from Leica and Shofu Dental. The participants were handed over certificates by Dr Ashu Gupta at the valedictory function.



SKILL DEVELOPMENT PROGRAMME, VISAKHAPATNAM,
7th JULY 2019

A Skill development programme for faculty was planned by team IACDE & conducted on July 7th 2019 at Hotel Palm Beach, Visakhapatnam, Andhra Pradesh under the eminent leadership of Dr Girish Parmar, President IACDE & Dr Mohan, Hon. General Secretary.

A team of 23 Conservative dentists & Endodontists participated for the lecture and workshop on Regenerative strategies in endodontics. One among the pioneers in regeneration experts in India Dr. Sai kalyan & Dr Ruchika Roongta delivered lecture and later demonstrated the procedure.

Topics were covered under the following headings; Practical applications in Indian scenario, Material aspect of platelet derived regenerative modalities, Preparation & placement techniques, Scaffold, Potential use of post natal stem cells, Future directives and Scope for research.

The programme was organised by Dr. Krishna Prasad P, Vice president, IACDE with his team comprising of Dr. Kavita Rudgi, Dr. Jayaprakash and Dr. Deepu Patil.



STUDENT EXCHANGE PROGRAM 2019 - K. M. SHAH DENTAL COLLEGE



**Dr. M.S Nivedhitha**

Professor and Head of Department
Conservative Dentistry and Endodontics
Saveetha Dental College
Chennai

AUTOTRANSPLANTATION OF TEETH – EVIDENCE BASED RECOMMENDATIONS

In simple terms, autotransplantation can be defined as the movement of one tooth from one position to another within the same person. It has a long track record with the earliest report of allotransplantation of teeth involving ancient

Egypt where the slaves were forced to give their teeth to their pharaohs. The first report of auto transplantation was in Sweden in the 19th century.

It is a viable treatment option for the missing teeth in the anterior aesthetic zone in paediatric and adolescent patients. This procedure helps in preserving the volume of alveolar bone and arch form, continued development of periodontal ligament, tooth eruption and maintenance of proprioception to aid in masticatory function. There are several factors which influence the success of the procedure. In the most recent technique, preoperatively designed surgical template (donor tooth replica) functions as a guide and reduces the risk of trauma to the periodontal ligament of the donor tooth and minimizes the extra oral time drastically which could increase the success rate of the procedure.

In the present-day scenario, more emphasis is given to the evidence-based practice for clinical decision making. This involves the process of systematically finding, appraising and using research findings to minimize the errors in the clinical decision-making process. Systematic review and meta-analysis form the highest level of evidence for the recommendation of clinical practice guidelines. Based on the results of available systematic review and meta-analysis, Martin et al (2018) have made the following conclusions and recommendations for the auto transplantation procedure.

Conclusions made are auto transplantation has a success rate of >81%, donor teeth with immature open apex show favourable prognosis compared to teeth with closed apices, complications include ankylosis and root resorption and surgical technique is an important prognostic factor. There is a stress for the need for randomized clinical trials but carries a major ethical concern for this procedure.

Recommendations for clinical practice guidelines are:

- ❖ Proper case selection – preferably paediatric or adolescent patients, donor and recipient sites free of inflammation and infection.
- ❖ Multidisciplinary approach – experienced oral surgeon, orthodontist to move the tooth to correct functional and aesthetic position in the arch and endodontist if the donor tooth requires endodontic treatment.
- ❖ 2D imaging is adequate for treatment planning.
- ❖ However, 3D imaging assists in constructing the donor tooth replica to minimize the extra oral time.
- ❖ Teeth with open apices have higher rate of success and survival rate.
- ❖ Atraumatic extraction is an important prognostic factor.
- ❖ There is no conclusive evidence for the timing of endodontic treatment, surgical method, antibiotic prophylaxis, type of splinting material and duration for transplanted teeth.
- ❖ Finally, a standardised surgical and follow up protocol, with specific success criterion is necessary to develop the evidence database for auto transplantation.

References:

1. Chung WC, Tu YK, Lin YH, Lu HK, Outcomes of autotransplanted teeth with complete root formation: a systematic review and meta-analysis. J Clin Periodontol 2014; 41: 412–413.
2. Almpanti K, Papageorgiou S, Papadopoulos M. Autotransplantation of teeth in humans: a systematic review and meta-analysis. Clin Oral Investig 2015; 19: 1157–1179.
3. Atala-Acevedo C, Abarca J, Martínez-Zapata M J, Díaz J, Olate S, Zaror C. Success rate of autotransplantation of teeth with an open apex: systematic review and meta-analysis. J Oral Maxillofac Surg 2017; 75: 35–50.
4. Machado L, do Nascimento R, Ferreira D, Mattos C, Vilella O. Long term prognosis of tooth autotransplantation: a systematic review and meta-analysis. Int J Oral Maxillofac Surg 2016; 45: 610-617.
5. Verweij JP, Jongkees FA, Moin DA, Wismeijer D, Van Merkesteyn JP. Autotransplantation of teeth using computer-aided rapid prototyping of a three-dimensional replica of the donor tooth: a systematic literature review. International Journal of Oral and Maxillofacial Surgery. 2017 Nov 1;46(11):1466-74.
6. Martin K, Nathwani S, Bunyan R. Autotransplantation of teeth: an evidence-based approach. British dental journal. 2018 Jun;224(11):861.

**Dr. SV Satish**

Professor and Head of Department
Conservative Dentistry and Endodontics
Navodaya Dental College and Hospital
Raichur, Karnataka

AUTOTRANSPLANTATION

Autotransplantation of teeth has been done since many years with varying degrees of success. This ensures the maintenance of alveolar bone volume by physiologic stimulation of periodontal ligament fibres. It

is defined as the transplantation of embedded, impacted or erupted teeth from one site into extraction site or surgically prepared socket in the same person. The indicated teeth for transplantation are maxillary premolar to mandibular premolar and third molar to first molar.

Timing of tooth extraction from recipient site should be carefully observed. Bone width at the recipient site should be evaluated and consideration should be given for autogenous bone graft. The donor tooth needs to be tried to the prepared recipient site and fit of the gingival tissues should be evaluated which determine the success of transplantation.

Transplant is placed slightly below the occlusal level and is stabilized by suturing and composite splinting. Allowing for some movement will reduce the chances of ankylosis. Chlorhexidine and antibiotics should be prescribed for a week.

Endodontic therapy is mandatory for donor teeth and should be initiated before the splint is removed which usually take around two months. The recommended procedures after transplantation are root canal therapy, ortho treatment and definitive restoration.

It is always better to extract the tooth from recipient site on the same day as the donor tooth is removed. Healing of periodontal ligament fibres, nonprogressive root resorption, healing of gingival tissues and alveolar bone determine the success of transplantation along with pulpal healing and root end closure in case of immature teeth.

Infection of dental pulp is the primary reason for the failure of transplantation. Pulpal healing can be monitored by radiographic examination, vitality tests. The ideal time for transplantation of an immature tooth is when then root is three fourth developed.

A recent approach in the transplantation is the 3 D printing technology in which a prototype of donor tooth is fabricated first and tried in the recipient area before the extraction of donor tooth.

Successful tooth autotransplantation offers improved tooth aesthetics, dentofacial development, arch integrity and normal function.

**Dr. Rubi Katakai**

Professor,
Department of Conservative Dentistry and Endodontics,
Regional Dental College, Guwahati.

AUTOTRANSPLANTATION – AN ALTERNATE TREATMENT MODALITY

Natiella et. al in 1970 defined autotransplantation as transplantation of an embedded, erupted or impacted tooth from one site to another in the same individual into extracted site or newly prepared socket. First successful clinical case report on autotransplantation appeared in the year 1950 where a decayed first molar tooth was replaced by an immature third molar tooth. Since then an increasing number of teeth especially premolars and canine have been transplanted.

Indications for autotransplantations of teeth include replacement of unrestorable first molars, missing premolars or upper incisors, and surgical repositioning of impacted upper canines. 1,2,3,4,5

It is well documented that for an avulsed teeth to recover optimal function and esthetics after replantation, ideal conditions are required. One of the critical factors for the success is favorable periodontal ligament healing whether teeth are mature or immature. Pulp regeneration can be expected in immature (developing) teeth but not in mature teeth. Continued root development after transplantation is also possible if a donor tooth is immature and Hertwig's epithelial sheath is preserved around the apices.

The sequence of autotransplantation of teeth includes clinical and radiographic examination, diagnosis, treatment planning, surgical procedure, endodontic treatment, orthodontic treatment, restorative treatment, and follow up. Case selection is important as there might be discrepancy in the tooth form and size which is to be replanted.

Autotransplantation is often not considered as a treatment option when teeth are lost. This is very unfortunate given that the biological principles for success are understood and the correct indications are present; it is an extremely successful treatment form with significant savings in time and cost compared to implants. From the patient's perspective, the dentition is preserved using a natural tooth rather than a mechanical prosthesis. The dental practitioner should definitely have the knowledge to recommend and carry out this procedure to the appropriate patient.

Autotransplantation of teeth based on science and the state of art will promise happiness and healthy smiles of patients for a long time.

REFERENCES

1. Apfel H. Preliminary work in transplanting the third molar to the first molar position. J Am Dent Assoc 1954; 48: 143-150.
2. Nordenram A. Autotransplantation of teeth. A clinical and experimental investigation. Acta Odontol Scand 1963; 21 (suppl. 33).
3. Slagvold O, Bjerke B. Indications for autotransplantation in cases of missing premolars. Am J Orthod 1978; 74: 241-257.
4. Dixon DA. Autogenous transplantation of tooth germs into upper incisor region. Br Dent J 1971; 131: 260-265.
5. Holland D. The surgical positioning of unerupted, impacted teeth (surgical orthodontics). Oral Surg 1956; 9: 130-140.
6. Tsukiboshi M. Autotransplantation of teeth. Chicago: Quintessence; 2001.
7. Tsukiboshi M. Autotransplantation of teeth: requirements for predictable success. Dent Traumatol 2002; 18: 157-180.

**Dr. Pratima Shenoi**

Prof. HOD
Conservative Dentistry & Endodontics
VSPM Dental College,
NAGPUR

AUTOGENOUS TOOTH TRANSPLANT (ATT)

Autogenous Tooth transplantation is the repositioning of erupted or semi erupted tooth from one site to another in the same individual. It enhances the possibility of a natural tooth replacing a missing or an extracted tooth rather than using a prosthesis orosseointegrated implant.

Recent literature affirms that mastication, a primary function of teeth, promotes and preserves cognitive functions of brain which is essential for learning, memory, improvement in cognitive performance and most importantly prevents dementia. This masticatory stimulus to cortex is initiated through the proprioceptive fibres in the vicinity of the tooth. Thus, preservation of the natural tooth should be first priority. In case of replacement of missing tooth, autogenous tooth transplantation, if indicated, should be considered mandatory.

ATT of teeth was first described by a Swedish dental surgeon in 1915. The treatment protocol has remained primarily unchanged. However, thorough knowledge of factors that influence its long term success should be diligently followed.

The indication of ATT are ectopic teeth, traumatic loss of tooth, tumors at apex, congenitally missing tooth, teeth with poor endo - perio prognosis and teeth with developmental anomalies. There are no absolute contraindications for ATT, except medically compromised patients, poor oral hygiene, lack of self motivation and insufficient bone width.

ATT has several advantages. Transplants perform all functions of natural tooth like proprioception, preservation of alveolar bone volume, orthodontic tooth movement, pulp regeneration and continued root development. Even in the case of a rejected ATT, the recipient site is intact for future implant placement.

According to the AAE protocol, when the donor tooth is in developing stage, transplantation maintains pulp vitality and root formation. Such teeth are evaluated every 3 months and root canal treatment is initiated only if the pulp vitality tests are found negative. In case of the fully developed tooth transplants, the pulp cannot regenerate or maintain vitality. Root canal treatment should be completed before extraction at donor site (if accessible) or 7-10 days after transplant at the recipient site. Endodontic treatment prevents tooth resorption and subsequent failure of transplant. Apicoectomy or Endodontic treatment during surgical procedure is not advisable.

The use of 3D printed guiding template and donor-tooth replicas have revolutionised the contemporary treatment protocol of ATT which has shown consistent evidence of long term clinical success.

Recent studies have reported success rate between 79-95% with follow up of as long as 41 years. ATT, thus, is a better biological and economical alternative to missing tooth. It can also be considered as a temporary measure in young children to ensure bone growth followed by implant placement.

ATT is a promising treatment option for replacement of missing teeth if proper case selection and stringent aseptic treatment protocol are adhered to.

References :

1. Ono Y, Yamamoto T, Kubo KY, Onozuka M. Occlusion and brain function: mastication as a prevention of cognitive dysfunction. J Oral Rehabil. 2010 Aug;37(8):624-40.
2. Czochrowska EM, Stenvik A, Bjercke B, Zachrisson BU. Outcome of tooth transplantation: survival and success rates 17-41 years post treatment. Am J Orthod Dentofac Orthop 2002; 121(2): 110-9.



Achieving more with less

Wafer-thin and brilliantly shaded: lab fabricated non-prep veneers for correcting misaligned teeth

An article by Carola Wohlgenannt, MDT, Dornbirn/Austria

Lab-fabricated non-prep veneers made it possible to sidestep orthodontic treatment in the clinical case presented in this report. Despite the limited space available, brilliant shade dynamics were achieved with the help of specially shaded Enamel and Effect materials (IPS e. max Ceram Selection).

"Less is more". However, using less is often difficult. In view of the high demand for minimally invasive restorations, dental technicians are presented with new challenges in many cases. The extent of the preparation is often reduced to minimize the invasiveness of the treatment, leaving only limited space for the fabrication of an esthetically pleasing, functional restoration. Such situations necessitate adequate ceramic materials and experience to reproduce the subtle interplay of shades seen in natural teeth. While previously various ceramic powders had to be combined with each other to create the required mixture, this procedure has now been simplified with the introduction of new ceramic materials. IPS e.max® Ceram Selection are specially shaded Enamel and Effect materials with brilliant shades and natural-looking light-optical properties. The range comprises twelve shades that are divided into three groups. The six Special Enamel shades are designed to produce lively translucent effects in the enamel area. The three Light Reflector Effect materials have light-reflecting capabilities and are suitable for areas where a high brightness value is desired. Wafer-thin and brilliantly shaded: lab fabricated non-prep veneers for correcting misaligned teeth. An article by Carola Wohlgenannt, MDT, Dornbirn/Austria. The three Light Absorber materials with light-absorbing properties are used to increase the in-depth effect. With this variation in materials, imitating natural teeth with individual characteristics is much easier than before. The range of possibilities is particularly convenient in cases where space is limited, such as in very thin restorations (e.g. veneers).

Clinical case

The approximately 40-year-old patient wanted the position of her teeth corrected (Fig. 1). She consulted her dentist with regard to this problem. She rejected orthodontic treatment because of the expected costs, the long treatment time and the limitations during therapy. An orthodontist had recommended the extraction of a tooth in the lower jaw to compensate for the crowdedness and to provide the basis for orthodontic treatment. All of this was out of question for the patient. She also emphasized that no tooth structure should be removed for the esthetic correction.



01 — Incisal view of the preoperative situation



02 — Mock-up in wax placed on the model



03 — Selecting the basic tooth shade (Dragon Shade, Drachenberg & Bellmann)

Treatment plan and mock-up

The possibilities of an esthetic improvement in the upper jaw were discussed together. In particular, teeth 11 and 13 were responsible for the unevenness in the dental arch. The teeth were inclined from the axis towards the palatal. The idea was to use two ceramic non-prep veneers to correct the misalignment and achieve harmony in the dental arch. With the help of a study model, the ideal tooth position was established in wax (Fig. 2) and then converted into "fast and easy"

resin veneers (mock-up). The first impression after the placement of the mock-up was positive. There was a strong aha! effect. The patient agreed to the treatment. The existing chalky spot on tooth 21 was masked with composite in the dental practice.

Challenge: reproducing the shade of the natural tooth

The shape and morphology of the veneers were defined by the mock-up. Now a matching tooth shade for the ceramic materials had to be determined. The challenges were posed by the dynamic interplay of shades, the "beautiful" translucency of the natural anterior teeth and the limited space available. How can the light-optical properties be reproduced as perfectly as possible in only a wafer-thin layer of ceramic material? The Enamel and Effect material concept of IPS e.max Ceram Selection provided the solution to this conundrum. First, the basic tooth shade was determined, for which shade samples mounted on a gingiva shield (Dragon Shade, Drachenberg & Bellmann, Germany) were used (Fig. 3). Conventional shade tabs - without gingival section - may impair the result.



04 and 05 — Selecting the IPS e.max Ceram Selection materials using shade tabs. On the right: shade tab with the intensive enamel shade "quartz"; on the left: shade tab with the light intensive Effect material "cream"

Already during the selection of the basic tooth shade, it became evident that standard dentin materials would not be sufficiently intensive to reproduce the natural tooth shade due to the thin layer thickness with which the veneer had to be created. It was therefore decided to use the Enamel and Effect materials of the IPS e.max Ceram Selection range. Self-made shade samples were used as reference for the targeted selection of the materials. Among others, the Light Reflector Effect material in shade cream should lead to the desired result (Fig. 4). In addition, three enamel shades were chosen. The intensive enamel shade "aqua" was selected to emphasize the bluish translucent areas along the marginal ridges (Fig. 5). The enamel shade "apricot" should lend warmth to the incisal, enhance the translucency and heighten the chroma. In addition, the slightly greyish but still warm enamel shade "quartz" was chosen.

Creating the veneers

Refractory dies for teeth 13 and 11 were created with the help of the master model (Fig. 6). The dies were then soaked in water to prevent them from drawing moisture from the ceramic materials during the layering procedure (Fig. 7). The veneers were built up in layers in accordance with the shape defined by the mock-up (Fig. 8). No dentin material was used. The colour- intensive Effect shade "cream" was used for the dentin core replacement. The other



06 — Master model with dies made of investment material



07 — Investment material dies are being soaked with water



08 — Building up the veneer for tooth 11 using IPS e.max Ceram Selection materials



09 — Incisal view of the completed veneers on the model



10a — Veneer 11 features an insertion handle at the incisal edge to be removed by grinding once the restoration is seated.



10b — Despite their thin layer thickness, the veneers exhibit natural light-optical properties.

Effect shades selected served to bring out the warm-translucent interplay of shades. It did not take long to build up the veneers in ceramic. However, the esthetic appearance of a restoration is not determined by the shade effect alone. Subtle, barely noticeable surface structures can underline the natural appearance of a restoration. Adequate time and attention was therefore dedicated to designing the surface morphology of the veneers. At the final firing, the ceramic surfaces were slightly smoothed and, once fired, refined by mechanical polishing. Polishing was carried out carefully by hand.

Figure 9 shows that the teeth were successfully brought into alignment with the adjacent teeth to create a harmonious appearance. An initial evaluation in the dental lab showed that the veneers demonstrated a natural interplay of shades in spite of the thin material thickness (Fig. 10). However, the effect in the mouth will ultimately decide the success of the restoration.

Seating the restoration and final result

An essential aspect for the success of veneers is the cementation procedure. No matter how brilliant the ceramic materials are and how skilful the work of the dental technician is, if the shade of the adhesive cementation material is not chosen correctly, the joy of the "new smile" will be short lived. Variolink® II luting composite in shade neutral was used for incorporating the veneers. Prior to placing the veneers, they were tried in with try-in paste to confirm that the treatment goal had been achieved. Once the ceramic veneers and tooth surfaces were conditioned (Fig. 11), the veneers were bonded to the teeth. The result was impressive. Teeth 13 and 11 now blended in harmoniously with the rest of the dental arch (Fig. 2). The tooth shape was aligned with the shape of the adjacent teeth, while slightly asymmetrical contours supported the natural appearance of the restorations. The light-optical properties of the veneers left nothing to desire. The intrinsic interplay of shades and variations of translucency seen in the adjacent teeth were faithfully reproduced. After the functional criteria had been checked, the patient was discharged from the practice (Figs 13 and 14).



11 — Conditioning of tooth 11 for the adhesive cementation procedure



12 — Situation after seating the veneers on teeth 11 and 13



13 and 14 — Final check of the functional aspects. The veneers blend in with the dental arch naturally and "invisibly".

Conclusion

In principle, such challenges can only be met if the dental technician understands the light-optical properties of natural teeth and is able to use appropriate ceramic materials. The procedure demonstrated in this report eliminated the need for dental technicians to mix the individual materials themselves. Suitable materials in the ideal shade could be applied "directly from the tub". In this way, the balancing act between maximum esthetics and minimum invasiveness was successfully and reliably accomplished.



Carola Wohlgenannt, MDT
Wohlgenannt Zahntechnik OG
Kurze Gasse 2
6850 Dornbirn
Austria
team@wohlgenannt-zt.com
www.wohlgenannt-zt.com

max
e.
IPS

THE ONLY

ZIRCONIA

THAT CAN BE CALLED **IPSe.max®!**



IPS e.max® ZirCAD

The perfect combination of strength, esthetics and translucency



- High flexural strength and fracture toughness for a broad indication range
- Low wall thicknesses for less invasive preparations
- Monolithic crowns and bridges with shade transition for high esthetics
- Cementation with the self-adhesive resin cement SpeedCEM®Plus

Find us on 

www.ivoclarvivadent.in

Ivoclar Vivadent Marketing (India) Pvt. Ltd.
503/504 Raheja Plaza 15 B Shah Industrial Estate Off Veera Desai Road Andheri (West) Mumbai, 400 053 India
Tel. +91 22 2673 0302 Fax +91 22 2673 0301

ivoclar
vivadent
passion vision innovation



Dr. Ajay Logani
Professor
Centre of Dental Education and Research
All India Institute of Medical Sciences
New Delhi

Management of Horizontal Root Fractures

Q1) What are the different types of root fractures?

There are two types of root fractures namely; horizontal aka transverse or oblique root fractures and vertical root fractures. Horizontal root fractures occur as a result of direct trauma and comprise of 0.5-7% of all traumatic dental injuries in the permanent dentition. It is defined as a perpendicular or oblique fracture line to the long axis of the root, involving the dentine, cementum, pulp and the supporting alveolar tissue. It most commonly occurs in the age group of 11-20 years. Vertical root fractures on the other hand occur over a period of time and thus are classified under longitudinal tooth fractures. It is defined as a complete or incomplete fracture initiated from the root at any level, usually directed buccolingually. The fracture line extends apico-coronal along the long axis of the root. This differentiation is imperative.

Q2) What are the types of horizontal root fractures?

Horizontal root fractures are classified according to their location into apical, middle or cervical third fractures (Figure 1). The cervical third fractures are further subclassified as sub crestal or supra crestal fractures.

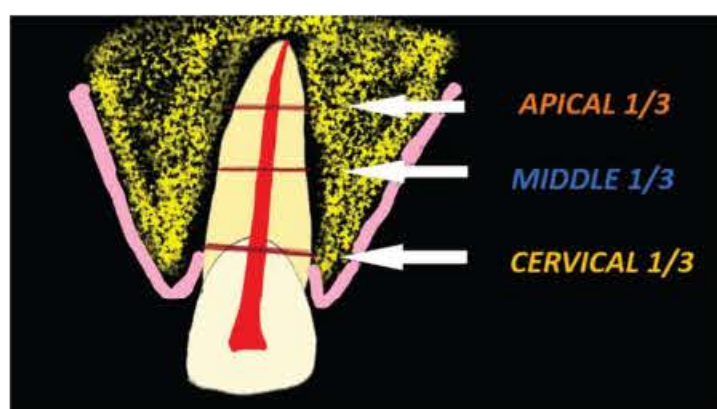


Figure 1: Schematic diagram showing the location of apical, middle and cervical third fracture

Q3) How do horizontal root fractures occur?

Horizontal root fractures occur due to sharp frontal impact, usually with a hard object or during a fight. Small sharp objects concentrate the force to a smaller area of the tooth causing a fracture rather than a displacement of the tooth. When the bone and periodontal ligament resist displacement, the root surface is forced against the bone marginally and apically. The tensile and shearing strength of dental tissues is lower than the compressive strength. Hence, shearing strain develops between the two zones of the opposing forces and the root is fractured

along the plane joining these two zones i.e. either in the middle or apical third of root. Cervical third root fractures occur when the tooth is firmly locked in its socket such that the stresses in the shearing zones are not high enough and a pure bending fracture occurs at the site of maximum bending stress i.e. where the tooth emerges from its supporting structures. These fractures are common in the maxillary lateral incisors.

Q4) How do you diagnose horizontal root fractures clinically and radiographically?

Clinically, the coronal fragment may be mobile or displaced accompanied with bleeding from the gingival sulcus and tenderness on palpation over the root.

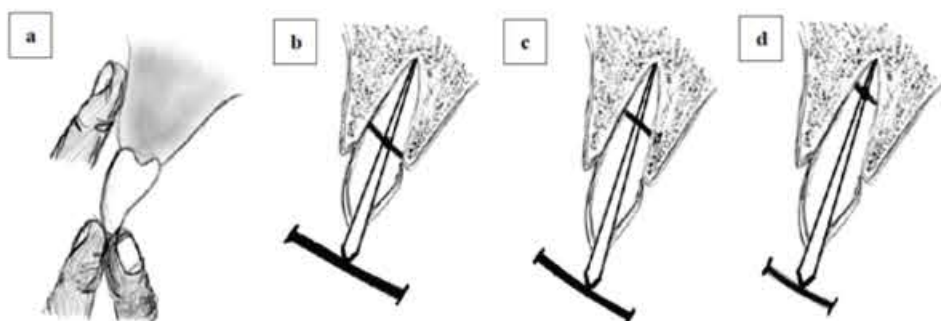


Figure 2: Diagnosis of fracture location a) Palpation of facial mucosa and gentle movement of crown of injured tooth. The clinician can feel the fracture level. b-d) Degree of arc produced on moving the coronal fragment. The degree of arc of motion decreases as the level of fracture line moves apically. b) cervical third fracture c) middle third fracture d) apical third fracture

The clinician can sometimes feel the level of the fracture line by palpating the facial mucosa and gently moving the crown of the injured tooth. Also, the degree of arc of motion of the coronal fragment aids in determining the fracture level. The closer the fracture is to the gingival crest as in case of cervical third root fractures the greater will be the arc of movement and the further the fracture is towards the apex, the arc of movement decreases (Figure 2).

Radiographs are the mainstay for diagnosing horizontal root fractures. A single transverse line is visible on radiograph when the central beam is parallel to the fracture plane. An increase or decrease in this angle leads to the appearance of an ellipsoidal fracture line. Multiple root fractures are visible as an irregular fracture line. Cervical third root fractures have a horizontal fracture line and thus can be detected in a regular periapical 90° angle film with the central beam passing through the tooth. Apical and middle third fractures have a more oblique course. A steep occlusal view radiograph and radiographs with different horizontal angulations are therefore recommended for their detection.

Q5) Is there a role of CBCT in the diagnosis of horizontal root fractures?

Horizontal root fractures are usually well visible on 2D radiographs. However, CBCT can be used for documentation and outcome evaluation i.e. identifying the type of healing pattern.

Q6) How do you manage cervical, middle and apical third root fractures?

Management of cervical third root fractures involves atraumatic repositioning with gentle finger pressure and stabilization of coronal fragment with rigid splint for a period of 4 months. Maintenance of immaculate oral hygiene and patient motivation is important for the survival of such teeth. Supra crestal fractures can be managed by removal of coronal fragment followed by orthodontic or surgical extrusion of the remaining apical segment provided a good crown root ratio can be maintained. The extruded apical segment is then rehabilitated with post, core and crown. Orthodontic extrusion is preferred as it is more physiologic. Tooth extraction followed by implant might be considered as an apt alternative for crestal fractures with poor prognosis.

Middle third root fractures are intra alveolar fractures and thus require conservative management aimed at preserving pulp vitality to promote fracture healing. Gentle finger pressure should be used to reposition the fragment and stabilize with flexible splint for a period of 4 weeks. Pulp status should be regularly monitored thereafter. If the coronal fragment loses vitality, visible as widening of fracture line on radiograph, endodontic intervention of only the coronal fragment should be done. It should be treated as an open apex. Working length should be confirmed both with electronic apex locator and radiographically. An MTA apical plug should be then placed and the coronal fragment should be filled. The undisplaced apical fragment usually maintains its vitality and hence no intervention is needed to manage it (Figure 3). However, if the apical fragment also loses its vitality surgical removal of the same is required. This is only done if the remaining coronal fragment has at least a 1:1 crown root ratio.

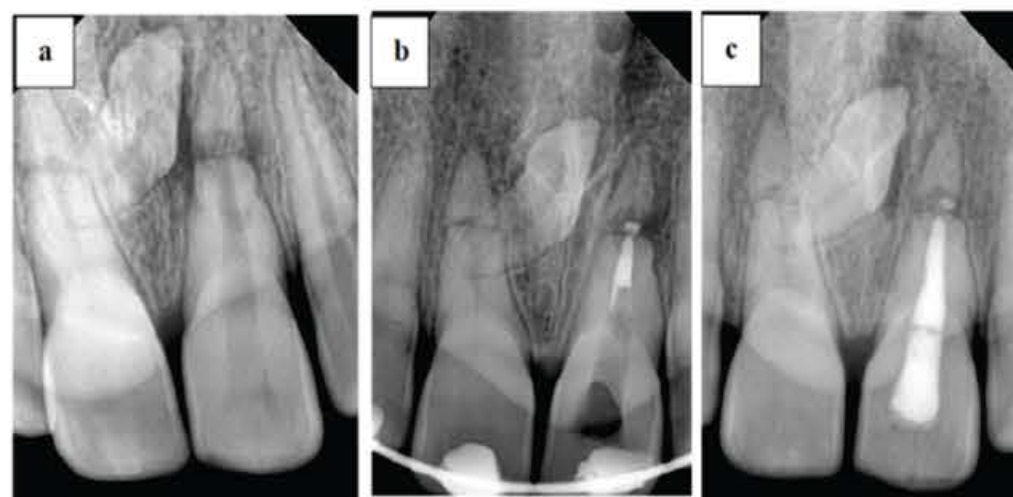


Figure 3: a) IOPAR showing middle third root fracture with rarefaction at fracture line in upper left central incisor b) IOPAR showing approximation of coronal fragment and MTA apical plug after endodontic intervention of coronal fragment only c) 1 year follow up IOPAR.

Apical third fractures are the easiest to manage. Stabilization with a flexible splint for four weeks is done, if required. In case of loss of vitality of either segment it is managed in a similar way as that described for middle third root fractures.

Q7) Should we do intra radicular splinting or use MTA/MTA based sealers for obturating through mid-root fractures?

A few case reports have reported the use of such techniques for the management of mid root fractures. However, these techniques have a low level of evidence and are experimental.

Q8) What are the different patterns of healing of horizontal root fractures?

There are four healing patterns for horizontal root fractures.

- Interposition of calcified tissue. Favourable healing pattern with best prognosis. Radiographically, fracture line may or may not be discernible but fractured segments in close contact.
- Interposition of connective tissue. Favourable healing pattern. Radiographically, visible as a faint radiolucent line between the fractured segments with peripheral rounding of the fractured ends.
- Interposition of bone and connective tissue. Favourable healing pattern. Radiographically, fragments seem to be separated by a distinct bony bridge.
- Interposition of granulation tissue. Unfavourable healing pattern. Radiographically, visible as widening of fracture line and/or development of radiolucency between the fragments.

Q9) For how long should we observe horizontal root fractures? What is their prognosis?

The recommended observation time for horizontal root fractures is 4 weeks, 6-8 weeks, 4 months, 6 months, 1 year and 5 years. Prognosis is best for apical third root fractures and decreases as the location of the fracture line moves cervically.

Take office message

- Emergency management of horizontal root fractures involve immediate repositioning of the coronal fragment and stabilization of the injured tooth.
- Pulp vitality should be monitored regularly. All efforts should be directed towards preserving the pulp and maintaining its vitality.
- Horizontal root fractures are unfortunate injuries but if they are managed well, they usually have a good long-term prognosis.
- Cervical third root fractures have the worst prognosis and may be suitable candidates for replacement of the tooth with immediate implants.



STUDENT EXCHANGE PROGRAM 2019

SAVEETHA DENTAL COLLEGE



ITS DENTAL COLLEGE



OXFORD DENTAL COLLEGE



TERNA DENTAL COLLEGE



OBITUARY

**Dr. Ashwini**

Dr. Ashwini Dhobal was born in Dehradun on 2nd October 1965. He completed his schooling from Dehradun. Dr. Ashwini finished his graduation and Post-graduation in 1991 from King George Medical College, Lucknow. He was a successful practitioner and an academician who received many awards.

He was the Principal of Uttaranchal Dental College from 2011 to 2014 and the Head of Department for Conservative Dentistry and Endodontics. He was also dentist to the Governor and Chief Minister of Uttarakhand.

**Dr. Peter Dawson**

Dr. Peter E. Dawson—acclaimed educator, innovator, author, and founder of the Dawson Academy—passed away on July 27, 2019, at age 89. Dawson was a mentor to many thousands of dentists and has left a positive, indelible mark on

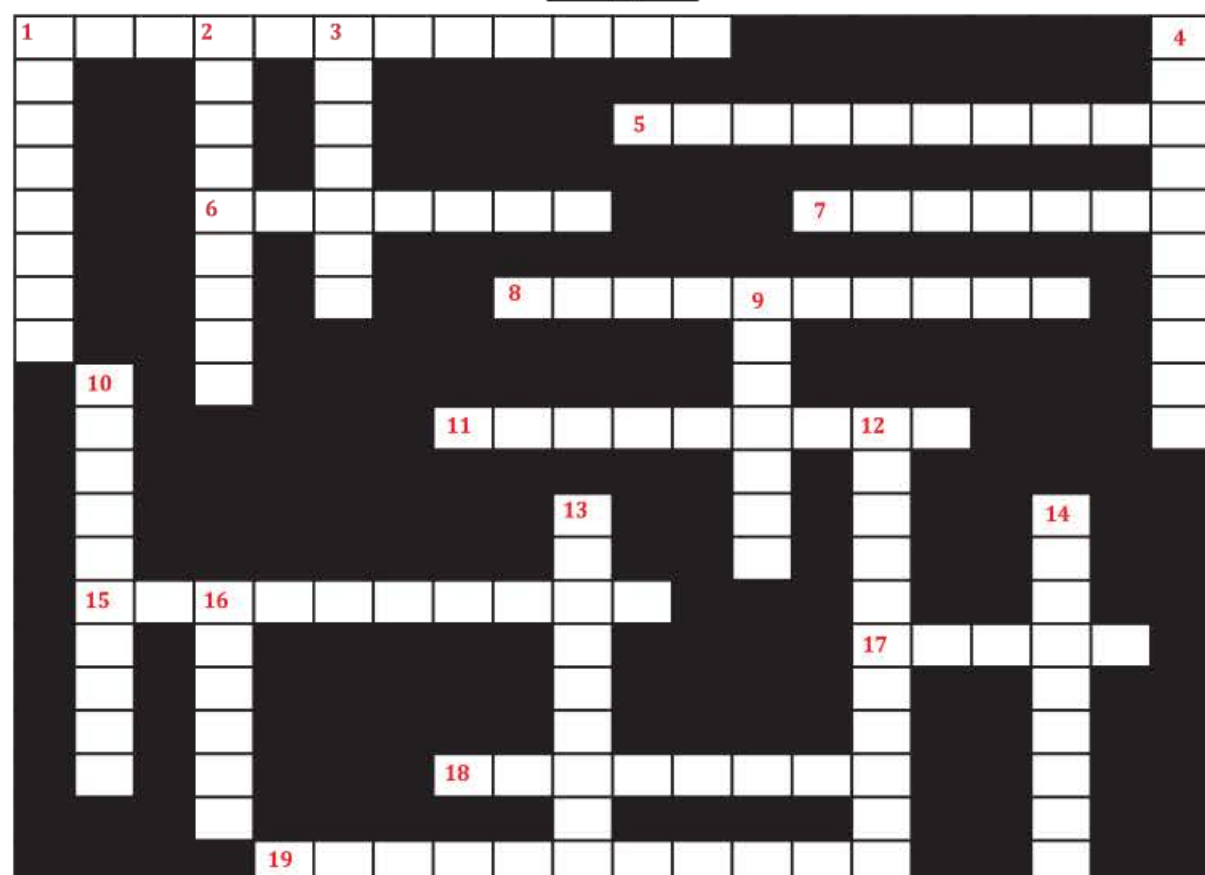
the dental profession. He is most known for concepts related to restorative dentistry, occlusion, and problem solving with temporal mandibular disorders



PINS & POSTS

REST-ORE-TAINMENT

CROSSWORD IACDE - 10



| ACROSS | DOWN |
|--|---|
| 1 Chemical substance or heat to reduce the number of microorganism | 1 Increases the amalgam retention |
| 5 Root canal disinfectant | 2 Root canal debridement agent |
| 6 Cervical perfusion | 3 360 metal collar of a crown surrounding parallel walls of dentin till shoulder of Preparation |
| 7 Soft silvery metal exist as both solid and liquid state | 4 Retainer less contouring system |
| 8 Appliance worn during sleep | 9 Spasm of masticatory muscle |
| 11 Displacement of tooth from socket | 10 Removal of infected pulpal tissue from the root canal |
| 15 Used for Caries detection | 12 Tertiary dentin containing entrapped fibroblast |
| 17 Accessory used in dental restoration | 13 Calcified masses in pulp |
| 18 Appliance used for immobilization | 14 Procedure to remove soft tissue lining in dental pocket |
| 19 Synthetic resins used as restorative material or adhesives | 16 Calcium hydroxide based radiopaque, non-shrinking root canal sealer paste |

MACRO PHOTOGRAPHY IN DENTISTRY

Dr. Anwetakshmi Ray,
allrd year Post Graduate from
Manipal College of Dental Sciences,
Mangalore has a passion for macrophotography.



IACDE JUMBLE WORDS

1. YLAEPMOATSLNE

2. REFOLMFEIT

3. TEONISCNIULOCR

4. EXARATPHYOITYD

5. ILENOIADC

Sanma



Loupes

2.5x / 3.5x / 4.0x



"One of the best optics I have used and I am personally using them in my practice and for training" - Dr. B. Mohan

* Rs. 1000/- off for IACDE members, Quote your IACDE number to avail this offer.

Sanma Medineers

#20, Brahmin street, Korattur, Chennai - 80.

Ph: 09444 444 624 / 09444 444 625 / 09444 006 818

E-mail: sales@sanmas.com / Web: www.sanmas.com



CALENDAR OF EVENTS- 2020

| Sl. No. | Date | Name of Conference | National / International | Venue |
|---------|----------------------------|---|--------------------------|--------------------------|
| 1. | 4th- 8th Sept 2019 | ADA FDI World Dental Congress 2019 | International | San Francisco, USA |
| 2. | 21st- 22nd Oct 2019 | 2nd Annual Congress on Orthodontics and Endodontics | International | Melbourne, Australia |
| 3. | 8th- 10th Nov 2019 | ConsAsia 2019 | International | Seoul, Korea |
| 4. | 29th Nov – 1st Dec 2019 | 34th IACDE National Conference 2019 | National | Navi Mumbai- Maharashtra |
| 5. | 8th -9th Jan 2020 | 4th Academy of Cosmetic Dentistry | International | Bhubaneswar, Odhisha |

CONSASIA 2021 & XXXVI IACDE NATIONAL CONFERENCE
The 2nd General Meeting of AOFCD
The Grand Hyatt, Kochi, Kerala-INDIA
November - 2021

Incredible India *God's Own Country*

Responsible Dentistry.....

CRICENDO

— ULTRASONIC TIPS —

GENERATION X ULTRASONIC TIPS



INTRODUCING
Newly launched **Semi-Crystalline Thermoplastic Tips** for oral prophylaxis for direct and indirect veneers, metal free crowns and implant prosthesis.

MINIMAL INVASIVE ULTRASONIC TIPS



- No.1**
Canal Location
- No.2**
For removal of dental overhang on Lateral Wall / Caries Removal
- No.3**
For removal of dental overhang on Internal Wall / Caries Removal
- No.4**
For finishing pulp chamber & Cavity Walls
- No.5**
Adaptor for Irrigation

CRICDENTAL

— RUBBER DAM KIT —

CRICDENTAL
MICRO HEAD
HANDPIECE

FOR ENQUIRIES CONTACT

Dr. Unmesh Khanvilkar M.D.S. (Endodontics)
+91 93210 29027 | cricdental@gmail.com



CRICDENTAL™

Accurate Zoom

Magnification System

SEMORR®
see more treat more

Ergonomic Design

Ease of Use, Comfort

Integrated 4k Camera
with In-Built WIFI

Excellent Optics

From SCHOTT

LED Illumination

DOM 3000 D
PLATINUM SERIES

ALSO AVAILABLE IN GOLD & SILVER SERIES



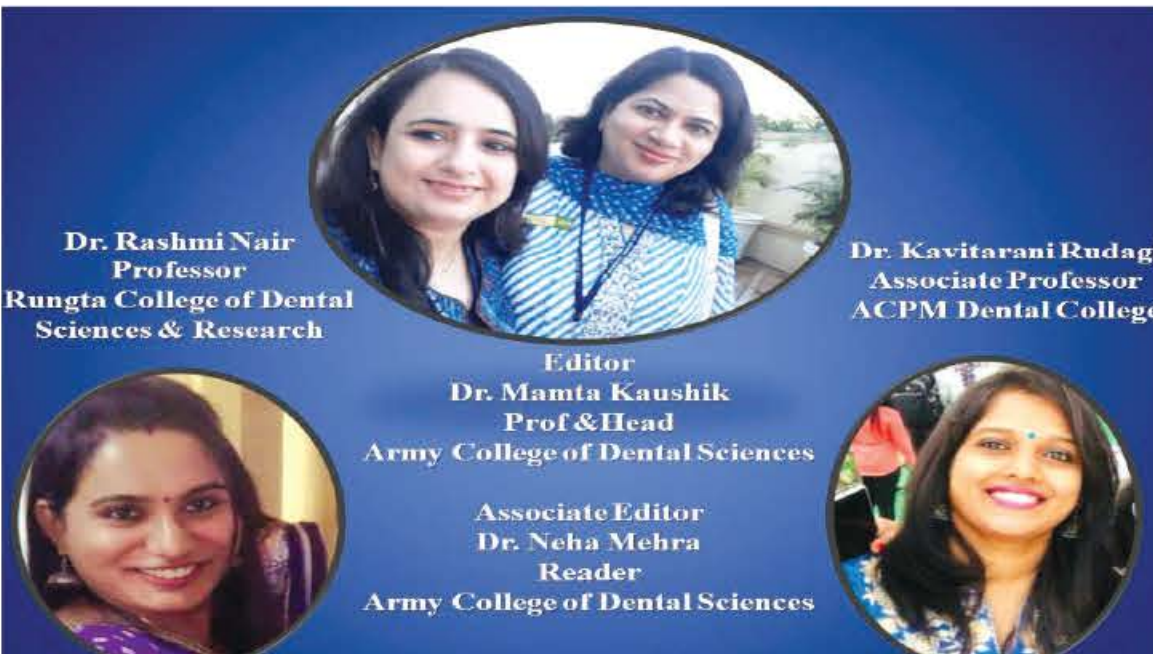
PINS & POSTS

SIGNING OFF

NEWS LETTER OFFICE

Dr. Mamta Kaushik,
Editor, News Letter - IACDE
Prof and Head
Conservative Dentistry and
Endodontics
Army College of Dental Sciences
CRPF-Chennapur Road; Jai
Jawahar Nagar
Secunderabad; Telangana- 500087
Please send your
Inputs,
Scientific and academic
achievements,
Activities in your state/city,
Awards,
Jokes, cartoons &
Questions or Queries to :
newsletter@iacde.in

EDITORIAL TEAM



Dr. Rashmi Nair
Professor
Rungta College of Dental
Sciences & Research

Dr. Kavitarani Rudagi
Associate Professor
ACPM Dental College

Editor
Dr. Mamta Kaushik
Prof & Head
Army College of Dental Sciences

Associate Editor
Dr. Neha Mehra
Reader
Army College of Dental Sciences

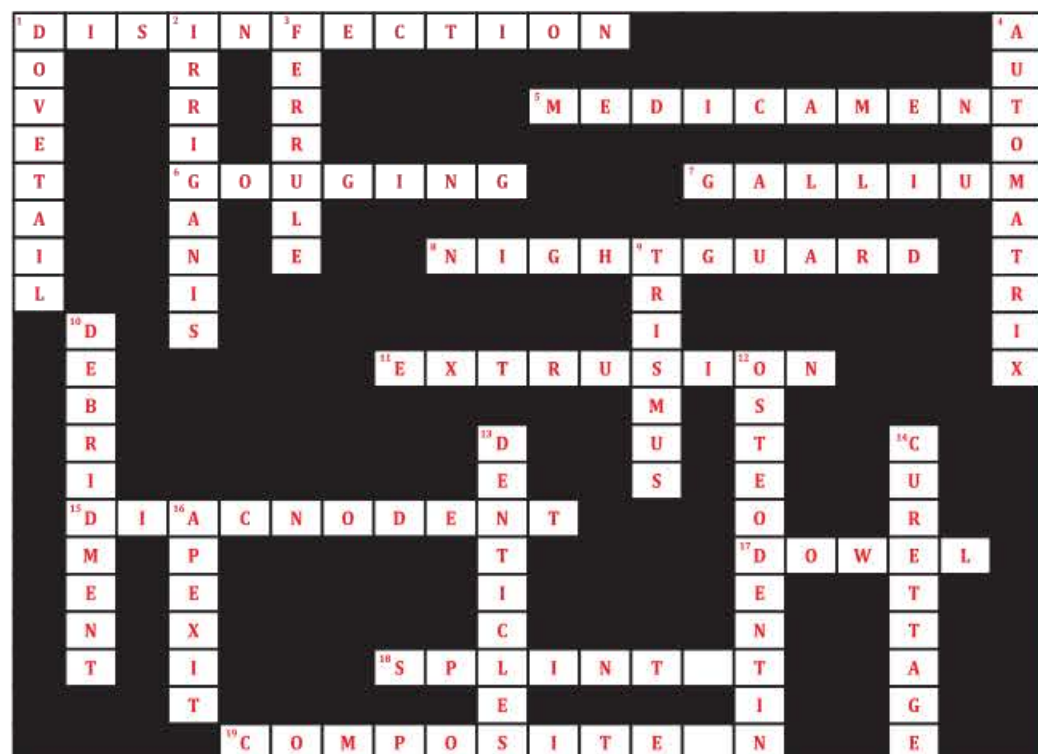
IACDE HEAD OFFICE

Z-279, 5th Avenue,
Anna Nagar, Chennai,
Tamil Nadu - 600040
Mobile: 99400 86289
Landline: 044 45566289

Head Office
timings 10 am to 5 pm on
all working days
Sunday holiday
Email: info@iacde.in
Website : www.iacde.in

IACDE CROSSWORD ANSWERS

| | | | | | | |
|---|---|---|---|---|---|---|
| I | A | C | D | E | | |
| | | R | | | | |
| W | | O | R | D | - | 7 |
| | | S | | | | |
| A | N | S | W | E | R | S |



ANSWERS TO JUMBLE WORDS - 9

1. YLAEPMOATSLNE

E N A M E L O P L A S T Y

2. REFOLMFEIT

T O F F L E M I R E

3. TEONISCNIULOCR

I N T E R O C C L U S I O N

4. EXARATPHYOITYD

H Y D R O X Y A P A T I T E

5. ILENOIADC

L I D O C A I N E



BEAUTIFIL
BEYOND
THE
CONVENTIONAL

ZIRCONOMER

**Glaslonomer FX
ULTRA**

SHOFU
Chemistry Behind
Every Smile

SHOFU
is officially now in
INDIA

SHOFU DENTAL INDIA PRIVATE LIMITED
D-3/3, Okhla Industrial Area, Phase-II, New Delhi - 110020, India
Call: (91) 11494 41400 Email: kbasu@shofudental.co.in Website: www.shofu.com