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Dhanvantari

Dhanvantari is an Avatar of Vishnu from the Hindu tradition. He appears in the Vedas and Puranas as the physician of the gods, and the god of Ayurvedic medicine. It is common practice in Hinduism for worshipers to pray to Dhanvantari seeking his blessings for sound health for themselves and/or others. Dhanvantari is depicted as Vishnu with four hands, holding Shankh, Sudarshan Chakra, Jalouka (Leech) and a pot containing rejuvenating nectar called amrita in another.

Bhagavatapurana states that Dhanavantari emerged from the Ocean of Milk and appeared with the pot of nectar during the story of the Samudra or Sagar manthan whilst the ocean was being churned by the devas and asuras, using the Mandara mountain and the serpent Vasuki.

Edited by: **Dr. K. Nandakumar,** Hon. Editor • Published By: **Dr. O.V. Sanal,** Hon Secretary • **For IDA, Kerala State Branch** • Production: **Suman Graphics,** sumangfx@gmail.com

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President's Message

Dr. Nizaro Siyo

Dear Members,

Another IDA year is reaching its end. This may be my last message as your president. I am happy that the year had a smooth sail. I am happy that you all appreciated and had been with the slogan for the year "Together we begin, March ahead & Achieve heights". My heartfelt gratitude to all esteemed members of IDA Kerala State and office bearers of the state & local branches for their overwhelming support that they have extended to us in conducting various activities.

After my last message, we have observed Doctor's Day, Chilamboli (cultural fest), Inter branch sports and games, Student conference, Children's Day and CDE's at various levels. I would like to congratulate the participants and the organizers for their efforts they have put for IDA.

The practice of Dentistry is in its tough stage now. Lots of fresh graduates are coming. Government has been strict with implementation of laws. On one side rules should be implemented for the good of profession and society. But here, implementation is done with insufficient infrastructure and facilities, with no proper policies which in turn cause great hardship to function a decent practice. We had timely raised the issues in front of the authorities. We had done our best at government level in getting decisions suiting the present situation. We had talks with PCB, DHS and Dental council for solving issues happened during Safe Kerala Programme. We have requested the government to provide facilities before enforcing laws and the Hon. Minister had positively responded to it.

It is high time for us to bring professionalism and transparency in our practice. As a professional body, we should frame a minimal standard for practice and adhere to the same. We should follow proper Bio-medical waste disposal protocol. Kindly be aware of various Laws of the land and follow it so that, we could stand erect before the authorities. We cannot give Western standards with Indian price, so definitely we should be united and raise the charges accordingly.

The representation before KSEB adalath had come fruitful. We have been placed to a new category under VI. Legalization process is going on. We were able to achieve income tax exemption. Three centers of Dental assistant course under ASAP have finished its first batch. Seven more centers had been started this year. This will help us in getting sufficient trained assistants in due course of time. Pension scheme is almost ready for sanction. Hope we could inaugurate it by next conference.

It is time for Dental council renewal. CDE credit points are not mandatory this time. You are supposed to send Rs.1000/- DD for five years along with a covering letter, Xerox copy of last renewal and self addressed envelope. Do attend CDE programmes with KDC accreditation and obtain sufficient points as it is mandatory for future renewals.

Only teamwork produces excellent result. At the same time, the individual should have the freedom for doing the best what they can. I have given my Committee Chairman's and Office bearers, the freedom of functioning. We have been guiding and observing them and I can definitely say that, they have stood with me for the best of the association. I thank each and every one of them for the help and support extended to me.

This year we are blessed with obtaining a National President for the year 2015-16. I congratulate Dr. Aliyas Thomas for his achievement and wish him a good year.

I wish to see you all at Kannur so that we do "Extracting information for implanting knowledge" by attending the grand finale of this year activities on 16th, 17th and 18th of January 2015.

I congratulate our Hon. Editor, Prof. Dr. K. Nandakumar for his commitment in bringing out excellent journals for IDA Kerala state.

Thanking you,

Jai IDA, Jai Hind

Dr. Nizaro Siyo
President, IDA Kerala State.


Dr. O.V. Sanal

Dear colleagues,

"Greetings from the state office"

We are going to reach the fag end of one more IDA year. I am completing my second year as Secretary of IDA Kerala state. When I look back I had lot of good and bad experiences. But I think everything is for the benefit of IDA and our dental profession. Working with the office bearers of each branch and ordinary members giving a special confidence to the state office to become active, take responsibility and to take pride in every achievement of the organisation. Members should take the result in a good manner, whatever be the outcome. We are working very hard for the result in connection with several issues like pollution control board, biomedical waste management, inspection in the clinic, harassment by the local authorities towards our members, problems with IMAGE etc in front of the government. We are having so much hope the matters will be settled within a month.

All the activities of IDA kerala state and branch level are going on very systematically. Branches are conducting their regular meetings, CDE programmes and CDH programmes. Coastal Malabar, North Malabar, Ernad, Malappuram, Kodungalore, Malanad, Pathanamthitta, Central Kerala, Kollam, Kottarakkara and Attingal sending their reports in correct time.

Fourth state executive meeting held on 26th October at Kunnamkulam. Oral hygiene day celebrations conducted on 1st August at Payyanur and the host was coastal malabar.

CHILAMBOLI, our cultural fest held on 21st September at Kolencherry and the host was malanad branch. Kerala state level sports meet held on 12th October at Trivandrum and it was hosted by Attingal branch. Students convention conducted in a befitting manner by Alappuzha branch at Thiruvalla on 8th November. I congratulate all the branches for conducting state level programmes in a marvellous way. All the coordinators Dr Sreekumar Nambiar, Dr Byju Paul, Dr Abhilash and Dr Aji Sarasan have done their duties in an exemplary manner.

I know all the branches are busy with their annual general body meetings and installation. Those branches who want to submit their application for awards should be done before 10th of December. Anyway I congratulate all new office bearers of each branch and lending you a full hearted support for the coming year.

Our main forthcoming programme is 47th KSDC at Kannur on 16th, 17th, 18th of January. I appeal all the members to register it as early as possible. You all know from 2016 onwards for the council registration credit points are must. Our conference providing twelve credit points, those who got registered. So please hurry up.

I urge each and every members of our association to contribute their strength and ability for the upliftment of our profession by cooperating with the programmes and projects organised by state as well as the local branches

Thanking you

With regards

Dr. O.V. Sanal
Hon. Secretary, IDA Kerala State.

Dr. K. Nandakumar

Do we really have obligations to patients?

A quarter century ago we would not have raised this question because everyone understood that we as professionals are obligated to the patients. The older generation of teachers by their model behavior taught the students the real meaning of dentist-patient relationship. As time went on, training on ethics has been pushed to the back stage and the professionals are reminded of it when they get entangled in a legal battle. This editorial is a gentle reminder to the present day dentist. Both patients and dentists should accept a responsibility to disclose information pertinent to the relationship. The dentist is obligated to respect patient's privacy, maintain patient's confidence, keep promises, be truthful, and consider patient's values and personal preferences in treatment decisions.

There are eight categories of professional obligations:

1. Chief Client-the chief client is the person or set of persons whose well-being the profession and its members are chiefly committed to serving. Patient should be considered as the most important person in our practice of the profession.

2. Ideal Relationship between Dentist and Patient-an ideal relationship is based on mutual respect and recognizes that the dentist and patient both bring important values to the professional setting. While a professional expects a certain level of behavior from others, he should be aware of the fact that the patient is also a respectable human being.

3. Central Values-the focus of each profession's expertise is a certain set of values, and each profession is obligated to work to secure these values for its clients. Both our association and the dental council underline some core values that should serve as a guiding light.

4. Competence-every professional is obligated to acquire and maintain the expertise necessary to undertake professional tasks. A professional should always update his level competency.

5. Relative Priority of the Patient's Well-being-while the well-being of the patient is to be given considerable priority, it is not to be given absolute priority. Treatment may cause mild discomfort and to avoid that we cannot postpone the treatment.

6. Ideal Relationships between Co-professionals-there does not seem to be any one account of ideal relationships between dentists and their co-professionals because so many different categories must be considered, but there are professional obligations to co-professionals.

7. Relationship between Dentistry and the Larger Community-the activities of every profession also involve relationships between the profession as a group or its members and the larger community and nonprofessional groups. Without the society, a profession cannot exist.

8. Integrity and Education-these are subtle components of conduct by which a person communicates to others what he or she stands for, not only in the acts the person chooses, but also both in how those acts are chosen and in how the person presents to others in carrying them out.

Reference: Ethics hand book for dentists published by American college of dentists

Dr. K. Nandakumar
Editor, KDJ

Comparative evaluation of flexural strength of heat polymerized acrylic resin repaired with metal and fiber reinforced autopolymerizing resin and conventional method– an invitro study

* Neenu Mary Varghese, ** K. Harshakumar, *** R. Ravichandran

Abstract

The fracture of acrylic resin dentures is a common clinical occurrence. Attempts to analyze and determine the causes of such fractures have received considerable attention in recent years. The clinician must often decide whether to repair or replace the broken denture. To minimize inconvenience to the patient and to save costs in the reconstruction of the dentures, quick and reliable denture repairs are often necessary. The use of auto-polymerizing acrylic resin generally allows for a simple and quick repair. However, the primary problem is its poor strength characteristics. Various methods for enhancing the strength of the repaired part have been reported The following study was carried out to compare the effects of metal reinforcement and fiber reinforcement on flexural strength of the repaired acrylic denture base.

Key Words: Acrylic denture repair, denture fracture, glass fiber, fiber reinforcement, metal reinforcement

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Introduction

Heat polymerizing acrylic resin is considered as the material of choice for the construction of denture bases[1], since its introduction to dentistry. Yet it is associated with two important clinical disadvantages: low flexure fatigue and impact resistance[2]. Clinical studies have shown that flexural fatigue and impact to be the common causes of fracture in maxillary complete dentures[3,4] whereas for mandibular dentures, 80% of fractures are caused by impact forces alone. [4] The clinician must often decide whether to repair or replace the broken denture. To minimize inconvenience to the patient and to save costs in the reconstruction of the dentures, quick and reliable denture repairs are often necessary. Autopolymerizing resin is the repair material most commonly employed[5] in routine prosthodontic practice. However, optimum bond strength between heat processed denture base resin and autopolymerizing acrylic resin is not always predictable.[6,7] Hence several methods have been used to reinforce autopolymerizing resin including metal strengthening or reinforcing fibers, but the results of those attempts were not consistent. The purpose of this study was to evaluate and compare the reinforcing effect of woven glass fibers and sandblasted metal wires on the flexural properties of denture base material repaired using autopolymerizing resins.

Materials and methods

Specimen preparation

Stainless steel rectangular dies of precise dimensions i.e 65x10x3mm were used in the fabrication of acrylic specimens of standard dimensions. The dies were invested in regular brass denture flasks to obtain the mold space for the preparation of test specimens. Heat-polymerizing denture base

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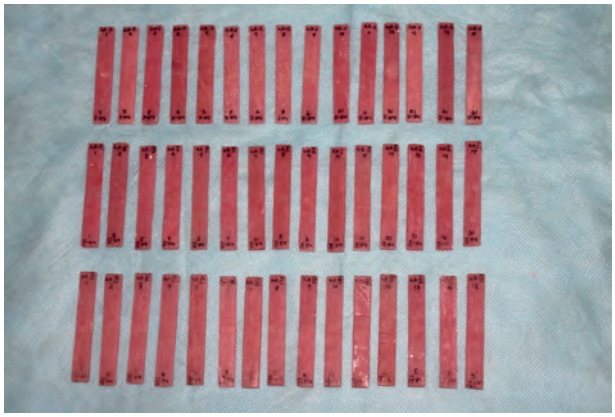

Fig. 1

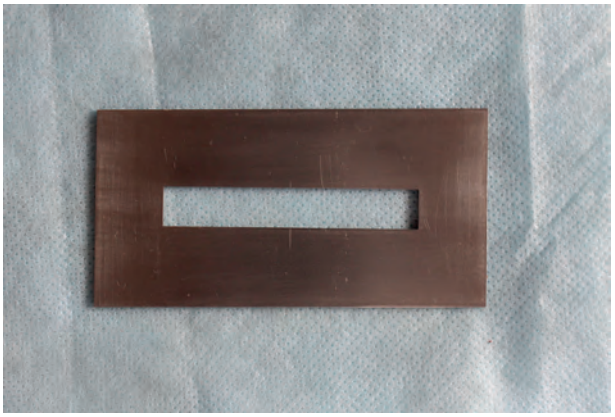

Fig. 2

resin (Lucitone 199, Dentsply international) was used in preparation of the test specimens. The processing was carried out at 74^0 c for 90 minutes and at 100^0 c for 30 minutes. All the specimens were finished and polished to a final dimension of 65.0×10.0×3 mm (fig. 1). This is in compliance to the international standards organization (iso standard, 1999:1567) for fabricating specimens for testing flexural strength of denture base polymers.

Specimen preparation for repair

The test specimens were cut in the middle and fixed in an open-ended mold so that the cut pieces can be precisely fixed with a 2-mm gap between them for repair (fig. 2). A 30×3 mm central channel were prepared in the middle of acrylic specimens (fig. 3). Autopolymerizing denture base resin was mixed according to the manufacturer's recommended ratio of polymer and monomer (10 ml/23.4 g). Control group (group A) specimens were repaired with a free flowing mixture of autopolymerizing acrylic resin alone. Group B specimens were repaired using metal wire reinforcements. Sandblasted metal wires (0.8mm) were cut into a length of 20 mm, and were used in reinforcing the autopolymerizing resin. Group C was repaired using woven glass fiber reinforcements. Woven glass fibers, 2% by weight were soaked in monomer for 10 minutes for better bonding of these fibers with the poly methyl methacrylate resin matrix. All 45 specimens were finished, with 600 and 500 grit silicon carbide paper and water, to a final dimension of 65.0×10.0×3 mm. The widths and thicknesses of the specimens were verified using a digital vernier calliper.

Testing of specimens

The flexural strength was evaluated according to the ISO/DIS 1567 International Standard by the three-point bending test using Universal testing machine (INSTRON) (fig. 4). All the samples were continually loaded at a crosshead speed of 5 mm/min (ISO 1567, 1999) until fracture of the resin samples occurred. The samples were placed on jigs 50 mm apart with their ends fixed so that any movements at the support were eliminated. They were then loaded at the center until fracture occurred. This event was defined by a complete fracture of the specimens or a decrease in the flexural strength of 40%, which was pre-programmed into the computer software. The maximum flexural strength, calculated in Megapascal for all the resin samples were collected by computer software and the data were analyzed.

Observations and results

Data were expressed in its mean and standard deviation. Analysis of variance (One Way ANOVA) was performed as parametric test to compare different groups. In order to facilitate multiple comparisons between groups, Duncan Multiple Range Test (DMR Test) was employed as post hoc test along with ANOVA. For all statistical evaluations, a two tailed probability of value, <0.05 was considered significant.

With respect to the flexural strength measurements of three groups as showed in table 1: Group 1 showed a mean flexural strength of 51.34 Mpa, Group 2 showed 69.71 Mpa and Group 3 showed 59.99 Mpa. As per this study, the maximum mean flexural strength were given by sandblasted metal reinforced repair followed by woven glass fiber reinforcement and the least values were given by the control group as shown in graph 1. The results were statistically significant with a P value < 0.001.

Discussion

Autopolymerizing acrylic resin was the most preferred (86%) material for denture repair[5]. Results

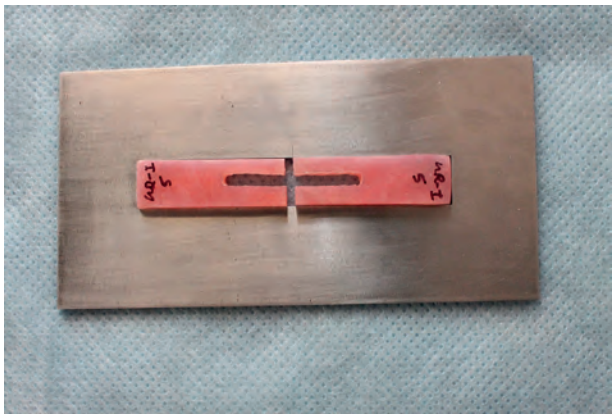

Fig. 3

Fig. 4

from previous studies have shown that the strength of autopolymerized resin repair is only 18 to 81% that of intact heat polymerized denture resin[8,9,10,11,12]. Many studies were conducted to improve the strength of repaired denture base resin by modifying the joint design[6,13,14], using pretreatments for the repair surface[15,16] and by selection of the repair materials. However, recurrent fractures frequently occur at the repaired interface or in adjacent areas. Those failures are attributed to insufficient flexural strengths of repaired denture bases. Studies conducted by Gulay uzan[17], David Watts[18], Fumiaki[19] proposed incorporation of various fibers or metal inserts to improve the strength of the repair with autopolymerizing resin. According to studies by Jagger et al[20], dentures reinforced with a metal strengthener sometimes fracture due to poor adhesion between the acrylic resin and the metal strengthener**.** But according to Vallittu et al [21], surface modifications of the metal strengtheners by sandblasting and the application of metal primers has been reported to increase adhesion between the acrylic resin and the metal strengthener and thereby increase the fracture resistance of the denture base resin. As stated by the previous studies, metal strengtheners increases the flexural strength and impact strength of denture base polymer but its use is limited because of its effect on aesthetics. Numerous studies were conducted by Braden et al[22], Gutteridge et al[23], Berrong et al[24], on carbon fibers, aramid fibers, glass fibers and ultra high molecular weight polyethylene fibers to prove their use as reinforcing materials for denture bases. Among the reinforcing fibers, glass fibres have gained widespread popularity due to its excellent aesthetic appearance and the absence of cytotoxicity [25].

The present study compared the effect of sandblasted metal wire and woven glass fiber reinforcement on the flexural strength of repaired acrylic resin denture base material. The present study concluded that, sandblasted metal wire reinforcement significantly increased the flexural strength of acrylic denture base repaired using autopolymerizing resins than that of woven glass fiber reinforcement. This finding is in agreement with previous studies of Kassab Bashi et al[26] and Carroll et al[27]. Future studies should focus on the comparison between different forms of glass fibers and different types of metal wires like semicircular, braided or twisted wires available for denture reinforcement. Hence further research should be carried out in this aspect to draw a more comparative conclusion.

Conclusion

Within the limits of the study the following conclusions were drawn :

1. Acrylic samples repaired using autopolymerizing resins reinforced with materials like sandblasted metal wire and woven glass fiber showed a significant increase in flexural strength when compared with the control group (acrylic samples repaired using autopolymerizing resin alone).

2. Group 2 acrylic samples repaired using autopolymerizing resin reinforced with sandblasted metal wires showed the maximum flexural strength among the three groups hence proving their use in routine clinical practice.

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Application of omic technologies in the field of Periodontics

*Teenu Abraham *Devisree Naveen *Midhulaj **Padmakumar T.P ***Raju Kurian Ninan ****K. Nandakumar

Abstract

Characteristics of an organism is determined by its Genetic makeup. The proteins that are required to carry out various functions of a living being is determined by the information stored in its DNA. Periodontitis is the result of complex interrelationship between infectious agents and host factors. The onset, progression and severity of periodontal disease are mainly mediated by various protein molecules. A better understanding of various proteins involved in periodontal disease pathogenesis can be used in the diagnosis, prevention and treatment of periodontal diseases.this is enabled through the development of various omic technologies. This review deals in detail about these techniques and their periodontal implications.

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Introduction

Life on earth is specified by the genomes of various organisms with which we share our planet. Genome is the store house of biological information that requires coordinated activity of enzymes and other proteins which participates in a complex series of bio chemical reaction termed as genome expression, for its utilization of biological information. The initial product of genome is the transcriptome which is a collection of RNA molecule derived from the genes whose biological information is required by the cell at a particular time. The transcriptome is maintained by the process called transcription, in which individual genes are copied into RNA molecule. The second product of genome expression is the proteome, which specifies the nature of the biochemical reaction that the cell is able to carry out. The proteins that make up proteome are processed by the translation of the individual RNA molecules present in the transcriptome. Understanding of the functions of cell has aided the development of medicinal science at various levels. This has been possible with the dawn of various "omic" technologies that studies the cell at a molecular level.

Genomics

This is the study of whole genome, i.e. all the DNA of a single organism. It involves sequencing of the DNA followed by assembling the fragments of longer DNA so as to reconstruct the original sequence and finally annotation which attaches biological information to the sequence. Genomic studies comprises of two main types. Functional genomics that focuses on gene transcription, translation and protein -protein interaction and structural genomics which seeks to describe the 3D structure of every protein encoded by a given gene.

Other branches of genomic studies include epigenomics (study of epigenic modification of DNA and histones) and metagenomics (study of genomic material recovered from the environment. The vast majority of microbial biodiversity which was missed by cultivation-based methods are now been discovered by the evolution of these sciences.[7]

Periodontal implication of genomics- Advancements in various technologies that employ genomics have enabled identification of various genes that are responsible for the production of numerous collagenous and non collagenous proteins that make up periodontal structures. The genes that are up regulated by various growth factors like EMD, TGF BETA and P15 have been

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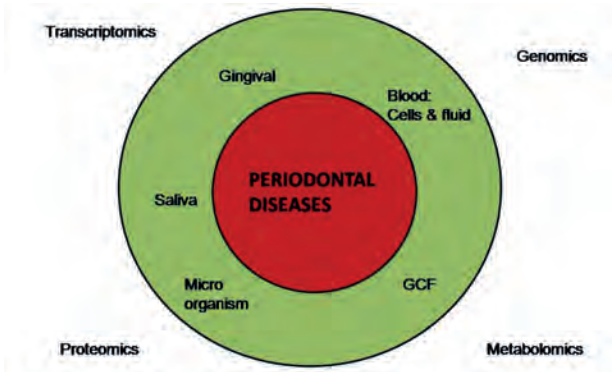
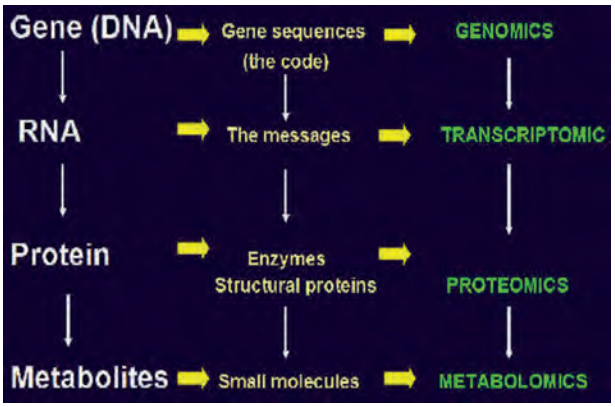
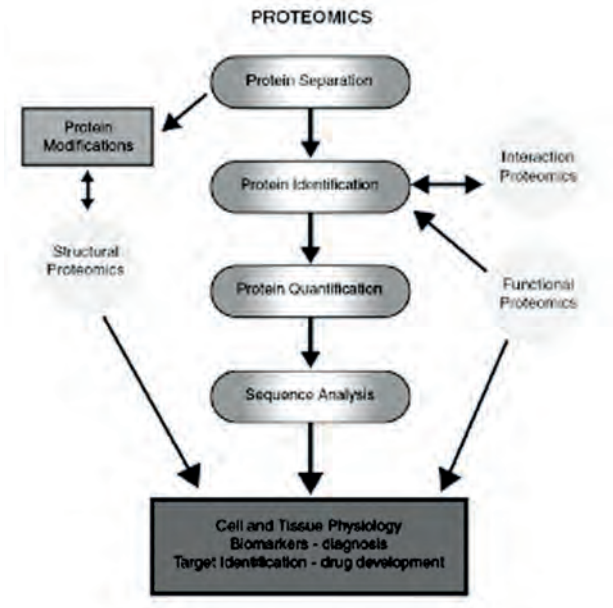


The compartments available for studying periodontal disease using 'omic technologies





identified. However it is necessary to study the whole array of genes involved in regeneration to understand both the up regulatory and down regulatory effect of these growth factors.

Influences of SNP on periodontal diseases were analyzed using genomic studies. Among the different genes analyzed IL-1 SNPs were suggested to be more associated with environmental interactions, such as with smoking, than with susceptibility to periodontitis, whereas TNFα showed a lack of association with inflammatory periodontal disease. However, polymorphisms in Fcγ receptors tend to be associated with both aggressive and chronic forms of periodontitis.[19]

Covani et al predicted five leader genes from an investigation of 61 genes potentially involved in periodontitis. These genes were NFkB1, CBL, GRB2, PIK3R1 and RELA, and are predominantly involved receptor-mediated signaling and may reflect the stimulation of the host inflammatory-immune system by bacteria in periodontitis.[4]

Transcriptomics

Genomics technologies came along with its own drawbacks which included confounding issues such as age, gender, diet, smoking and likely many more. Where dynamic range is a problem the technology may be affected by the 'usual suspects' phenomenon where similar species are found in a variety of unrelated studies and reflect the fact that some situations/ treatments affect central signaling or metabolic hubs within cells, for example affecting energy generation.[9] This gave way for the development of transcriptomics which involved the study of messenger RNA (mRNA) production at a transcription level. This technology utilizes biopsies of oral tissues rather than oral fluids.

There are two general methods of inferring transcriptomes. One approach maps sequence reads onto a reference genome, either of the organism itself (whose transcriptome is being studied) or of a closely related species. The other approach, de novo transcriptome assembly, uses software to infer transcripts directly from short sequence reads. The transcriptomes of stem cells and cells are of particular interest to researchers who seek to understand the processes of cellular differentiation. Transcriptomics is an emerging and continually growing field in biomarker discovery for use in risk assessment.[1]

Periodontal implication on transcriptomics

The major advantages that this techniques provides is the ability to amplify the expressed gene products; and it provides stability and uniformity to the platforms employed in identification of interesting and/or novel species. This is reflected in the far greater number of articles reporting transcriptomic studies than proteomic

and metabolomic studies. Over the last 5 years Papapanou and colleagues have analyzed whole tissue transcriptome from the excised papillae of healthy and diseased patients in an attempt to re-classify periodontal disease biologically rather than clinically and identified genes that have not previously been linked with periodontal diseases, such as CXCL6 (granulocyte chemoattractant protein 6)[15]

Papapanou et al took monocytes from periodontal patients undergoing treatment and examined mRNA expression using Affymetrix arrays. They found that a third of patients had substantial changes in genes relevant to innate immunity, apoptosis and cell signaling; and concluded that periodontal therapy had a systemic anti-inflammatory effect.[16] Matthews et al have previously reported that neutrophils from periodontitis patients are both hyper-reactive to stimulation by F.nucleatum or Fcγ-receptors and also show baseline hyperactivity with respect to reactive oxygen species (ROS) production.[14] Following these discoveries, the same group utilized neutrophils from periodontitis patients to determine what genes were affected.[20] They found significant increases in type-1 interferon-stimulated genes and this led to the discovery that patients had significantly greater concentrations of circulating interferon-alpha, which, upon successful periodontal treatment, decreased to the same levels as non-diseased controls. They concluded that periodontitis is a complex disease where increases in interferon-alpha may be one component of a distinct molecular phenotype in neutrophils, triggered potentially by viral priming or autoimmune responses. This latter concept is new to periodontology and may help explain the association between periodontitis and rheumatoid arthritis.[3]

Though advances have been made using transcriptomic approaches but there is a need to bring together the established datasets and also to conduct much larger, wide ranging studies that can take into account possible changes in cell type within periodontal tissues, to pinpoint genes that may be useful in differentiating between disease types and address the criteria for biomarker researches.

Proteomics

Transcriptomics can be regarded as precursor to proteomic studies which involves the study of the complete protein complement of a cell or organism termed as the proteome.

During protein formation gene activity results in formation of mRNA which is an interim to protein formation. Protein formation occurs only after post translational changes which are accompanied by several modification during translation. Post translational modification along with other protein/ carbohydrate interactions are also important for the final protein product to be ready for functional and structural integration into tissues. The analysis of relative mRNA expression levels can be complicated by the fact that relatively small changes in mRNA expression can produce large changes in the total amount of the corresponding protein present in the cell as the levels of mRNA are not directly proportional to the expression level of the proteins they code. While proteomics generally refers to the large-scale experimental analysis of proteins, it is often specifically used for protein purification and mass spectrometry.

In the past this phenomenon was done by mRNA analysis, but it was found not to correlate with protein content. It is now known that mRNA is not always translated into protein, and the amount of protein produced for a given amount of mRNA depends on the gene it is transcribed from and on the current physiological state of the cell. Proteomics confirms the presence of the protein and provides a direct measure of the quantity present.

This technology involves several steps that are carried out in a sequential manner. The first step involves the separation of the cells from tissues through fractionisation procedures. Once the cells are separated, the tissue is then analyzed for their protein. The early step is to separate the entire protein assembly in the tissue, either through the use of their protein structure itself or their smaller peptide units. Subcellular fractionistaion is also possible, where cellular organelles are separated and then the proteins present in the organelles such as lysosomes are identified.

Proteomics are broadly classified as structural proteomics and interaction proteomics.

- Structural proteomics which is the structural identification of the structural nature of all the protein in a genomic scale. Several methods like ligand binding, helical structural motif, catalytic binding sites etc are employed in this method. Structural proteomics hence, helps to understand the spatial, temporal, and physiological regulation of proteins.
- Interaction proteomics is the understanding the interaction of protein molecules with other similar and dissimilar molecules which structural proteomics fail to offer.

Periodontal implication of proteomics

In periodontics this technology is implied to assess the action of MMPs in the control of inflammation

reaction and tissue turn over. It also helps in identifying various signaling molecules that take part in tissue formation and turnover. Proteomic analysis of fribroblast, osteoblast and cementoblast help in identifying the protein structure they synthesis. An array of proteins involved in wound healing at various phases are identified using proteomic studies enabling us to identify the proteins which when delivered at the appropriate time would interact with other matrix components and would thus help in the three dimensional organization of the extracellular matrix, spatially and temporally.[11]

Wu et al compared saliva proteomes from generalized aggressive periodontitis patients and controls using a similar technique. Whole saliva yielded differences in highly abundant proteins, such as albumin and amylase which were increased in the diseased samples, illustrating perhaps the need for prefractionation to dissect deeper down into the proteome.[20]

Proteomics offers a new approach to the understanding of holistic changes occurring as oral micro-organisms adapt to environmental change within their habitats in the mouth. [17]

A study in which whole-cell proteomic analyses were conducted to investigate the changes from an extracellular to intracellular lifestyle for Porphyromonas gingivalis and found that a total of 385 proteins were over expressed in internalized P. gingivalis relative to controls.[21]

Large scale mesenchymal stem (MSC) cell proteome analyses have been emphasized in recent MSC research. A review by Hye Won park presents an expandable list of MSC proteins which will function as a starting point for the generation of a comprehensive reference map of their proteome. This proteomic and transcriptomic analyses may allow us to obtain new and hopefully fundamental insights into the protein expression, regulation, and cellular biology of MSC.[8]

One of the most promising developments to come from the study of human genes and proteins has been the identification of potential new drugs for the treatment of disease. This relies on genome and proteome information to identify proteins associated with a disease, which computer software can then use as targets for new drugs.

As protein expression and post-translational modifications are dynamic processes, particularly in the periodontium, identification and quantification of proteins alone are not sufficient to understand functional changes. New technologies will be needed to enable combinations of metabolic labeling and identification as well as quantification and measurement of synthesis rates. Also Proteomics experiments conducted in one laboratory are not easily reproduced in another.

Metabolomics

Metabolomics is a discipline that studies the quantities of all chemicals except DNA, RNA and proteins within a sample. At disease sites, in comparison to healthy sites, antioxidant, glutamine and di-and tri-sacchride levels were decreased whereas amino acids (except glutamine), choline, glucose, polyamines, and purine degradation and urea cycle metabolites were increased. This study has expanded our knowledge of the sources of oxidative stress, which is already acknowledged as being of particular importance, in periodontal disease by the potential increase in activity of the xanthine oxidase-reactive oxygen species axis.[1]

Metabolomics is an area that could and should see intensive research to provide a clearer understanding of periodontitis. It will be able to reveal information about host and host micro flora interactions which may yield specific small molecule targets that have been over looked by other techniques. Metabolome refers to the complete set of small-molecule metabolites (such as metabolic intermediates, hormones and other signaling molecules, and secondary metabolites) to be found within a biological sample, such as a single organism.[18,19]

Periodontal implication of metabolomics

There is a vast number of potential metabolites and targeted approaches have elucidated some changes, but there are very few articles that report on tackling the global metabolome in periodontal disease.[12] Barnes et al used gas and liquid chromatographic separations coupled to mass spectrometry to investigate GCF samples from 22 chronic periodontitis patients, stratified for healthy, gingivitis and periodontitis sites.[1] They identified 103 metabolites in comparison to a chemical reference library, finding that levels of metabolites from gingivitis sites fell between healthy and periodontitis sites. At disease sites, in comparison to healthy sites, antioxidant, glutamine and di-and tri-sacchride levels were decreased whereas amino acids (except glutamine), choline, glucose, polyamines, and purine degradation and urea cycle metabolites were increased. This study has expanded our knowledge of the sources of oxidative stress, which is already

acknowledged as being of particular importance, in periodontal disease by the potential increase in activity of the xanthine oxidase-reactive oxygen species axis.

Lipidomics is a particular subgroup of metabolomics that investigates the role of lipids in cellular function, because they integrate signalling and metabolic processes. Recently, Gronert et al used a lipidomics approach to identify and quantify diacyl glycerol species in neutrophils from localized aggressive periodontitis patients.[6] Metabolomics is an area that could and should see intensive research to provide a clearer understanding of periodontitis. It will be able to reveal information about host and host micro flora interactions which may yield specific small molecule targets that have been over looked by other techniques.

Conclusion

Periodontitis is acknowledged as a complex inflammatory disease, initiated by a plaque biofilm and with multiple component causes, and it is therefore much more likely that there is a multiplicity of biomarkers which together can: differentiate between health and disease; between disease onset and progression; improve the prognosis of disease outcomes and possible patient stratification allowing for personalized medical interventions; identify disease resolution/healing; predict treatment outcomes; identify patients who will respond well to a particular treatment; or provide surrogate end points. The use of use 'omic techniques will play an important role in their discovery. To conclude, as yet 'omic technologies have not yielded validated biomarkers for periodontal disease but they are identifying new routes for research to follow in relation to disease pathogenesis. It is unrealistic to think that one biomarker will be found, there is no more "low hanging fruit".[13]

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Failed calcium hydroxide apexification treated with biodentine

* Sunita John, ** Shoba K, *** Sheena P, **** Subash D.

Abstract

The completion of root development and closure of the apex occurs up to 3 years after the eruption of the tooth. Traumatic dental injuries during this period result in endodontic complications. Pulp necrosis is one of the main complications of dental trauma. When it happens in an immature tooth, pulp necrosis implies a lack of root maturation and apical closure. While treating a non vital tooth, with an open apex the prime objective is eliminating bacteria from the root canal system and induction of apical closure. Apexification is a procedure done to induce the formation of a calcified apical barrier allowing a permanent and hermetic root filling. The most common material used in apexification is calcium hydroxide. The following case report demonstrates an unusual case of failed calcium hydroxide apexification, followed by periapical surgery & root end filling with biodentine.

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Introduction

Trauma to the anterior teeth, commonly found among young children, accounts for one third of all traumatic injuries in boys and one fourth of all injuries in girls[1]. 25% of all school children experience dental trauma and 33% of adults have experienced trauma to the permanent dentition. In many cases, the injury causes cessation of tooth development[2]. An incompletely formed apex is one of the most common features seen in traumatized teeth. The patient commonly reports after many years - either with pain or compromised esthetics[3]. Treatment of the immature nonvital anterior tooth with apical pathosis presents several treatment challenges.

Various Treatment Options are[3]-

1. calcium hydroxide apexification – multivisit treatment
2. surgery & retrograde sealing
3. apical plug - single visit treatment using either MTA or Biodentine
4. regenerative procedures

The main objective of treatment for these teeth is apexification. Apexification is defined as, "a method to induce a calcified barrier in a root with an open apex or the continued apical development of an incomplete root in teeth with necrotic pulp." Apexification permits a barrier to be formed at the root apex, allowing for proper condensation and retention of the root canal filling. Various clinical techniques have been aimed at inducing apexification in immature permanent teeth with necrotic pulps. Inducing apical closure by the formation of an apical stop, generally with calcium hydroxide, (CH) is one of the most widely used methods of treating a tooth that has a necrotic pulp and an open apex. The use of calcium hydroxide was first introduced by Kaiser in 1964 & popularized by Frank[4].

The hard tissue eliciting effect on adjacent soft tissue appears to be related to a necrotizing effect of CH because of its high pH (pH = 12.5). A desirable feature of CH (at its normally high pH level) is its excellent antibacterial property. This results in the development of hard tissue at the apex (apexification), usually as a cementum-like structure. The drawback of this hard tissue bridge are the numerous vascular channels, which could lead to bacterial invasion into these channels & perforate it[5].

Biodentine is a new class of dental material with high mechanical properties, excellent biocompatibility and is reported to be bioactive. Its similar to MTA in its basic composition, with fast setting, better handling properties and strength due to addition of calcium chloride. It is suitable as a

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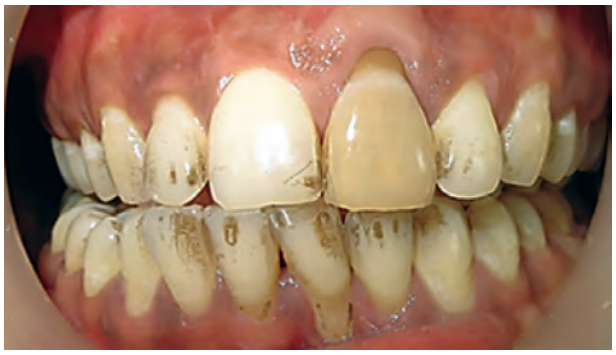

Fig 1 Pre-operative view.Discoloration of #21

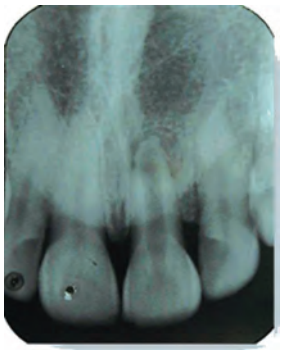

Fig 2 Pre-op x-ray

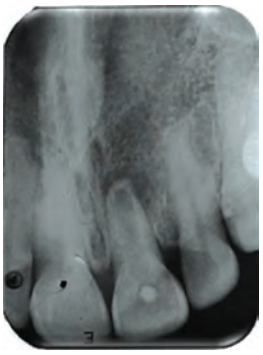

Fig 3 x-ray at 9 months after $Ca(OH)_2$ apexification

dentine replacement material whenever original dentine is damaged. [6]

This article discusses a case report of failed CH apexification, treated successfully with surgery & retrograde filling with biodentine.

Case report

A 28 year old female patient reported to the Department with chief complaint of discoloration in the upper front tooth. She had a history of fall in her childhood. Discoloration of 21 started 3 yrs before and progressed to present condition. Medical history was non-contributory.

Clinical examination revealed - generalized extrinsic stains, yellowish brown discoloration & extrusion of 21.No other lesions were detected. (Fig. 1)

Investigations-

Thermal and electric pulp sensibility tests gave negative response. Radiographic examination revealed an immature apex with slight radiolucency around the apex in relation to 21. (Fig. 2)

Treatment plan was formulated.

1.Oral prophylaxis

2.Calcium hydroxide apexification in 21

3.Completion of endodontic treatment

4.Jacket crown

Procedure

After oral prophylaxis, under local anaesthesia, access opening was done in relation to 21 with rubber dam isolation. Working length determined & bio mechanical preparation done. Thick paste of Calcium hydroxide placed and dry powder condensed with hand plugger into the canal. Temporary restoration given. Calcium hydroxide dressing was changed at one month interval. Review x-rays were taken at 3, 6 & 9 months. After 9 months, in IOPA – presence of apical barrier was detected (Fig.3). Endodontic treatment completed by Roll cone technique. IOPA x-ray post obturation revealed accessary cone extrusion on the distal aspect (Fig.4). Treatment plan was revised. Periapical Surgery and retrograde sealing with Biodentine was planned.

Routine blood investigations were done. Full thickness mucoperiosteal flap raised under local anaesthesia in relation to 11,21,22. Cortical bone was removed by surgical bur. Periapical curettage was done. Extruded gutta percha cone was removed & apical gutta percha was condensed & root end filling with biodentine placed. Patient was reviewed after 1 week. X-rays were taken at 3, 6 & 9 months (Fig.5). Post endodontic restoration with metal ceramic crown done (Fig.6).

Discussion

Apexification with calcium hydroxide is a relatively simple and predictable technique with reported success rates of up to 100%. Usually success ranges from 74% to 100% with most above 95%. Formation of a bonelike material and cementum in decreasing concentric circles have been reported[6]. The composition of the apical barrier seems to vary. Cementum can form the apical bridge, and has been reported to have been deposited along the walls of the root canal even to the junction of the middle and cervical thirds. Dentine and bone have also been reported, but the most common result seems to be a combination of all three tissues, with connective tissue and calcium hydroxide sometimes mixed in with them[7].

The ability of calcium hydroxide to induce a hard tissue barrier is accepted and its osteogenic potential has been known for some time, as has its effect on

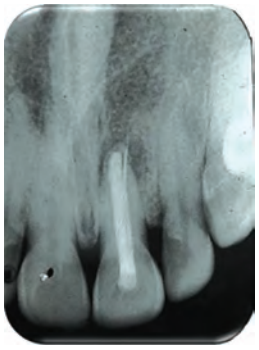

Fig. 4 Post obt x-ray with accessory cone extrusion

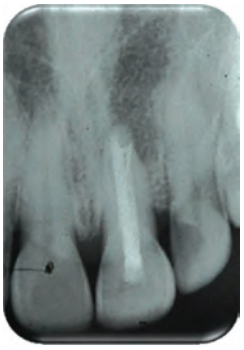

Fig 5 Post surgical xray at 9months

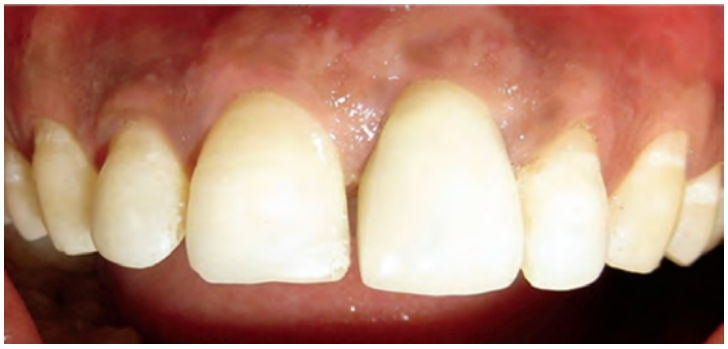

Fig 6 Post operative view with jacket crown on #21

accelerating the natural healing functions in the periapical tissues. To date, however, there is no clear and consistent explanation in the literature for the exact action of calcium hydroxide[5].

Recent research does not attribute the efficacy of calcium hydroxide to only its pH or antimicrobial activity, although the alkaline pH could activate alkaline phosphatases which play an important role in hard tissue formation. The role of the calcium ion itself in osteogenesis has been supported, and indications are that elevated levels of calcium ion can elicit cellular signalling which may be involved in the mineralization process. One study suggests that the effect of calcium hydroxide appears to be the formation of an immediate precipitate-barrier that induces dystrophic calcification[10].

Disadvantages of Calcium hydroxide apexification are-multiple visit, intracanal calcium hydroxide dressing make the tooth brittle because of its hygroscopic and proteolytic properties and. Its high pH is known to be toxic to vital cells[5].

In spite of radiographic and clinical evidence of complete apical bridge formation, scanning electron microscopy & histological examination reveals that the barrier is irregular in topography and porous[7].

In the present case extrusion of guttapercha cone through the apical bridge, should be attributed to the porous nature of CH.

Revised treatment plan of surgery & retrograde sealing with biodentine was planned as biodentine is a surrogate for MTA. Biodentine has better compressive strength. Its setting time – 12 – 15 min. Microleakage is significantly less in Biodentine & it is bioactive[9].

The patient was was followed up after one year and was found to be asymptomatic.

Conclusion

Calcium hydroxide has been the standard material for apexification for many years and has been shown to achieve success, while undoubtedly possessing multiple drawbacks. With the addition of MTA, Biodentine to the option list and apical regeneration being considered, the future for successful treatment of necrotic immature permanent teeth is promising. Continued research will certainly lead to faster and more reliable treatment options for patients with necrotic immature permanent tooth.

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Conservative management of multiple non vital teeth associated with a large periapical lesion

* Priya Philip, * Sabna B.S., ** Ramesh Kumar M., *** Jayasree S.

Abstract

The treatment of choice for the management of non-vital teeth with large periapical lesion is conventional root canal therapy. Conservative approach should be preferred to invasive surgical procedures when indicated. This report presents a case of non surgical management of a large periapical lesion associated with multiple non vital and discolored teeth using premixed calcium hydroxide iodoform paste.

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Introduction

The main aim of root canal therapy is prevention and treatment of apical periodontitis. Bacterial invasion of the root canal system is crucial for the onset and maintenance of periapical diseases; thus, one goal of endodontic treatment is to kill microorganisms in the root canal system[1]. The treatment of choice for the management of non-vital teeth with large periapical lesions is conventional root canal therapy[2]. When endodontic treatment is performed to accepted clinical standards, a success rate of around 90% can be expected[3].

When this treatment is not successful in resolving the periapical pathology, other options such as non surgical retreatment or periapical surgery are considered. By these procedures an environment conducive to healing is established[4]. Efficient neutralization of microorganisms and the removal of byproducts of cells and microorganisms as well as preventing reinfection are prerequisites in treating apical pathosis[5]. The greatest impact may be achieved by effective biomechanical preparation and calcium hydroxide medication, which promotes antisepsis of the root canal system and mineralized tissue formation in the apical region[6,7].

Histological examination of most tissue sections in experimental animals and humans shows that healing of periradicular lesions after root canal therapy is repair rather than regeneration of the periradicular tissues. Periradicular repair ranges from a relatively simple resolution of an inflammatory infiltrate in the PDL to considerable reorganization and repair of a variety of tissues[2].

This report presents a case of non surgical management of a large periapical lesion associated with multiple non vital and discolored teeth using premixed calcium hydroxide iodoform paste. The discoloration was conservatively managed by non vital bleaching using sodium perborate-saline mixture.

Case report

A 27 year old female patient, reported to the department of Conservative Dentistry and Endodontics of Govt. Dental College, Calicut with the chief complaint of swelling on palate in relation to upper right front teeth. She gave a vague history of trauma to right side of face 10 years back. There was a mild pain on touching which was noticed 2 weeks back and a bad taste in mouth since 2 days.

Detailed intra oral examination revealed palatal swelling in the relation to 11, 12 and 13.

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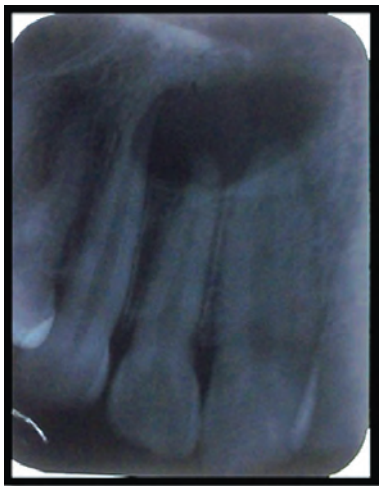

Fig. 1 Pre operative.

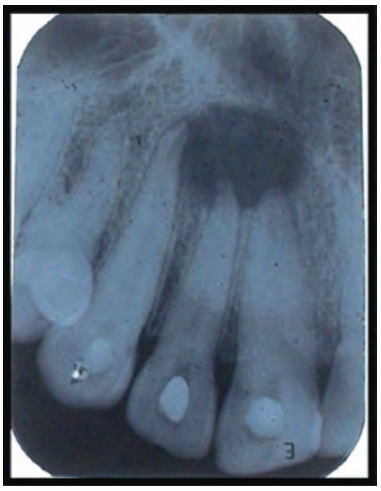

Fig. 2 Calcium hydroxide & Iodoform paste placed.

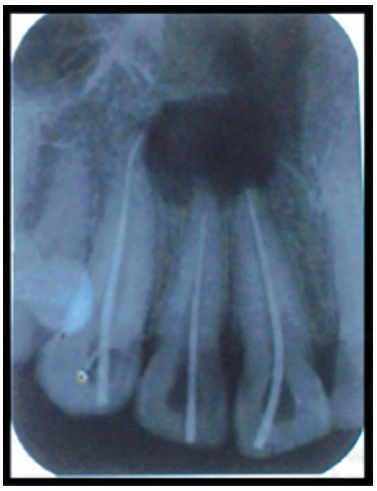

Fig. 3 Working length confirmation.

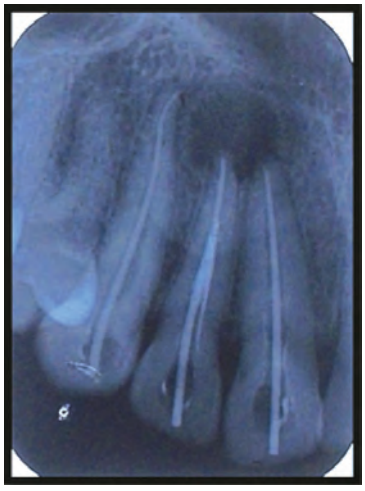

Fig. 4 Master cone placed.

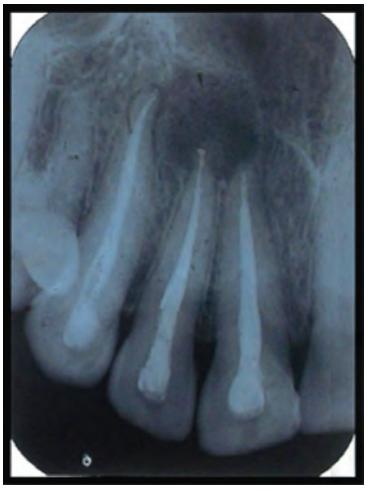

Fig. 5 Post obturation.

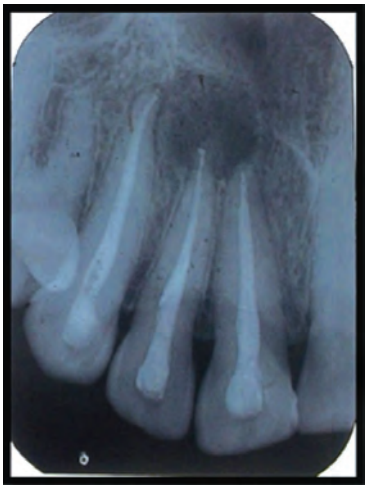

Fig. 6 Six months follow up.

Hard tissue examination showed mild discoloration of 11 and 12. Pulp sensitivity testing using Endo-frost (Roeko, -50^{0}C) on 11, 12 and 13 gave a negative response. Radiographic analysis indicated the presence of a large periapical radiolucency approximately 1.5cmx1cm in dimension, involving the root apex of 11, 12 and 13 (Fig: 1). The condition was diagnosed as pulp necrosis with symptomatic chronic apical periodontitis secondary to trauma. Treatment plan was decided and informed consent was obtained from the patient.

Clinical procedure

Access cavity preparations were done on 11, 12 and 13 after confirmation of pulp status using test cavity, under rubber dam and wedget isolation. Working length of each tooth was determined and confirmed with radiographs (Fig: 2). Mild drainage of yellowish fluid was established through 12. Shaping and cleaning was done using hand K files (Sybron Endo) and more emphasis was given on hypochlorite irrigation. Master apical file sizes for tooth 11 and 12 was #50 K file where as for tooth 13 it was # 40(Fig:4). The canals were packed with pre mixed calcium hydroxide paste with iodoform (Diapex plus-Diadent). Patient was recalled every 3 weeks for next 3 months and fresh paste was placed in the canals during each visit. The swelling subsided and obturation was then completed on 11, 12 and 13 with cold lateral condensation of Gutta Percha (Fig:5). Marked reduction in periapical radiolucency was found during the 6 month follow up visit (Fig:6). Non vital bleaching

using sodium perborate-saline mixture was initiated. The mixture was kept in the access cavity after placing a cervical barrier with Cavit. The bleaching agent was replaced every 4 days for 4 appointments after which the patient was happy with the shade lightening. The access cavity was then sealed with composite. Patient was asymptomatic at all the appointments.

Discussion

Treatment options to manage large periapical lesions range from nonsurgical root canal treatment and apical surgery to extraction[8]. Various nonsurgical methods have been used in the management of periapical lesions including conservative root canal therapy without adjunctive treatment, passive decompression of the lesion, active non surgical decompression technique using the Endo-eze vacuum system, needle aspiration of the cystic fluid using a buccal palatal approach, aspiration through the root canal, methods using intra canal calcium hydroxide, lesion sterilization and repair therapy (LSTR) and apexum procedure[9]. Conventional nonsurgical root canal therapy is the treatment of choice in managing teeth with large periapical lesions[2]. When this treatment does not succeed in resolving the periradicular pathosis, additional options must be considered, such as nonsurgical retreatment or periapical surgery. Irrigation with 5.25% sodium hypochlorite and adequate biomechanical preparation is recommended for effective neutralization and removal of infection from the root canal system, followed by calcium hydroxide intracanal medication[10]. The benefits of calcium hydroxide include anti inflammatory action through its hygroscopic properties, forming cacium-proteinate bridges, phospholipase inhibition, neutralization of acidic products, activation of alkaline phosphatase and antibacterial action[11].

Although non-vital teeth are subject to external and other stains, the primary discoloration of the non-vital tooth is likely to come from within the pulp chamber itself, resulting from pulp degeneration, with or without hemorrhage[12]. Out-of-Office Bleaching Technique (or Walking Bleach) was first described by Spasser and involves sealing into the tooth a mixture of sodium perborate with water by introducing it into the pulp chamber. According to several investigators the bleaching molecules are small enough to pass freely through enamel and dentin, thus they can reach parts of tooth away from direct contact with the solution. This technique works quickly because the nascent oxygen released can move freely inside and outside the tooth to achieve whitening[13].

Conclusion

This case report highlights the healing potential of periapical tissues when a favourable environment is provided. Non surgical root canal treatment, when performed to accepted clinical standards, ensures a good success rate.

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Characterization of complete dentures: a literature review

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Abstract

Esthetics plays a vital role in rehabilitation of complete dentures to achieve a pleasant smile. Denture esthetics is the effect produced, which improves beauty and attractiveness of a person. In the era of implants and ceramics, the conventional denture needs to be updated. Denture characterization is must in avoiding denture look and giving natural look. Only changes in tooth arrangement is not sufficient.This article is an attempt to highlight various methods of denture base characterization in order to improve one's personality. Present review outlines methods of improving the aesthetics of complete dentures with the aim of constructing dentures which are both functional and have a natural appearance. This will require very close collaborative teamwork involving the dentist, technician and the patient. With practice, the techniques described can be incorporated into treatment procedures with relative ease and, results in better acceptance of the denture by the patient.

Key words: denture characterization, denture look, denture esthetics

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Introduction

According to the glossary of prosthodontics terms "Denture characterization is modification of the form and color of the denture base and teeth to produce a more lifelike appearance." As said by Frush and Fisher[1], "the environment of the teeth is as important as the tooth itself". Thus the two elements that must be considered in denture esthetics are teeth and their supporting denture base. Complete dentures must be esthetic as well as functional[2]. Hardy stated that, "To meet the esthetic needs of the denture patient, we should make the (denture) teeth look like (the patient's) natural teeth[3]."

Complete denture can be characterized by two basic methods.

1. Characterization by selection, arrangement and modification of artificial teeth.

2. Characterization by tinting the denture bases.

Characterization by selection, arrangement and modification of artificial teeth

The teeth can be modified to harmonize with the patient's age, sex, and personality to provide subjective unity. Fisher[1] said that gender, personality, and age can be used as guidelines for tooth selection, arrangement, and characterization to "enhance the natural appearance of the individual.

The ways of characterization are;

1. Varying the direction of the long axis of teeth.

2. Place the teeth so that the tips of the maxillary lateral incisors show when the patient speaks seriously; the amount depends on the age and sex, less for old than for young people and more for woman than for men.

3. Create asymmetry in the divergences of the proximal surfaces of the teeth from the contact points. Martone[4] stated that, "The key to esthetics lies in asymmetry." Most things in nature are asymmetric, and in the human face many minute and subtle differences are found from one side to the other.

4. Use an eccentric midline.

5. Place one maxillary central and lateral incisor parallel to the midline and rotate the other central and lateral incisors slightly in a posterior direction.

6. Place one maxillary central incisor slightly in an anterior direction to the other central incisor.

7. Place the neck of one maxillary central incisor in a posterior direction and the neck of other central incisor in an anterior direction.

8. Create asymmetry for the maxillary right and left cuspids. Rotate one in a posterior direction than the other.

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9. Gingival tissues recede with age. Selecting a long tooth, contouring the wax to show gingival recession and then staining it a bit, can give natural appearance reproducing the recession. Long clinical crowns with receded gingiva after periodontal destruction, may also play a role in achieving a natural-looking denture for selected patients[5].

10. Grinding the incisal edges.

Teeth abrade with age. Reshaping the incisal edges and mesiodistal diameter makes it possible to modify any tooth to the desired form[6].

11. A teeth arrangement that is too perfect may not be ideal. In fact, slight modifications in the position of teeth such as overlapping, tilting, rotation and incisal variations may contribute to a natural-looking denture[6].

12. Spacing and diastemas often exist in natural dentition. Thus slight diastema can be created between the lateral incisor and the cuspid on one side.

Diastema given should exceed 2-3mm and should be wider at the incisal edge than the base. In diastemas smaller than 2-3 mm, fibrous food tends to be trapped and can be a source of embarrassment[7].

13. A hair line crack can be given in the teeth.

14. Often, gold or alloy restorations can be placed in these teeth to create the illusion of naturalness[7]. The use of gold occlusal surfaces on the teeth of prosthesis can contribute to its clinical success[8].

15. Silver filling can be given on posterior teeth.

16. Cast crown can be given on posterior teeth[5].

17. A discolored tooth can be shown by selecting one or two teeth of darker shade compared to the rest of the teeth set. Older patients tend to have darker teeth as a result of discoloration from fillings and food stains.

Characterization of the denture bases

Pound in 1951 incorporated the racial and individual colour peculiarities, of the gingiva in artificial denture. He was the first to suggest a method of tinting acrylic denture bases to simulate the gingival colour. Kemnitzer used a combination of blue and brown stain to reproduce the melanotic pigmentation of the gingiva[9].

Festooning -The papillae and marginal gingiva are smooth, as is the alveolar mucosa; but the band of attached gingiva in between is described as having a stippled or orange-peel appearance. The contour of the gingiva presents a festooned appearance with intermittent elongated prominences corresponding to the root contours. It is recommended that casts from patients with natural teeth be used as guides for gingival waxing and festooning, rather than simply making grooves in the wax between each tooth. Without festooning and stippling, light is not randomly reflected and dispersed and the denture becomes a smooth, pink mirror announcing itself as an impostor[10].

Stippling-Stippling of the areas representing the attached gingiva seems to collect less debris and calculus, and is easier to clean than the indentations made by negative stippling techniques. If the positive stippling is to be preserved in the finished denture, care must be taken in waxing the denture to the proper thickness and finishing and polishing the denture after processing[11].

Use of tints in the denture bases: Several methods have been used to tint denture base resins to achieve a more natural appearance. Usually heat curing or auto-polymerizing resins of various shades or colors are painted on the denture base or are shifted onto the mold during denture construction to obtain a tinted denture.

Conclusion

This review outlines methods of improving the aesthetics of complete dentures with the aim of constructing dentures which are both functional and have a natural appearance. This will require very close collaborative teamwork involving the dentist, technician and the patient. With practice, the techniques described can be incorporated into treatment procedures with relative ease and, results in better acceptance of the denture by the patient.

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Management of missing anterior tooth using fixed dental prosthesis with loop connector

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Abstract

Fixed restoration for missing single anterior tooth with spacing of remaining anterior teeth is a prosthetic challenge . Replacement of single anterior tooth can be done by implant restoration, metal ceramic restoration or resin bonded fixed partial dentures. The best esthetic option should be given for such patients. Diastema of anterior teeth which existed before an extraction may lead to excessive mesio distal dimension to the ponticspace .This is a case report of a patient who had a missing left lateral incisor with excessive spacing in the maxillary anterior region The missing tooth was replaced with metal ceramic fixed restoration which had a loop connector to get an ideal esthetic result by maintaining the spacing between the anterior teeth. Establishment of normal appearance and smile improved patients emotional and pscychological profile.

Keywords: Diastema, metal ceramic restoration, loop connector, esthetics

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Introduction

Fixed restoration for missing single anterior tooth with spacing of remaining anterior teeth is a prosthetic challenge[1]. Different prosthetic options may be indicated and the patients need to be encouraged for an appropriate treatment. Replacement of single missing anterior tooth can be done by single tooth implant restoration, metal ceramic restoration or resin bonded fixed partial dentures.[2,3,4] Diastema of anterior teeth which existed before an extraction may lead to excessive mesio distal dimension to the ponticspace.[5] Patients with anterior spacing often desire to maintain this spacing in the prosthesis for best esthetic result and natural appearance. Spacing in fixed partial denture can be maintained with the help of loop connector.[6]

Connectors are those parts of a fixed partial denture (FPD) or splint that join the individual retainers and pontics together.

There are two types of connectors, one is a rigid connections and the other a non rigid connector.[7]

Rigid connectors are shaped and incorporated into the wax pattern.

Types of rigid connectors - castconector, soldered connector and loop connectors.

The loop connector is a rigid connector which consists of a loop on the palatal aspect of the prosthesis connecting the adjacent retainer and /or pontics. The loop may be cast from sprue wax that is circular in cross section or shaped from a platinum-goldpalladium (Pt-Au-Pd) alloy wire.[5]

Nonrigid connectors are dovetails (key - keyways) split pontics (connector inside the pontic), or taperedpins.

Nonrigid connectors are indicated, either to relieve stress or to accommodate malaligned fixed partial denture abutments. The size, shape, and position of connectors all influence the success of the prosthesis. [7]

Requirements of Connectors (Design)[1,7]

Connectors should be sufficiently large to prevent distortion or fracture during function.

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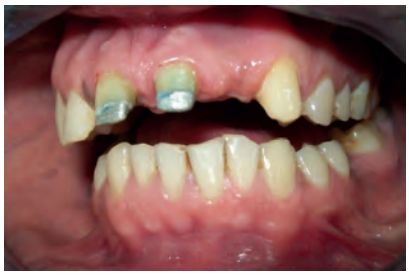

Fig. 1 Missing left lateral incisor with excessive edentulous space mesially and distally

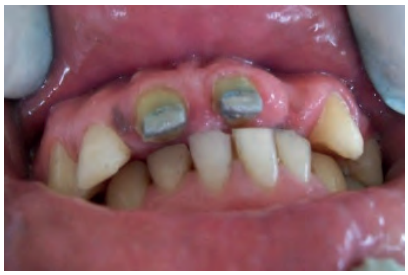

Fig. 2 Prepared abutment teeth in relation to the right and left central incisors and left canine

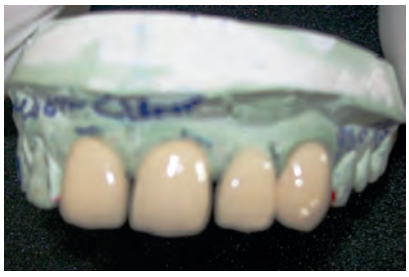

Fig. 3 Finished metal ceramic prosthesis on stone cast –labial view

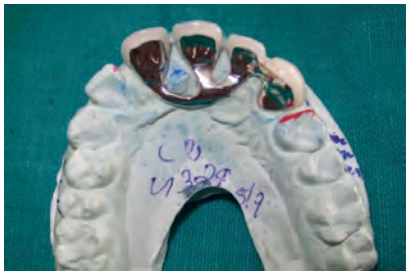

Fig. 4 Finished metal ceramic prosthesis on stone cast –lingual view

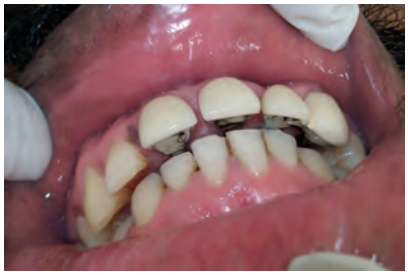

Fig. 5 Loop connectors causing occlusal interference due to limited interocclusal space.

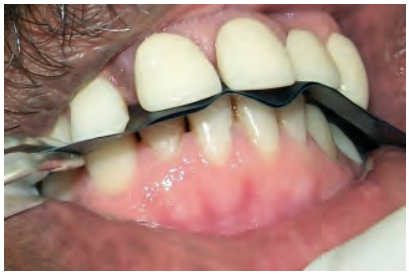

Fig. 6 Occlusal interferences were checked using 12 micros articulating paper.

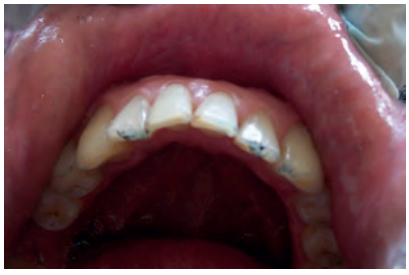

Fig. 7 Enameloplasty done on the lower anteriors to correct the interferences.

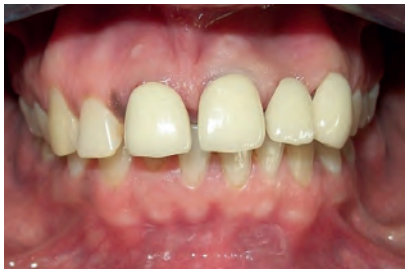

Fig. 8 Cemented metal ceramic restoration with loop connectors

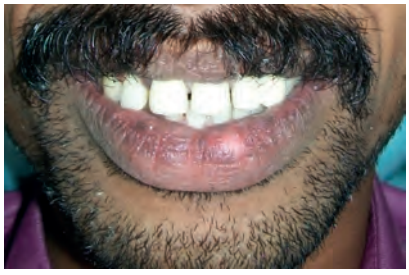

Fig. 9 Restoration maintaining the anterior spacing

It should have close contact with the mucosa.

It should not interfere with the tongue

It should not affect the speech.

It should not interfere with effective plaque control leading to periodontal breakdown over time. Adequate access (i.e., embrasure space) must be available for oral hygiene aids cervical to the connector.

It should be highly polished, and facilitate cleansing

Smoother, less angled and more round connectors should be kept for lower stress levels as the connector geometry affects the strength of ceramic materials.

It should be esthetically acceptable.

For esthetic FPDs, a large connector or inappropriate shaping of the individual retainers may result in display of the metal connector, which may compromise the appearance of the restoration and lead to patient dissatisfaction.

Loop connectors are used sometimes when an existing diastema is to be maintained in a planned fixed prosthesis. The connector consists of a loop on the lingual aspect of the prosthesis that connects adjacent retainers and/or pontics. The loop may be cast from sprue wax that is circular in cross section or shaped from a platinum-gold palladium (Pt-Au-Pd) alloy wire. The connector design is important so that plaque control will not be impeded.

Case Report

A 22-year-old male patient reported to the department of prosthodontics, with the complaint of missing tooth in upper left front region due to trauma. On intraoral examination, it was seen that maxillary central incisors were nonvital and root canal treatment was done. Due to insufficient crown structure of the upper central incisors post –core was planned. The left lateral incisor was missing and the edentulous space was large mesially and distally. (Fig. 1) She had class- II molar relation with generalized spacing between the anterior teeth. So conventional FPD was not possible due to large spaces between the anterior teeth. A single tooth implant was a good option as it would allow a restoration maintaining the diastema. But the patient was not willing for implant placement as it involves a surgical procedure. He wanted an immediate fixed alternative for his missing tooth. The treatment plan was a loop connector FPD with the left lateral incisor as pontic and right and left central incisor and left canine as the abutment teeth, maintaining the anterior spacing between the pontic and the retainers.

Armamentarium

Putty and light body elastomeric impression material –Aquasil - Dentsply

Type 111 Dental Stone (Gold stone)

Pattern wax (Renfert)

Procedure

A mock wax up was done on the diagnostic cast. The aesthetic appearance of the diagnostic wax up was confirmed with the patient. Initially the right and left central incisors were root canal treated and prepared for post and core. The fabricated cast post and core were cemented with luting agent. Abutment teeth were prepared in relation to the right and left central incisors and left canine, with finish line placed subgingivally on the labial and equigingival chamfer margin given on the lingual surface using chamfer diamond point. (Fig. 2) Gingival displacement was done to reproduce the finish line of the tooth preparation in the impression. Final Impressions were made using the putty reline technique in a rim-lock impression tray.

Wax pattern for the retainers and pontic were fabricated with blue inlay wax. Wax patterns for two lingual loop connectors were incorporated into the design connecting the pontic to the retainers on the right and left central incisor and a rigid connector connecting the pontic to the retainer on the leftcanine. A 0.2 mm relief was provided in region of loop connectors. The wax patterns were cast and copings finished. During the next appointment, try in of the frame work was made to ensure proper fit, lack of palatal tissue impingement and sufficient occlusal clearance on the lingual aspect. Ceramic prosthesis was fabricated after proper shade selection. (Fig. 3 and Fig. 4)

The loop connectors were causing occlusal interference due to limited interocclusal space as the patient had Class 11 Division 2 malocclusion (Fig.5) Occlusal interferences were checked using 12 micros articulating paper. (Fig. 6) So a minimal enameloplasty was done on the lower anteriors to correct the interferences. (Fig. 7)

The rest of the laboratory procedures were common with the conventional metal-ceramic FPD construction. Ceramic buildup was completed and prior to final cementation, the loop connectors were polished to high shine to eliminate rough surface which can lead to plaque accumulation. (Fig. 8) Due to the overcontoured design of the loop connectors maintenance of oral hygiene will become a difficult task. Use of dental floss and interdental brush was advised to the patient for maintenance of proper oral hygiene.

Discussion

Ever since the evolution of prosthodontics the dentist have been trying to find a suitable solution for missing anterior tooth with excessive anterior spacing. Maintaining the anterior spacing in fixed restoration will give good esthetic results with minimal over-contouring of the adjacent teeth[8]. Fixed restoration with loop connectors help in providing naturality of the restoration by maintaining the anterior spacing and the proper emergence profile and preserving the remaining tooth structure of the abutment teeth[9] (Fig. 9). Meeting patients expectations by giving importance to patients demands is the most important criteria for success. Even though importance should be given to the patient's choice an operator can take the liberty to make a treatment plan to an aesthetic and acceptable form. Restoration of good appearance is merely an outcome of successful treatment plan.

Conclusion

Fixed restoration with loop connectors are mostly the treatment advocated when an existing diastema or anterior spacing is to be maintained in a fixed partial denture.[10] This clinical case reports the treatment done

for restoring missing left lateral incisor with anterior spacing with loop connectors incorporated in fixed partial denture was well accepted by the patient. It was an acceptable treatment plan for the patient since it was a non invasive procedure. Good esthetics was achieved which enhanced the appearance as well as the function and psychosocial well being. Eventually the patient was satisfied with the prosthesis as edentulousness was rectified and esthetics was not compromised. Long term success depends on regular recall appointments and meticulous maintenance of oral and prosthetic hygiene.

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Oral health related quality of life

* Byju Paul Kurian, ** Albin Geo Joseph, *** Anil Mathew, **** Manu Johns

Abstract

The concept of health status embraces the bio-psychosocial model of health into which symptoms, physical functioning, and emotional and social well-being are incorporated. Oral health-related quality of life (OHRQoL) includes the absence of negative impacts of oral conditions on social life, and a positive sense of dentofacial self-confidence. Oral diseases are the most common of the chronic diseases. They affect people physically and psychologically and influence how they grow, enjoy life, look, speak, chew, taste food and socialize, as well as their feelings of social well-being. OHRQoL is a term used to define the impact of oral health over these parameters.

Key Words: Health, Quality of life, oral health.

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Subjective perceptions by patients have been increasingly recognized as an important outcome of dental care. The use of patient-based outcomes to measure their impact on oral health-related quality of life and the effectiveness of treatment has been widely advocated.[1]

As stated by the World Health Organisation, Health is defined as "a complete state of physical, mental and social wellbeing and not just the absence of disease". The concept of health status embraces the bio-psychosocial model of health into which symptoms, physical functioning, and emotional and social well-being are incorporated. Oral diseases are the most common of the chronic diseases. Oral health attains significant importance as public health problems because of their prevalence, their impact on individuals and society, and the expense of their treatment. They affect people physically and psychologically and influences how they grow, enjoy life, look, speak, chew, taste food and socialize, as well as their feelings of social well-being. A great contribution of dentistry is to improve the quality of life.[2]

Quality of Life

Quality of Life is a multi-dimensional and subjective construct which is anchored in an individual's internal frame of reference. The perceptions of their position in life in the context of culture and value systems in which they live, and in relation to their goals, expectations, standards, and concerns, is now recognized as a valid parameter in patient assessment in nearly every area of physical and mental healthcare, including oral health.[3]

Oral health-related quality of life

According to the concept of Oral health-related quality of life (OHRQoL), good oral health is no longer seen as the mere absence of oral disease and dysfunction. The definition of OHRQoL includes the absence of negative impacts of oral conditions on social life, and a positive sense of dentofacial self-confidence[4]. A reflection of comfort when eating, sleeping and engaging in social interactions along with self-esteem and satisfaction with respect to oral health is emphasised here.

The various domains include functional limitation, physical discomfort, psychological discomfort, physical disability, psychological disability, social disability and handicap. The Physical, psychological and social

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parameters influence feelings of disease and disability, as well as by the opportunity for treatment. Thus, OHRQoL is a term used to define the impact of oral health over these parameters.[3]

Assessment of health

Traditional measures in assessing health mainly involve the use of clinical indices[2]. Diagnosis and treatment are no longer the only concern in medical field and instead, the improvement and promotion of patient's quality of life is highly addressed[5]. Assessment of OHRQoL allows for a shift from traditional medical/dental criteria to assessment and care that focus on a person's social and emotional experience and physical functioning in defining appropriate treatment goals and outcomes, thus enabling patient-reported outcomes to become increasingly popular in dentistry. The patients are now asked how they perceive the effect of clinical interventions and how they affect their quality of life[6]. Practicing clinicians need to know whether an observed change in score represents a clinically important improvement or deterioration, rather than merely a trivial fluctuation to indicate what patients perceive as relevant when treated with common treatments[6].

OHRQoL has also been involved in the assessment of oral health disparities and access to care. It acts as an important measure in evaluating the impact of oral health disparities on overall health and Quality of Life.

In view of the importance of oral health care and equal access to it, comparing QoL across treatment groups may facilitate decision-making for patients, healthcare providers, and policy- makers. Recent laws have invested special interest in patient centred outcomes in the act of policy implementation.

By integrating oral health into strategies for promoting general health and by assessing oral needs in sociodental ways, health planners can greatly enhance both general and oral health. Units of OHRQoL have the potential to be valuable clinical and health economic measures[6].

Conclusion

OHRQoL being accepted as the standard outcome measure in the clinical field in the west [7] needs its Indian recognition too. Various questionnaires pertaining to OHRQoL[8], validated in the developed countries call for our validation and usage. By these means, command would be established in provision of patient care services and policy implementation, thereby enhancing the health of the Indian public.

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Interdisciplinary aesthetic management of bimaxillary proclination with ankylosed maxillary central incisors

* Bejoy P. U. , ** Deebu Mathew, *** Jose Paul, **** Jacob Cheeramelil

Abstract

Orthodontic treatment for a patient with ankylosed anterior teeth is really challenging. A careful review of the literature gives multiple options to manage this condition with each one having its merits and demerits. These conditions often require a multi disciplinary approach. A case of bimaxillary proclination with two ankylosed maxillary central incisors by a multidisciplinary approach is discussed here.

Key words: Ankylosed teeth, Proclination, Infraocclusion, Aesthetics

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Esthetics is the prime concern of parents and children in the adolescent age. The all round development of a child is enhanced when a feeling of physical & mental wellbeing is present. The facial appearance of a child often plays a crucial role in his or her psychological & physical development.

To this end the enhancement or correction of facial esthetics is a great challenge to clinician or group of clinicians. An apparently routine case of bimaxillary protrusion can be rendered challenging from the treatment perspective by the presence of ankylosed teeth, compounded by the feet that these ankylosed teeth being the maxillary central incisors

An ankylosed permanent maxillary central incisor in a growing patient is of great challenge for any clinician. Ankylosis results from the fusion of a portion of the cementum of the root to the adjacent alveolar bone. Ankylosis frequently occurs following trauma and result in alteration in the growth patterns of the maxilla. While the undiseased teeth erupt normally with alveolar growth, the ankylosed tooth stays behind. Such teeth cannot be moved orthodontically, but may also be in infraocclusion with a higher gingival margin[1].

From an orthodontic perspective, the absence of maxillary anterior teeth provides space and opportunity to reduce proclination or relieve crowding without extracting other teeth. However, this approach requires the lateral incisors to assume the functional and esthetic role of central incisors; the canines become the lateral incisors and the first premolars take the role of the canines, with all the prosthetic camouflage that these positional changes require. The objective of this article is to demonstrate a similar clinical situation and discuss the advantages and disadvantages of this approach.

Presenting complaint and history

A girl, aged 15 years, reported with a chief complaint of inadequate visibility of anterior teeth. Her dental history revealed a traumatic episode at age 10 years with avulsion of both upper central incisors. These teeth had received endodontic treatment immediately after the trauma and were reimplanted back into the socket. Both the teeth were asymptomatic at the time of presentation.

Diagnosis

The patient's profile was straight, with protrusive lips and inadequate visibility of incisors while smiling. The maxillary central incisors appeared ankylosed, with reduced

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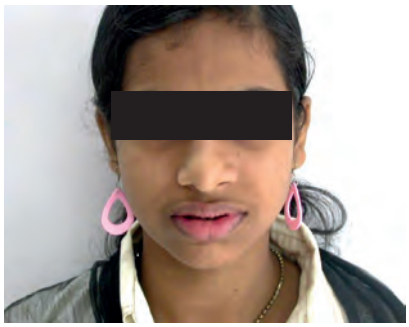

Fig 1. Pre op frontal view

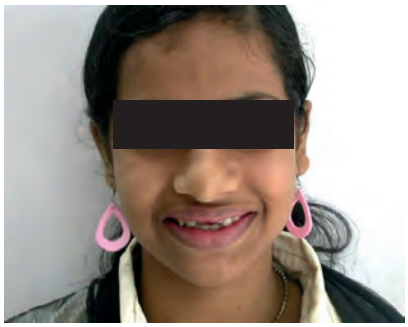

Fig 2. Pre op – smiling

Fig 3. Pre op - Profile

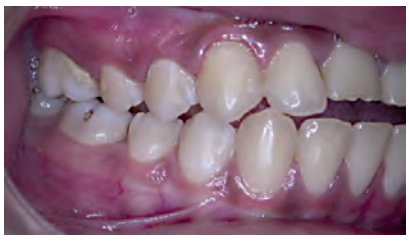

Fig 4. Pre op – Right side

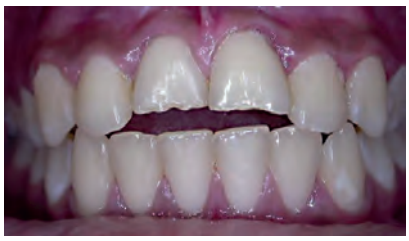

Fig 5. Pre op – front

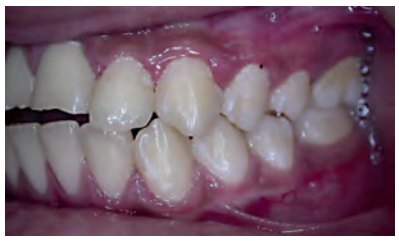

Fig 6. Pre op - left

incisor exposure with fractured tips and gingival level 4mm higher than the adjacent teeth. She had Angle Class I molar and canine relationship on both sides. She had bimaxillary proclination (Fig. 1 to Fig. 6). The overall periodontal condition was good.

The cephalometric evaluation confirmed the proclination of maxillary and mandibular incisors and showed Class I skeletal pattern (Fig 7). The pulp vitality test showed non vital maxillary lateral incisors. The panoramic radiograph (Fig 8) showed previous endodontic treatment and root resorption of both maxillary central incisors and periapical changes in the lateral incisors.

Treatment objectives

The main objective was to eliminate the excessive lip protrusion and to improve her facial appearance. The treatment objectives included correction in the asymmetry of the gingival margins, betterment of anterior esthetics by addressing the maxillary incisor ankylosis and root resorption., attaining an ideal overbite overjet relationship and maintaining lip fullness. Root canal treatment was suggested for maxillary laterals and canines and esthetic crowns for these teeth.

Treatment alternatives

Three treatment alternatives were considered:

Option 1:- consisted of extracting the first premolar from all quadrants and also the ankylosed central incisors. Following orthodontic therapy and once the alveolar growth has stopped dental implants may be given for replacing the anterior teeth. However, extraction of the ankylosed central incisors might lead to labial bone plate loss with a significant vertical and bucco lingual defect necessitating bone and gingival augmentation.

Option 2:- consisted of extracting 4 first premolars and the ankylosed central incisors. Mandibular first premolars would be auto transplanted to the central incisor extraction site[2,3]. Nevertheless, bone loss in connection with extraction might prevent proper auto transplantation of premolars, making the treatment option unrealistic.

Option 3:- Extracting the ankylosed central incisors and mandibular first premolars. The lateral incisors would be moved into the central incisor extraction site[4] and following orthodontic therapy crowns to be given for the laterals and canines for the prosthetic camouflage required for optimal esthetics.

The third option was adopted. By moving the lateral incisor slowly into the extraction space, alveolar bone would be deposited ahead of the tooth[5]. This would avoid a bone grafting procedure and correct the high gingival margin on the maxillary central incisors. The major advantage of replacing the ankylosed central with the lateral incisor would be the permanence of the finished result.

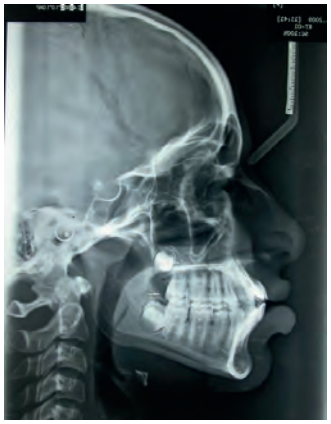

Fig 7. Pre op – Ceph

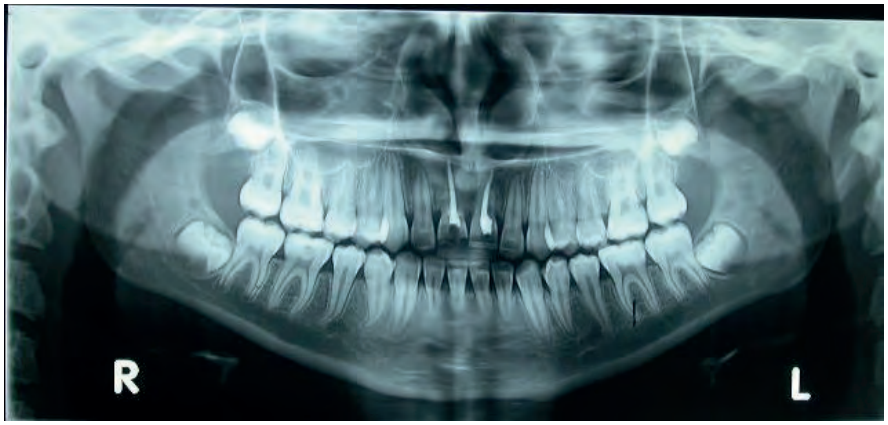

Fig 8. Pre op - OPG

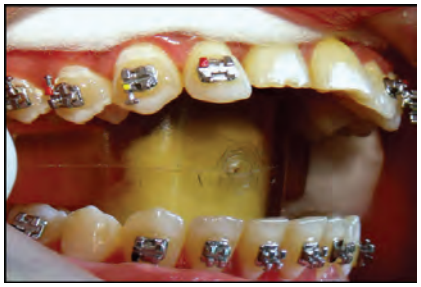

Fig 9. Bracket placement Right side

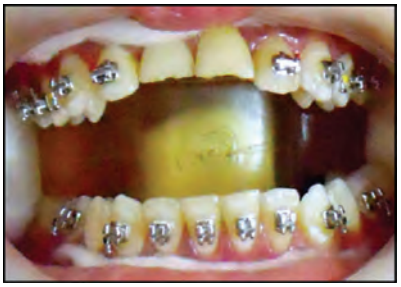

Fig 10. Bracket placement Front view

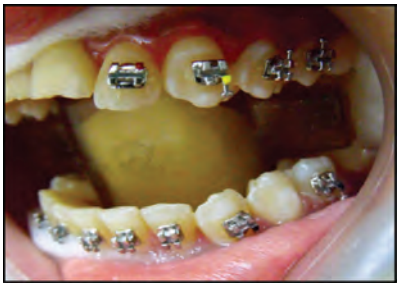

Fig 11. Bracket placement Left side

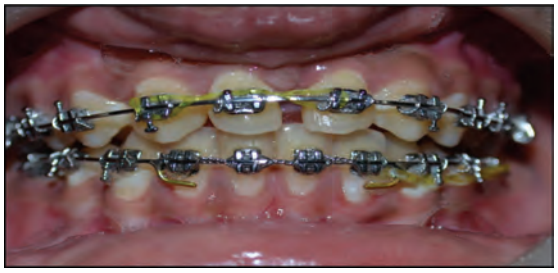

Fig 12 Mid Treatment Space closure

Fig 13 Post OP- Lateral Ceph.

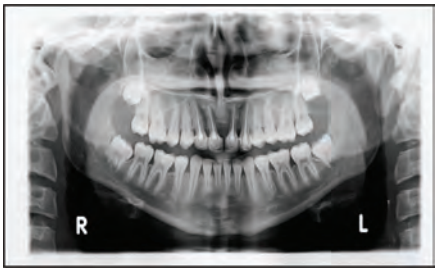

Fig 14 Post OP- OPG

The maxillary lateral incisors were not responding for vitality tests, indicating pulpal changes. The canines are much larger teeth than the lateral incisors, they will be replacing. With a wider crown and a more convex labial surface, a significant amount of reduction is required to achieve a normal occlusion and acceptable esthetics[6]. This will cause the canines to become sensitive and may later become non vital. So it was decided to perform endodontic treatment for 13, 12, 22 and 23 and metal free Ceramic crowns for the four upper anterior teeth. A bit of odontoplasty was planned on the upper first premolars so that they will appear like a canine

Special attention must be given for correction of the root torque of mesially relocated canines to match the optimal lateral incisors torque. Also care must be given to prevent rotation of the mesially moved premolars. Individualized extrusion and intrusion of premolar, canine and lateral incisors were planned by careful bracket placement to obtain proper marginal gingival contour of the anterior teeth[7]. Widening and lengthening the incisors while doing the prosthetic camouflage will provide a natural esthetic appearance during speech and smile[8].

Treatment progress

After caries control and oral hygiene instructions, the mandibular first premolars and maxillary central incisors were extracted. The first molars were banded and pre adjusted edgewise brackets (0.022 x 0.028 inches, MBT prescription) were placed on all remaining teeth. The gingival shape and contour were corrected

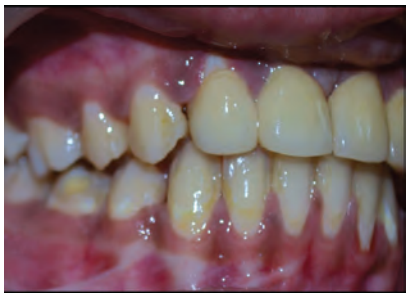

Fig 15 Post op right

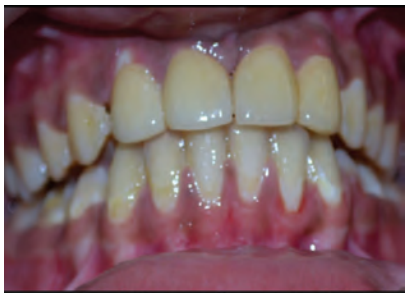

Fig 16 Post op front

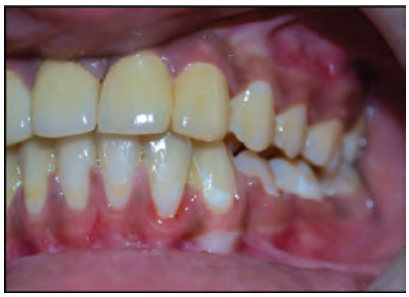

Fig 17 Post op right

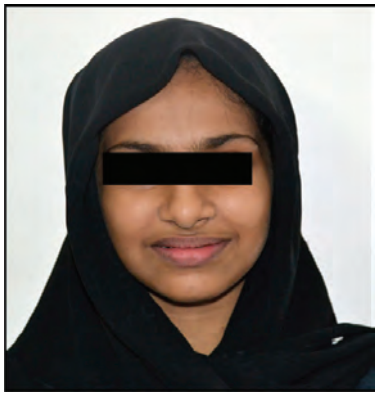

Fig 18 Post op

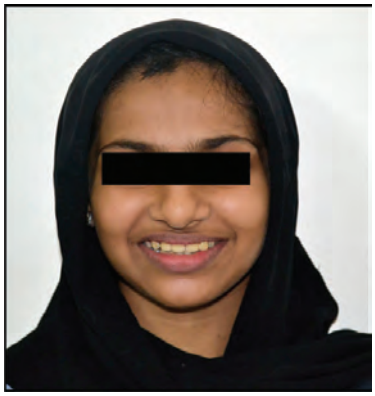

Fig 19 Post op smile

Fig 20 Post op profile frontal

by placing brackets at different levels to achieve premolar intrusion and canine extrusion.

High torque brackets with $+22^0$ (lower second premolar bracket kept up side down) were used on canines and 0^0 torque canine brackets were used on I premolar to improve the palatal root torque of these teeth[9]. (Fig 9 – Fig 11)

The Upper and Lower arches were leveled and aligned with a progression of arch wires, starting with 0.014" Nitinol and worked up to 0.019x0.025"SS wires. Space closure was done by elastic tie back in the lower arch and with elastic chain in the upper anterior region [Fig 12]. The bone defect caused by extraction of ankylosed central incisors was filled progressively while the lateral incisors were moved into the extraction space. 3-4mm space was left in the midline for adjustment in the width of the central incisors while doing crowns. Finishing and detailing was done by giving small 'V' bends and minor offsets. Settling elastics were used to get good posterior occlusion.

Once the orthodontic phase of treatment was stabilized, the upper arch's fixed appliance was debonded. Root canal treatments for the maxillary canines and lateral incisors were initialized using the crown down technique after taking pre-operative intra-oral radiographs. Working length was established, bio-mechanical preparation done and obturation was done with Gutta percha points. The access cavities were sealed with composite resin.

Tooth preparations were done with subgingival margins, impressions were made with poly vinyl siloxane and transferred to the lab for fabrication of the prostheses. The fixed orthodontic appliance on the lower arch was debonded and a fixed lingual bonded retainer was delivered with a long term retention period in mind.

Bisque trial of the fabricated prosthesis was done satisfactorily and the finished metal free esthetic crowns were delivered in the maxillary anterior region. An invisible Essix type orthodontic retainer was fabricated for the upper arch

Favorable facial changes were observed with reduction in the lip protrusion. On smiling, an ideal amount of tooth structure was displayed (Fig 15-Fig20). The overjet and overbite were optimized and the gingival margins were leveled. The class I molar relations on both sides were maintained. The post treatment panoramic radiograph showed that the roots of the teeth were fairly parallel (Fig 14). The post treatment cephalometric radiograph and super imposed tracing showed no significant changes in the skeletal measurements after treatment. The upper and

lower incisors were uprighted to average values and soft tissue analysis showed improved lip relationship to the Rickett's Esthetic plane [Fig 13].

The major advantage of this approach is the permanence of the finished result. The healthy gingival tissues and intact interdental gingival papillae will change in synchrony with the patient's own teeth over a lifetime. This is in contrast to current long term experiences with the single implant porcelain crowns in the esthetic zone. After a five year observation period, artificial crowns on Osseo integrated implants have shown side effects such as progressive resorption of the labial bone plate and blueing of the overlying gingiva; progressive infra occlusion even in mature adults[10,11].

With the selected treatment protocol, bonegraft surgery was avoided; alveolar bone height was maintained by early mesial movement of lateral incisors. In addition the final anterior esthetic appearance was satisfactory. Nevertheless, the maxillary lateral incisors and canines needed to be crowned.

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Need based manpower supply and diversification as a solution

The editorial of **Kerala Dental Journal** July, 2014 *"Suggest a radical solution for the faux pas"* was really thought provoking as it attempted to analyze the lapses in policy planning and degradation in quality of UG and Post Graduates in country. The title itself was to suggest a solution, but in reality everyone knows the solution but there is no one to bell the cat. After the 2014 allotment for BDS is completed and having found that there is more than 200 seats remain vacant in various Dental Colleges in Kerala is really a matter of concern for all who adore this profession. From 2001 onwards there has been privatization in Dental education field in Kerala from just 2 Dental Colleges in government sector in 2001, now the number is 24. The number of seats has increased from 80 to more than 1600, i.e., a 20 fold increase. The WHO recommended Dentist to patient ratio is fast achieving in Kerala, so naturally the demand will reduce which in turn will reflect the choice of students in the selection of their career. The editor's decades of teaching undergraduates and postgraduates made him right fully to lament on the decline of integrity, skill and aptitude among postgraduate education in country. It is high time now to improve the standard of postgraduate education in the country. One of the solutions to suggest is strict quantity control for quality assurance. The vacant 200 seats in Kerala should make the policy makers think and act accordingly. There is absolutely no need for new Dental Colleges in Kerala and same is the view regarding increase in number of UG and PG seats. As the Editor has rightfully said the "ignorance of statistics" by policymakers, it is better to say that the ignorance of the "concept" of statistics. The kerala government Education Department has provided that there is 6% decline in children taking admission in first standard, which is attributed to a decline of birth rate in kerala. This decline must have started atleast 5 years back to reflect in first standard admissions in 2014, but contrastingly BDS and MDS seats are increasing exponentially. The duty of policy makers, apex regulating body, Universities, and management of institutions is not only to increase the number of seats but also to see that the passed out candidates are placed adequately. Diversification in location of settling down, changing the mode of practicing the profession etc. are some ways to address the problem apart from statistics oriented quantity control in professional entry. The strict code of conduct prescribed by the DCI (2014) and the need to diversify the profession with incoporation of management skills appears to be conflicting, and to strike the right balance is challenging. The penalty for poor strategy planning is to be paid by the new aspirants in the profession. A need based supply of professional manpower as in Chartered accountancy and IAS is to be tried in dental field also. Reduction in the number of seats will adversely affect the policy of management authorities, and those who are currently employed but vacant seats acts as "theory of natural selection" in automatic reduction of seats.

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Govt Dental College, Kottayam.

Dr. Alias Thomas, elected as the National President of Indian Dental Association

- Dr. Alias Thomas, elected as the National President of Indian Dental Association, Head Office for the year 2015-16.
- Started his sojourn in IDA by joining as Student member in IDA Davengere Branch, Karnataka State in 1986.
- Was the charter member of IDA Malanadu Branch in 1991.
- Executive member of IDA Kerala State from '92 onwards.
- Organised 30th Kerala State Dental Conference, Muvattupuzha,'97-'98
- President, IDA Malanadu Branch – '98-'99.
- Hon. State Secretary, IDA Kerala State for 5 consecutive years, during this tenure, 12 local branches were extended in the State.
- CC member from '93 onwards.
- President, IDA Kerala State, in '04-'05.
- Organizing Secretary, South India Dental Conference, Kochi in 2005.
- Organizing Secretary, 62nd IDC, Nagpur. 2008-2009.
- Vice President, IDA Head Office '09-'10.

Recipient of numerous awards like:

- Dr. Ratan H. Doctor Memorial award – Best IDA Member below 30yrs – '94-'95.
- National & State Award for Best local branch Secretary – '94-'95.
- I.R. Goela National Award & State Award for best Local Branch Secretary – '98-'99.
- B.R. Chopra Award for Best State Branch Secretary.

He also served in various capacities in other Organizations, namely

- President of Rotary Club of Muvattupuzha, -'99.
- Assistant Governor, Rotary International.
- President, JCI Thodupuzha – '99.
- Zone President, Junior Chamber international – '99.
- Even though IDA elections were done in '14 September, announcement of election results were stayed by Delhi high court. Last week, the stay was vacated. Votes were counted at the Central Council meeting held at Delhi on 17th September, & results were announced.
- Dr.Alias Thomas got more than 91% of votes compared to the opposing candidate.

125th Birth Anniversary of Padmabhushan Dr. R. Ahmed – Father of Modern Indian Dentistry

* Joji George

Dr. RafiuddinAhmed was born on December 24, 1890, in Bardhanpara, East Bengal, India. He graduated from Aligarh Muslim University in 1908. By the next year, he left for the United States by working his passage over. He enrolled in the University of Iowa School of Dentistry, earning his dental degree in 1915. Dr. Ahmed then worked in the Forsyth Dental Infirmary for Children in Boston, Massachusetts, until 1918. In 1919, he returned to India to open a dental practice in Calcutta.

In 1920, Dr w. Ahmed founded the First Dental College of India, which was financed by starting the New York Soda Fountain in Calcutta. Dr. Ahmed published the First Student's Handbook on Operative Dentistry in 1928.

The First Dental College of India affiliated with the State Medical Facility in 1936, and then with the University of Calcutta in 1949. In that same year, Dr. Ahmed donated his First Dental College of India to the West Bengal government. Dr. Ahmed served as the Principal of the College from 1920 to 1950.

Dr. Ahmed's philosophy was: "Education is the responsibility of the State; but if no one is willing to carry the cross, I will, for as long as I can."

In 1925, Dr. Ahmed established the Bengal Dental Association, which became the forerunner for the Indian Dental Association (which he also organized in 1928).

Dr. R. Ahmed

He served three terms as President of the Indian Dental Association from 1945 to 1948.

He also established the Indian Dental Journal in 1925 and was its Editor until 1946. He also served on the Editorial Boards for the Journal of the Canadian Dental Association, the PFA's Dental World/Dental Survey, and other publications.

Dr. Ahmed helped to form the Bengal Dentists Act in 1939. This was the first dental governmental regulation in India and it became the model for the Indian Dental Act passed in 1948. Dr. R. Ahmed was the first elected President of the India Dental Council, serving from 1954 to 1958.

Dr. Ahmed was awarded a Fellowship in the International College of Dentists in 1947 and Fellowships in the Royal College of Surgeons of England and the Pierre Fauchard Academy in 1949. In 1964, the Indian government awarded him the Padma Bhushan, a rare and coveted honor never before presented to a dentist. Dr. Ahmed was the first Indian to have achieved such status.

Dr. Ahmed served as a Councillor and Alderman of the Calcutta Corporation from 1932 to 1944. In 1950, he became a Minister in the West Bengal government and was supervisor for the Departments of Agriculture, Community Development, Co-operation, Relief, and Rehabilitation until 1962.

Dr. Ahmed earned many honors and memorial tributes, of which inscription on the ICD Memorial Roll in 1965 was a particularly special tribute. The Indian Dental Association recognized his many contributions to Indian dentistry by establishing the Dr. R. Ahmed Memorial Oration at the 1977 Annual Indian Dental Conference. The Pierre Fauchard Academy dedicated its 1987 quarterly PFA Journal in Dr. Ahmed's memory, and the University of Iowa School of Dentistry Alumni Association presented their First Distinguished International Alumnus Award to him in 1989.

Today, Dr. R. Ahmed is remembered as the Nestor and Dean of Dentistry, Dental Education, and the Dental Profession in India. He died on January 18, 1965.

* Chairman, Council on Dental Health, IDA Kerala State **Corresponding Author: Dr. Joji George, Email: jojigeorgen@gmail.com**

Dr. R. Ahmed Dental College and Hospital, Kolkata

The then chief minister, Dr. P.C. Roy, after establishing the Culcutta Dental College said 'We should treat and prevent dental diseases by opening dental colleges and dental clinics. This sequence calls for collaboration between the dentist and the public authorities. That is, the government, it has, therefore, been decided that government should take over the Culcutta Dental College and Hospital which represents the lifelong sacrifice and service to the cause of dentistry by Dr. R. Ahmed and his associates. The Government desires to convert this into a fully equipped institution for training and research in dentist'.

Dr.R.Ahmed then donated his First Dental College, started in 1920 to the West Bengal Government. Only after Twelve Years later, in 1932 the Nair Hospital Dental College was established in Bombay by Doctor V.M.Desai.

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3. www.Dr.R.Ahmed Dental College
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My Life – My Times

Dr. M.K. James

Date of birth: 10 May 1934

Schooling: Primary at 'Clives House' School at Trichinopoly (Thiruchi), Tamil Nadu. My father, M.J. Kuriackose was at that time working as lecturer (and later) professor at the St. Joseph's College there. Secondary – at St. George's English Middle school at Manimala and at St. Berchman's High school, at Changanachery in Kottayam District, Kerala. College – Intermediate science at Loyoala college, Madras (Chennai) during 1949-51. Dental graduation – at end of four year course at Nair Hospital Dental college, Bombay (Mumbai) in 1955. There I took part in all games, field sports and tournaments, swimming competition, stage plays and declamation and won several prizes.

Higher Education: In 1955 I enrolled at the Friedrich Wilhelm University at Bonn, West Germany. There I had training in clinical dentistry, oral surgery and oral pathology while preparing for the Doctorate degree on Roentgenological and Histopathological study of Apical lesions. Passed the Doctoral examination in March 1959. Owing to parental compulsion I returned to Kerala the next month. Both my journeys, ie. from Kochi to Genoa in Italy and from Genoa to Bombay were by luxury ocean liners of Lloyd Triestino of Italy, each voyage taking 15 days of luxurious enjoyment.

Activities and experiences in Europe: In the 1950's and 60's the common people in Germany and all Europe did not speak, write or understand English. I had just started to learn the basics of German from a guide book and so had unpleasant difficulty in communication. But things eased up progressively owing to my taking up private tuition and more importantly, staying as paying guest with a German family where no English was spoken and who taught me their language through patient conversation and skilful gesticulations.

In 1956 I spent a week's holiday in Austria, in Schladming, a very small town in the Nieder Touvern mountains of the Alps, frequented by hordes of skiing tourists, where I learned skiing and sliding. The place was freezing cold in autumn, having an elevation of 2700 m. in the Alps.

In 1957 I spent most of the time pursuing research work on my Doctoral theme apart from surgical training in the clinics of the Dental college. At times a senior doctor would take me as helper to a hospital outside where he was assigned to treat maxillo- facial fractures. Generally in that year I had the opportunity to learn German language better, and to learn German and European manners and customs and culture. Often visited the drama theatres in Cologne.

1958 was a remarkable year. The Indian Embassy in Bonn, specifically Dr. Mukharjee the cultural Attache nominated me as Indian delegate to represent India at the first world congress of Catholic Doctors to be held at Louvin near Brussels in Belgium. I attended and delivered a speech in English which was simultaneously translated into several languages and heard by the audience through the earphone. I took part in several discussions. I had also the rare opportunity to visit the historic Brussels World Fair. Travelled through Belgium and Netherlands before returning to Bonn.

The Bonn University's overseas students co-ordination committee (OSCO) nominated me as leader of a group of Asian-African students to tour a number of German cities. Our assignment was to perform on stage diverse cultural items like music, songs, dance, mimicry etc. in order to introduce alien cultures to the German people who had not known the cultures of peoples outside of Europe, for historical reasons. Pater Haas, a catholic priest who was our spiritual leader kept us all bouyant with his

guitar and humorous songs and timely encouragement.

The same year I was invited as a guest speaker to the annual meeting of the All German Catholic Federation held in Essen city, the meeting presided over by the Bishop (or Archbishop? don't remember) of Essen. My speech was critical of the declining sexual moral standards in the west. To boot I advised to emulate Kerala Christians conservatism regarding relationship between the sexes. The speech was not well received for the same reason, but surprisingly, after the meeting I found myself busy giving autograph to scores of youngsters!

In the summer I enjoyed a week's holiday in Paris, exploring a good part of the sprawling city, spending a whole day looking at most of the master pieces in the Louvre museum. Before the close of the year, I also toured in the Netherlands, Denmark and visited Lund in the southern part of Sweden, all in company of friends. I also made a visit to communist Berlin and East Germany by car with my German Indian and Srilankan friends and saw the pavilions at the famous and ancient Leipzig Trade Fair in Easten Saxony. I had the opportunity also to see round London twice at no cost to myself on account of the University union's assignment to take a train load of student tourists from Bonn to London, and back after two or three days.

On father's express wish I returned to my native Kerala in April 1959 on passing the Doctoral examination in spite of an offer of job in Sweden. I was qualified to work and earn in Germany, Switzerland, Holland and Denmark also.

I have no doubt that man's being and doing are dictated by Fate. I joined the medical staff of the Lisie Hospital, the newly built largest private hospital in the State, on the express wish of the Archbishop of Ernakulam (later cardinal), Mar Joseph Parecattil as the Head of the Dental department. That changed my entire life, as it negated my prospects for a lucrative and satisfying career and life in Europe or America. At Lisie, as expected of me, I ushered in an era of modern Dentistry in Kerala and performed procedures like X-ray based diagnosis, root canal treatment, oral surgery, jaw fracture fixation, reimplantation of teeth- procedures not done and unheard of in the southern part of the country except at Madras and Vellore.

My marriage took place in May 1960

Noticing the need for orthodontic treatment among our population, what with the frequent cases of maxillary and bi-maxillary protrusion, I applied to the Dental Institute of the University of Vienna for a course in orthodontics, as there was no post graduate course in India in that subject. My father-in- law fully financed the project for his daughter and myself. Vienna was world-famed in medical and dental sciences as in music, opera and drama. I did the course in orthodontics mainly under Prof. Leopold Petrik head of the department and author of books on the ' Activator' generally known as the 'Norwegian Appliance' I also had the honour of undergoing a brief tutelage under Prof. A.M. Sehwarz, one of the greatest orthodontists in the world and a historical pioneer in the science.

In Vienna, I had the privilege of meeting and being friendly with Mrs (Frau) Schenkel, the window of our past national leader Subhash Chandra Bose.

After securing the post- graduate certificate from the University of Vienna in 1962, I was again forced to return to India by force of circumstances.

Another ten years of service at Lisie Hospital followed. I became the co-founder and founder-president of the Kerala state branch of the Indian Dental Association and continued to be active during the next thirty years in the I.D.A

I have served as teaching staff at the T.D. Medical college, Alapuzha and St. Johns medical college, Bangalore.

All my professional life was taken up by hospital and private practice, although my first love was teaching and research. However, a satisfactory break from the mundane monotony of private practice was afforded by my brief diversion to literature which resulted in my authorship of a pioneering book on dental science, treatment and care, titled "All about Dental care", and a couple of novels in Malayalam. I had also contributed scientific articles to the official journal of the Dental Association from time to time.

From the 1960's the Junior chamber, also known as the Jaycees, an international organization devoted to personality development and leadership training of youths, was active in cochin aka Kochi. I had joined it in the 60's and steadily climbing up, served as president of Cochin Junior Chamber in 1973. I have also served as master in the 'Susrutha' Masonic lodge in Kochi.

At present after retirement from practice, I am occupying myself with lexicographic work, and I hope my English – English – Malayalam dictionary will be a useful reference and learning book.

Now, after retirement, what I can look back with great satisfaction are that I as instrument of God, as pioneer, introduced in Kerala the modern European model of dental practice, organized professional association and regular meetings and published scientific articles in the national and Kerala dental journals thereby ushering a new dental era in Kerala.

Dr.Joji George
CDH Chairman

Council on Dental Health – CDH

"CHARITY DENTAL TREATMENT YEAR – 2014"
REPORT OF ACTIVITIES No. 2

NATIONAL DOCTORS' DAY, JULY 1ST

IDA Trivandrum branch hosted the state level observation of National Doctors' day in Commemoration of Bharat Ratna Dr.B.C. Roy at Trans towers, Vazhuthacaud.

The chief guest of the day was Dr. Elangovan, The Principal Secretary for health. He stressed the need of clinical standardisation and appreciated IDA for IDAACS; IDA accreditation and clinic standardisation and DESK, the dental establishment survey of Kerala. Dr. Ipe Varghese, the registrar KUHAS and Dr. Jyothindra Kumar, the joint DME were the guests of honor. Dr. Capt. Vivek.V, the president of IDA Trivandrum welcomed the meeting and Dr. Joji George, the state CDH Chairman thanked the audience. Dr. Elangovan honoured 22 senior dental Surgeons. Dr. Nizaro Siyo presided over the function. Dr. Antony Thomas, Dr. Sanal O.V, Dr. Anil.G, Dr. Nandakumar.K represented the state office.

The programme highlighted the nobility and charm of the profession of doctor.

ORAL HYGIENE DAY, AUGUST 1ST

The Father of Indian Society of Periodontology Dr.G.B. Shankwalker's is birth anniversary is celebrated as Oral hygiene day in India.

IDA Coastal Malabar branch in association with Thanal Charitable educational trust, Payyanur under the presidentship of Dr.Ahmed Shafi and the Coordinator Dr.Sreekumar Nambiar conducted a phenomenal programme of oral hygiene day on august 1st at Gandhi park, Payyannoor.

Sri.C.K. Krishnan, the MLA of Payyannoor was the chief guest and Dr. Nizaro Siyo, the president IDA Kerala presided over the programme. Dr.Santhosh Sreedhar presented the oral health awareness class to the public.

Healthy teeth Contest, Best Smile Competition and magic show were the other attractions. Smt. Ambili Merlin Jacob, Sri. Ganesh Payyannoor, Dr. Thomas. K.C, Dr.Sreejan.C.K, Dr.Joji George & Sri. Raveendran Master spoke on the occasion. Dr.Ahamed Shafi welcomed & Dr.Sreekumar nambiar thanked the audience. Prizes were distributed in the Valedictory function.

The Oral hygiene day observation by IDA Kerala State was awarded 2nd Prize by the Indian Society of Periodontology, ISP.

FORTH COMING EVENT NATIONAL CHILDREN'S DAY, NOV. 14th

Indian Dental Association, Kerala State has planned to Conduct the State level Children's Day Celebration at Guruvayoor Municipal Town Hall from 4pm to 8.30pm on Friday, 14 November 2014.

The Programme will be inaugurated by the Eminent Professor P.C. Thomas and beloved MLAs Mr.Babu M. Palissery (Kunnamkulam), Mr.K.V.Abdul Khader (Guruvayoor), Mr.Sri.P. Ramakrishnan (Ponnani), Mr.V.T.Balram (Thrithala), Mr. P. Madhavan (Manaloor), will be the guests of honour. The President of IDA Kerala State Dr.Nizaro Siyo will preside over the function.

The function will be hosted by IDA Kunnamkulam Branch & Dr. Sunil Mohammed will be the Programme coordinator.

The meritorious students from Nursery to 10th standard from various schools will be honored by trophies on the occasion. The Magic show by the famous Magician Mr.Preeth Azheekkode & Team & Cultural entertainments will also be the attraction.


National Doctors' Day, July 1st




Oral Hygiene Day, August 1st

Dr. Anjana G.
WDC Chairperson

Dr. Shoma Anil
Secretary, WDC

Womens Dental Council

The second state CDE program of WDC IDA Kerala was held on 14 th September at Peevees Arcade, Nilambur. Chairperson Dr Anjana was the faculty and the topic was "Pulp Therapy in Primary teeth". The program was hosted by IDA Ernad branch and the efforts taken by the Office bearers Dr Joy Thomas, Dr Sameer, Dr Sangeetha and Dr Samina deserves special appreciation.

Dr. Samuel K. Ninan
Hon. Secretary

IDA HOPE REPORT

IDA HOPE - Adding new avenues in 2014
(Help Offered to Professionals in Emergencies)
• IDA HOPE, the premier member's welfare scheme of Indian dental Association, Kerala State, was formed in the year 2007-08 by merging two schemes namely SSS & PPS.
• SSS - Social Security Scheme, aimed at supporting the family in the event of death / Total Permanent Disability of a member. The contribution to the family (Fraternity Contribution) is collected from the members of the scheme @ Rs.500 per member
• PPS - Professional Protection Scheme supports a member to fight civil / criminal cases related to the profession. Gives peace of mind to a certain extent in dealing complicated situations.
• From November 2014 the Scheme itself is insured with United India Insurance Company for Accidental Death and Permanent disability of Rs. 5 lakhs per member to reduce the impact of any possible multiple mishap in a year.

For a member presently IDA HOPE Provides
• Death Coverage - Rs.10 Lakhs (Approx 2000 Members x Rs.500) • Total Permanent Disability - Rs.10 Lakhs (Approx 2000 Members x Rs.500) • Professional protection - compensations up to Rs.200000 (Two Lakhs) • From November 2014 - Hospitalization expenses due to accidents up to Rs.1 Lakh in association with United India Insurance Company *.

Only members of IDA Kerala State, having valid dental council registration, up to the age of 50 are eligible to join IDA HOPE.

How to become a member?

Apply to the Secretary IDA HOPE through the local branch representative with

1. Completely filled application in the prescribed form attested by the branch secretary /representative 2. Admission fee (depending on age) taken as DD in favor of IDA HOPE Payable at Pathanamthitta. 3. Two recent passport size photographs 4. Copy of Degree certificate 5. Copy of updated Dental Council Registration 6. Age Proof

• Receipt will be issued by the branch representative after verifying the details • Membership certificate will be issued by the state office after realization of the payments.

Professional protection coverage for new members will start after one month and the Social Security coverage will start one year after the date of joining in the Scheme.

Admission fee
• Up to the age of 30 - Rs.5000 • 31 -40 years of age - Rs.7500 • 41 -50 years of age - Rs.10000 • New membership stops at the age of 50.

Yearly Renewal / Subscription
• Yearly Renewal - Rs.1200 + Rs.500 per Death / Disability Claim if any in the previous year. • Yearly renewal / Subscriptions to be done between 1st of April to 31st of May every Year • Considering the number of Claims in a year, Hon. Secretary will prepare the renewal / subscription list, which will be available with the local branch representative from 1st of April. • Members who do not pay their yearly renewal / subscriptions by 31st of May will not be eligible for Social Security Claims (Death / Permanent Disability) • From 1st of June till 30th of September, renewal may be done by paying an additional late fee of Rs.500. During this period they will be eligible only for professional protection coverage. • Members who do not renew by 30th of September will be considered as permanently dropped out from the scheme and if they wish to rejoin they have to do so as a new member by paying the admission fee if they are up to the age of 50. • Most Important: Pay your renewal fee / yearly subscription before 31st of May every year to be a good standing member and to receive all the benefits continuously.

Requirements for claiming Professional coverage

1. A valid case sheet is to be maintained in the clinic by the Dentist.

2. Updated Dental Council registration, IDA Membership & Clinic registration

Inform the IDA HOPE office immediately and forward detailed write up about the incident by the member on his letter head, photocopies of the legal notice if any, case history, updated dental council registration, professional certificates, IDA Membership, Clinic Registration etc. to IDA HOPE Secretary through the local branch representative.

Once there is an order for legal settlement and negligence observed by the court, the membership ceases. The member then has to re-enter the scheme as a new member which is subjected to the decision of the managing committee of IDA HOPE.

Requirements for Claiming Social Security Coverage

a. Total Permanent disability: Request letter to IDA HOPE Secretary mentioning the situation and requesting to surrender his IDA HOPE membership. Claim may be forwarded when a member suffers permanent disability other than due to old age which prevents him/her from practicing dentistry and forced to terminate dental profession. Total permanent disability may be from accidents / progressive or terminal disease which has reached a stage where recovery is not feasible under the accepted medical norms.

Medical report from a registered medical practitioner with sufficient documentary evidence to support the total permanent disability.

Resolution from the IDA Local Branch executive committee forwarded to IDA HOPE Secretary with a recommendation from the local branch Representative.

b. Death Claim: Recommendation from the local branch representative accompanied by a copy Death certificate duly attested by the local branch secretary.

c. Personal accident Hospitalization : Inform the IDA HOPE Secretary immediately.

Completed claim form of United India Insurance Company should be duly submitted within 14 days of the accident along with the relevant prescriptions, bills, receipts, etc. Claims will be settled after verification and approval by United India Insurance Company.

Office & Contact details of IDA HOPE
Dr. Samuel K. Ninan, Hon.Secretary, IDA HOPE,
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Opp.K.S.R.T.C. Bus Station,
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Kerala.
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For details visit us at: www.hope.idakerala.com

The present team took charge during the AGM at Trivandrum in 2012 and our term ends by AGM at Kannur in January 2015.

IDA HOPE respect the guidance rendered by Dr. Oommen George, Chairman (2012-2014) and Dr. Sherafudheen K. P. Legal Cell Chairman (2012- 2013) who left us before completion of their term. Their contributions were numerous and helped us to restructure IDA HOPE to the present situation.

Thanks to our present Chairman Dr. Nizaro Ziyo, Legal Cell Chairman Dr. Manoj Joseph Michel, Social Security wing Chairman Dr. Ramesan T.V., Hon. Joint Secretary Dr. Philip T. Mathew, Hon Treasurer Dr. Thomas Eapen, IDA State Secretary Dr. O.V. Sanal, Past Presidents Dr. Raveendranath, Dr. Antony Thomas, Past Secretary Dr. Shibu Rajagopal, Dr. Suresh Kumar, our legal consultants Adv. Shyam Padman & Adv. Sudheer Bose, representatives from Local Branches, members, office bearers and leaders of IDA Kerala state for their continuous support.

We are happy to announce that all our legal cases are in the winning path since last few years and certain cases which we lost earlier in the local forums were judged in our favor at the higher forums.

During our term we could raise the contribution to the families of our members from Rs.3 lakhs to 10 lakhs and add total permanent disability benefit of Rs.10 lakhs.

Legalization of IDA HOPE by bringing it under the newly formed IDA Kerala State Branch society was a mile stone in the history.

In association with United India Insurance Company, recently we could add personal accident and permanent disability benefits of Rs. 5 Lakhs each for our members to support IDA HOPE in unexpected multiple claims. Our members are also insured against accident hospitalization of Rs. 1 Lakhs with United India Insurance Company.

Thanks to all who has given inputs and guidance. All these things were possible with dedication, determination of the leaders and the trust of the members. We believe that these years will be marked as the golden years in the history of IDA HOPE. Our experiences in leading IDA Kerala State in the past and the continuous support of the members at large are our assets for the future.

Chilamboli-'14

The cultural fest of IDA Kerala state for the year 2014, Chilamboli-'14 was hosted by IDA Malanadu Branch at Broke side club Kolenchery on 21st September 2014 Sunday.

The Registration was started by 9.00 in the morning. The official inaugural meeting was started by 10:00 am.

Dr. Muhammed Sameer P. T. 1st Vice President of IDA Kerala presided the meeting due to the absence of Dr. Nizaro Siyo, State President of IDA Kerala. Chief Guest of the meeting was Dr. C K Eapen, Medical Director, MOSC Medical College Hospital, Kolenchery. He inaugurated Chilamboli by lighting the traditional lamp.

Dr. Byju Paul Kurian welcomed the gathering, Dr. O. V. Sanal, Hon.Secretary IDA Kerala State; Dr. K. C. Thomas - President elect IDA Kerala; Dr. Ciju A. Paulose, IInd Vice President - IDA Kerala; Dr. Muhammed Faizal IIIrd vice President - IDA Kerala; Dr. Antony Thomas Past President IDA Kerala; Dr. Subhash K. Madhavan, Cultural and Entertainment Chairman of IDA Kerala addressed the gathering. Dr.Terry Thomas cultural co-cordinator of IDA Malanadu felicitated the gathering.

Dr. Muhammed Faizal and Dr. O. V. Sanal handed over the memento to Dr. C. K. Eapen.

Dr. Joby J. Parappuram gave away the vote of thanks. It was followed by National anthem and the meeting was adjourned for competition.

Cultural event

A total of 7 branches registered for the event, with a total number of 75 Dentists and their relatives. Each of the participants was given a chest number to denote their unique number and their group. After the meeting, in the presence of representative from each group; lot was taken for the order of performance.

The Judges for the event were Mrs. Sreedevi Biju,music teacher in Presidency Central School

Mr. Alex Kallam, dance teacher at St.Peters Senior Secondary School Kadayiruppu and Mr. Kalabhavan Vishwanathan (Chirima cinema- Mayavil manorama, Comediyum mimicsum pinnae njanum in Kairali TV)

The lunch break was given by 2:00pm and the competition continued by 2:45 pm. In between the group performance there was separate slot for singers to compete for Dr. Julesh Balakrishnan memorial award. The whole event came to an end by 4:30 pm.

Valedictory function

The valedictory function started by 5:00 pm. The chief guest for the evening was Mr. Vayalar Sharathchandra Varma. Dr.Ciju A. Paulose - IInd Vice President of IDA Kerala presided the meeting.

The official meeting was inaugurated by Shri. Vayalar; by lighting the traditional lamp. Dr. Byju Paul Kurian welcomed the gathering. Dr.Ciju A. Paulose gave the presidential address. Dr. O. V. Sanal addressed the gathering. Dr. Anil G and Dr. Terry felicitated. Shri. Vayalar declared the results officially.

Results

For group performance

Ist	Malanadu Branch
IInd	North Malabar Branch
IIIrd	Valluvanadu Branch

Award for best performance was shared by Dr. Subhash K. Madhavan of Valluvanadu branch and Master Arun Benny (S/O Dr. Benny Augustin,Malanadu branch)

Dr. Julesh Balakrishnan memorial award was given to Master Joel Varghese (S/O Dr. Jibi P Varghese, Malanadu branch)

Ms. Irin Terry (D/O Dr Terry Thomas, Malanadu branch)

Trophies were given to the winners by Sri. Vayalar Sharathchandra Varma. All the participants were given medals.

Dr. Joby J Parappuram gave away the vote of thanks. It was followed by National Anthem. The meeting was adjourned by 6:00 p.m.



CDE Report

Dr Anil G.
CDE Convenor, IDA Kerala State

Fourth Kerala State CDE programme was held by IDA Mavelikara branch.The subject was "COMMON CLINICAL COMPLICATIONS" and the faculty was Dr.Sooraj.It was conducted on 30th november 2014 at Hotel Travancore Regency Mavelikara.It was inagurated by Dr. Pradeep Kumar P.G in presence of Major Dr. Ninan Joseph President, Dr. Samith, Hon.Secretary, Dr. Anil.G CDE Chairman IDA Kerala State.

Fifth Kerala State CDE programme was held at Pattampi hosted by IDA Valluvanad Branch. The class was "PREVENTIVE ORTHODONTICS" and the CDE inaugurated by Dr.O V Sanal, Hon State Secretary IDA Kerala. Dr. Sijo Poulose Iind VP, Dr KC Thomas Pre-elect, Dr. Anil.G, CDE Chairman, Dr. Sanjeev, President Valluvanadu graced the occation.

SILVER JUBILEE CELEBRATION OF IDA CENTRAL KERALA BRANCH

November 30th 2014 IDA- Central kerala Kottayam celebrated the completion of 25years since inception. It was yet another historic moment in IDA history. Meeting was a Grand Celebratory function by the presence of Chief minister kerala and senior political leaders. Stalwarts from IDA made the function a glorious moment by there active participation. Meeting started by collaring thePresident Dr. Rengith George. After a minute of prayer Dr.K N Prathap Kumar welcomed the gathering. Dr.Sherry M Joseph, coordinator of free denture programme briefed about the planning & implementation of the project. The silver jubilee Celebration programme was inaugurated by Chief minister Sri Oommen Chandy by lighting the lamp. Charity programme was also ingurated by Sri. Oommen Chandy by distributing denture to patient. Sri PC George felicitated and released the Souvenir, Sri AntoAntony-MP, Dr. Mathew Vayalil- KDC President, Dr.Alias Thomas- NationalPresident elect Dr. Nizaro Siyo- State President, Dr Sanal Ov- Hon State secretary ,Dr. KC Thomas- state president elect, Dr. George Varghese addressed the gathering. Dr Eapen Thomas -Silver jubilee coordinator presented the activity report of the silver jubilee year. The house paid homage to the departed souls of IDA-CKK. Hon. Sec Dr. Linu M Ninan proposed vote of thanks and meeting was adjourned.

Journal: fourth issue of branch journal smile was released by Hon.state secretary Dr. Sanal OV on 30th of November during the silver jubilee celebration.

MALANADU BRANCH

Dental Assistant Training Camp

Held on Sunday, 6th July, 2014 at Rotary Hall, Muvattupuzha. This year too IDA Malanadu conducted a dental assistant camp for the dental assistants working in dental clinics of the members of IDA Malanadu. The Camp was inaugurated by Hon. Minister Adv. Anoop Jacob. Dr. Byju Paul Kurian presided the inaugural meeting.

Dr. Jose Paul and Dr. Muhammed Shameel took the classes. After the theory classes there was a hand on program conducted by the 3M faculty, Mr. Agnal.

Swanthwanam Denture Delivery

Held on Sunday 6th July, 2014 at Rotary Hall, Muvattupuzha

The free denture delivery of the Swanthwanam project was held on 6th July 2014, Sunday at Rotary Hall, Muvattupuzha. The official meeting ws started at 4.30 in the evening. Dr. Geo Varghese CDH, Chairman welcomed the gathering.

Dr. Byju gave the presidential address. Adv. Anoop Jacob, Hon. Minster for food and civil supplies inaugurated the meeting by lighting the tradition lamp. After that he delivered the inaugural speech. Following that he distributed the free dentures to the patients.

Report of Seventh CDE

Held on Thursday, 28th August, 2014 at Hotel Kabani, Muvattupuzha

Sixth CDE of IDA Malanadu was conducted on 28th August 2014 Thursday at Hotel Kabani, Muvattupuzha.

Dr. Geo Varghese welcomed the gathering. Dr. Arun Babu introduced the faculty, Dr. Jojo Kottoor. Dr. Jojo Kottoor is a practicing endodontist and is working in Baselious Dental College, Kothamangalam.

He took a very detailed and interesting class on Practical methods to achieve endondontic success. Following the classes, IDA Malanadu honoured Dr. Alias Thomas on becoming the National President Elect of IDA after winning the case. And a memento was given to Dr. Jojo Kottoor. Dr. Joseph K. Thanikunnel, CDH, Chairman gave vote of thanks.

MALAPPURAM BRANCH

CDH Activities

1. As a curtain raiser for current year activities launching of community dental health wing project "Healthy Smile... Happy Life..." was done by Dr. KC Thomas (President elect, IDA Kerala State) on the installation day

2. MIDA participated in the ASAP orientation exhibition held at Government College, Malappuram on 21/12/2013

3. CDH wing in association with the MIDA LOTUS (Women's Dental Council) observed the World Pain and Palliative Day on 15th Jan 2014 at new bus stand premises Manjeri

4. 1st CDH camp was held at Kottakkal in association with JCI 2/2/14

5. 2nd CDH camp with awareness programme for teachers and students were held at GMLP School Kidangazhi on 20/2/14

6. 3rd CDH camp with awareness programme for teachers and students were held at GLP School, Thottupoyil on 25/2/14

7. IDA Malappuram adopted Manarul Islam Orphanage Munduparamba on 27/2/14. A dental treatment camp was held on the same day.

8. 5th CDH camp was held at Kaladyl on 10/05/2014 in association with Educare Dental College

9. A CDH camp was held at Kalayl on 10/05/14. 255 patients were benefitted.

10. 7th CDH camp was held at Anakkara on 10/09/14

CDE Activities

1. 1st branch level CDE was held at Hotel Hillfort, Malappuram on Suday 27th Dec. 2013 from 7 pm to 9 pm. The CDE included lecture on Practice Management by Dr. Mohammed Sameer PT.

2. 2nd branch level CDE was held at Hotel Hi-Ton, Perinthalmanna on Suday 5/2/14 from 7.30 pm to 9.30pm. The CDE included lecture on Suturing techniques by Dr. Roshni Sajid.

3. 3rd CDE was a two day Interbranch CDE with hands on & demo by Dr. Benoy Ambookan on 9th & 10th March 2014 on Fixed Orthodontics & Myo functional appliances.

4. 4th CDE also was a full day interbranch CDE with hands on and demo by Dr. Joy Kurien on 23/3/14 on Dental Lasers in General Practice.

5. 5th CDE was a short lecture on Dentistry & Anesthesia by Dr. Nagamani Nambiar at Hillfort, Malappuram from 7.30 pm

6. 6th CDE was a half day branch level lecture "CHILL DRILL & FILL" on pedodontics by Dr. Sunl Mohemad, Dr. Hafeez & Dr. Ratheesh

7. 7th branch level CDE was held at Hotel Rydges Inn, Kottakkal on Suday 8/6/14 from 4 pm to 8pm. The CDE included lecture on Jaw relation in complete denture & TMJ disordes and its management by Dr. Mohankumar.

8. 8th CDE was a branch level CDE on "Rotary Endodontics" by Dr. Madhu MDS on10/08/2014.

9. 9th CDE was conducted on Luminers and Veneers by Tarek Frank Feisssalli on 14/10/14 at Rydges Inn, Kottakkal

10. 10th CDE was conducted on 20/11/14 on Problem Solving in Restorattive Dentistry by Dr. Joy Kurien at Rydges inn, Kottakkal

Day Celebrations / Observation

1. Pain and Palliative day was observed at Pain & Palliative Booth of Pain & Palliative Clinic, Manjeri on 15/01/2014

2. Dentist's day was celebrated at Hotel Sangamam, Tirur on 9/3/14 in presence of Dr. Nisar O Siyo, President IDA Kerala State

3. International Women's Day was observed on 9/3/14 at Sangamam Auditorium, Tirur. Rtn. Dr. Kumari Sukumaran, Past District Assistant Governor, Rotary International addressed the gathering

4. HSG Dr. Ashok Dhoble visited IDA Malappuram on 25/5/14 at Rydges Inn, Kottakkal.

5. International Women's Day was observed on 9/3/14 at Sangamam Auditorium, Tirur. Rtn. Dr. Kumari Sukumaran, Past District Assistant Governor, Rotary International addressed the gathering

6. Eid ul ftr was celebrated on 10/8/14 at VP Hall, Manjeri. More than100 members attend the get together with family. Mylanchi corner, fireworks, cookery show, biriyani fest etc were some of the highlights

7. Onam was celebrated on 14/9/2014 at HiTon Perinthalmanna. More than 30 families attended

MIDA LOTUS (WDC)

1. MIDA LOTUS (Women's Dental Council) celebrated the new year by cutting the cake and the ariety entertainments on the day of installation.

2. MIDA LOTUS in association with the CDH wing observed the World Pain and Palliative Day on 15th Jan 2014 at new bus stand premises Manjeri

3. MIDA sports "Kalikkalam" was held at Cosmopolitan Club, Manjeri on 11/5/14. More than 30 members attended with family. Competitions were held on various items like shuttle, TT, football, caroms, sackrace, etc.

4. MIDA family tour was conducted on 27th & 28th April 2014 to Ooty

KASARGOD BRANCH

We had a general body meeting on 26th September, at I.M.A hall, Kasargod at 7.30 pm. A C.D.E program was conducted on the same day on the topic" all ceramic restorations" the guest speaker was Dr Hasan Sarfaraz-Prof. Dept of Prosthodontics, Yenepoya Dental College, Mangalore. The meeting was sponsored by 'himalaya health care'. Meeting was well attended followed by dinner.

MAVELIKARA BRANCH

IDA Mavelikara conducted a family trip to kuttanadu on August 2nd and 3rd.The tour named 'monsoon drops'includes a one night stay at the luxurious 'Ramada resorts'and a day cruise along the coast of kuttanadu enjoying the refreshing, delightful monsoon. Thirteen families from the branch attended the tour. Everyone, especially children enjoyed every moment of this trip.

The fourth CDE of the branch was conducted at hotel Vandhanam,Mavelikara on September 14th.Dr S.Balagopal from chennai was the speaker and he took class on rotary endodontics called 'stess free Endo dontics'.The programm was very informative and interesting. About fifteen members of the branch attended.

This year Ida conducted onam celebrations in a different and noble way.Onam celebrations was organized at Jyothis special school, kallumala, Mavelikara on September 28 th. The day was really memorable for all the members attended. The children at the special school performed various cultural programs. There was a orchestra and finallyhad dinner with the children and staff there.Hon.secretary handed a donation to the school principal. Eighteen members of the branch and their family attended the program.

The sixth and seventh executive meeting of the branch was conducted at hotel Travancore Regency,Mavelikara on July 25th and august 16th respectively.

NORTH MALABAR BRANCH

EXECUTIVE COMMITTEE MEETING:

SIXTH executive committee meeting was held on 01 / 08 / 2014 at I.D.A. Hall, Podikkundu, Kannur.

SEVENTH executive committee meeting was held on 12/09/2014 at I.D.A. Hall, Podikkundu, Kannur.

EIGHT executive committee meeting was held on 20/10/2014 at I.D.A. Hall, Podikkundu, Kannur.

E.O.G.M:

FIRST E.O.G.M was held on 28/08/2014 at I.D.A. Hall,Podikkundu ,Kannur.

SECOND E.O.G.M was held on 27/10/2014 at I.D.A. Hall, Podikkundu, Kannur.

C.D.E PROGRAMMES:

1. Topic: Course on Clinical Orthodontics.
   Venue: Hotel broad bean
   Date: 8 / 11 /2014 & 9 / 11 / 2014.
   Faculty: Dr.Shamsudhien Moopan, M.D.S.

2. Topic: Medically compromised patients for exodontia
   Faculty: Dr. Ajoy Vijayan, [Professor and head, Dept. of OMFS, Kannur Dental College]
   Venue: Ida hall ,podikundu.
   Date: 14 /11 / 2014.
   Time: 8 pm.

3. Topic : All about Implantology.
   Faculty: Dr. Jaibin George .
   Venue: IDA hall, Podikundu
   Date: 16 / 11/ 2014.
   Time: 9.30 am to 1.00 pm.

C.D.H:

1. A dental check up camp and dental awareness class where conducted on 12/10/2014 at Azhikoden Smaraka Club, Kottanichery, Munderi, Kannur Dist. Dr. Saleem C.K took the awareness class. Around 50 patients were examined. Dr.Saleem C. K. and Dr. Jaleel attended the camp.

PATHANAMTHITTA BRANCH

Activity Report - Augest 2014

Ninth executive committee meeting of IDA Pathanamthitta was held on 21st August 2014 at Mannil Regency, Pathanamthitta at 7 30 pm. Seventeen executive committee members attended the meeting and decisions on Onam celebration, Branch CDE, Hope rep. changeetc. was taken.

Activity Report - September 2014

Tenth executive committee meeting of IDA Pathanamthitta was held on 23rd September 2014 at Mannil Regency, Pathanamthitta at 7 30 pm. Fifteen executive committee members attended the meeting and decisions on Onam celebration, upcoming CDE, tour program etc was taken.

Activity Report - October 2014

Onam celebration of the branch was on 5th October 2014 at Sam's Gardans, Mylapra. More than twenty families attended the programme which was inaugurated by the National President Elect Dr. Aliyas Thomas. State Dental Council Ethics Committee Chairman DrJohnykutty Jacobinaugurated the cultural programmes. The celebration was very colorful with various onam games which was followed by onamsadhya.

QUILON BRANCH

1. IDA quilon branch conducted an inter branch CDE programme with 6KDC CREDIT POINTS .speaker was MR.GIACOMO MELAN BIO medical medical engineer from Italy. Topic was STERILIZATION AND DIS-INFECTION IN DENTAL CLINIC WITH HANDS ON. 65 members attended the cde programme. Programme was in association with KDC and HAILLY INDIA LTD. At hotel sea palace Kollam

2. 4th CDE programme was on 18th oct 14 at Lions Club Kollam. Speaker was DR.R RATHY MDS vice principal and hod dept of oral path Azeezia Dental College Kollam. Topic. ORAL LESION - A KEY TO DIAGNOSIS.

3. IDA Quilon family get together-at aquaserreene paravoor kollam on25th may 14.20 familys participated . followed by games, entertainment, and dinner.

4. Dental treatment camp at SS Samithy Mayanad, Kollam on 12th oct 14. About 300 inmates were their most of them were mentally challenged,hence they deserve a treatment camp.we perfume arount 40-50 extractions, temporary filling, and dispense medicines, oral hyegine kit etc. treatment was with the support of maxilla facial surgeons.

5. World no tobacco day rally on may 31 with azeezia dental college, from college to pooyapally (5km) all college students participated followed by poster presentation and prize destribtion.

KODUNGALLUR BRANCH

Report of the 8th General Body Meeting and Dental Camp conducted by IDA Kodungallur branch.

8th General Body meeting of IDA Kodungallur branch was held on 19th November 2014 at IMA Hall Kodungallur. 40 members attended the meeting. New office bearers for 2015 was proposed and elected. Meeting was followed by fellowship and Dinner.

4th executive committee meeting of IDA Kodungallur branch was held on 24th September 2014 at IMA Hall Kodungallur. 25 members attended the meeting.

5th executive committee meeting of IDA Kodungallur branch was held on 22nd October 2014 at IMA Hall Kodungallur. 20 members attended the meeting.

A Dental Camp was conducted on October 3rd 2014 at Prathyasha bhavan Kodungallur. About 100 children's were examined and Tooth Paste Packs Distributed. Dr.Shaji and Dr.Nazeer attended the camp which was conducted along with Jaycees Kodungallur.

ALAPPUZHA BRANCH

The All Kerala Students conference XTRACT 14, was hosted by IDA Alappuzha branch at Pushpagiri college of Dental Sciences, Tiruvalla on 8th November, 2014. President dr. Nizaro siyo presided over the function and was inagurated by rev. Mathew Vadakkedathu, director of Pushpagiri medicity. Total number of 237 students from various dental colleges across the state participated in the event.Poster Presentation was conducted. Total of 18 participants were there. Various form of cultural programs were performed by the student members.Valdectory function was presided by Dr. Rajesh C. Pazheparambil, President IDA Alappuzha,Organising Chairmanm Dr. Chandy Joseph,organising Secretary Dr. Joe Bijoy and Dr. Aji sarasan Hon Secretary IDA Alappuzha.Function concluded with prize distribution which was done by Dr.Alias Thomas IDA National President Elect.

WAYANAD BRANCH

Executive Meeting

The 7th Executive meeting was held on 20.10.2014 at IMA Hall manathavady. Executive committee congratulated all the members who attended and bagged the overall championship in state sports held at Trivandrum, 14 Members attended it.

CDE Programme

IDA Wayand Branch in association with 3M ESPE conducted a CDE on Post and Core All the ways on 27th July2014 at Hotel Harithagiri Kalpetta. 34 participants attended and appreciated the programme.

State Sports

14 Members from IDA Wayanad participated in the state sports and bagged the overall championship and cash award with 146 points Dr. Kavitha Sajith was selected as the best sports women of IDA Kerala Sate.

Branch Sports

We have conducted our branch level sports at Diana club Manathavady on Nov9th 2014. Most of our members with family attended the programme.

Family Tour and Onam Celebrations

The 2nd Family tour and Onam celebrations was conducted at Karapuzha Village Resort, Karapuzha on 28th and 29th 2014. The programme had fun filled variety entertainments and competitions for kids, ladies and gents. The programme concluded with a grand Onam sadhya.

IDA Online Purchase Scheme

IDA Wayand is coming up with a unique project, an e-Commerce website which can be used by dentist and dental students throughout Kerala to meet their dental material & equipment needs from dealers throughout India.

Dr. Shanavas Palliyal, Assistant Profosser, Department of Dentrisry presented research paper "ORAL HEALTH DISPARITIES AMONG THE PRIVILEGED AND THE UNDERPRIVILEGED TRIBES OF INDIA - A STUDY ON PERIODONTAL DISEASE PREVALENCE" at IEA World Congress of Epidemiology at Anchorage, USA on 17-21st August 2014.

CENTRAL KERALA KOTTAYAM BRANCH

AUGUST

CDE PROGRAMME: 6TH CDE programme of IDA-CKK was held on 24th of August at Hotel Arcadia. Dr. Giresh and Dr. Lalu M C spoke on CLEAR ALIGNER.

CDH: On August 17th camp was held at Kottayam Lions Club near railway station. 380 people registered for the camp.

On Aug 21st a camp was held at Basaleos School at Kottayam

Executive meeting: 6th executive meeting of IDA-CKK was held on 20th August at Kottayam club, kottayam. 16 members attended the executive meeting

SEPTEMBER

DENTAL CAMPS: Four dental camps were held during this month benifiting more than 1000 students.

OCTOBER 2014

CDH ACTIVITY: Dental checkup and treatment camps were held at

• AKJM high school on 9th October • Gov LPS Elampally on 10th October • Nalla Samarayan old age home on • St. George Sunday school at Neyattusserry • Gov LPS at Thampalakad • St Rotas LPS at Thampalakad • M M LPS at Thampalakad on • St. Josephs LPS Podimattom

Executive Committee Meeting

7th executive committee meeting of IDA-CKK was held on 16th October at Vazhoor Club, Kodungoor at 7:30 pm.

Extra Ordinary General Body Meeting

EOGM of IDA-CKK was held on 23rd of October at Vazhoor Club at 7:30pm.

OTHER ACTIVITIES

SPORTS MEET: Members from IDA-CKK participated the IDA Kerala state sports meet held at Kazhakootam. Central Kerala bagged the Overall Runners up. Dr. Tonny Xavior became the Overall champion claiming three first prize in individual items and one from group event. Dr. Timmy won the Badminton singles, Dr. Timmy and Dr. Anoop won the Badminton doubles, Dr. Raju Sunny became the swimming champion.

Journal SMILE: Second edition of journal was officially released on October 26th during the state executive meeting. IDA- kerala state president Dr. Nizaro Siyo released the journal.

NOVEMBER

Executive meeting: 8th executive committee meeting of IDA-CKK was held on 11th nov at Kottayam club Kottayam.

CDH: On Nov 1st a camp at Poonjar was held by IDA- CKK in association with NSS of St Antonys High School .

On Nov 15th IDA-CKK Conducted a camp in association with social justice forum at Thiruvathukal.

Orphanage Adoption: IDA-CKK Adopted Sri Guruji Balasramam at Kottayam. Free dental checkup were done and assured to provide free dental treatment for next one year for the inmates through IDA members.

UPCOMING EVENT: IDA- CKK celebrates it 25th year, Celebrating the journey of struggles and contribution that led IDA to a formidable position. Chief minister Sri Oomen Chandy will be the chief guest and Sri. P C George (Gov Chief Whip), Dr. Alias Thomas, Dr.Ashok Dhoble, Dr Nizaro Siyo, Dr.Sanal O V will be the guest of honor.

ERANAD BRANCH

CDE programs:

On July 20th 2014, 5th CDE on Rotary Endodontics with Hand's On' by Dr.Anoop Samuel. M.D.S, Reader, Department of Conservative & Endodontics , Noorul -Islam College of Dental Science, Neyyartinkara At K.P.M .Residency ,Perinthalmanna on 20th July 2014 ,9am-4p.m.

On 14th September 2014 Women's Dental Council of IDA Eranad & CDE wing jointly hosted State Women's Dental Council CDE program on Pulp Therapy in Primary Teeth By Dr. Anjana G, Professor and HOD, Royal Dental College, Iron Hills Chalissery, Palghat at Peevees Arcade, Nilambur from 9.30 am to 12.30pm.

7th CDE on Pre-malignant Lesions-Diagnosis & Management By Dr.Deepu George Mathew MDS , Reader, Dept of Oral Pathology, Mar Baselios Dental College, Kothamangalam was held at KPM Residency, Perinthalmanna on Sunday the 12th October,2014 from 11am to 3pm.

CDH programs:

On October 1st IDA Eranad observed State level programme ' World Geriatric Day' at Salvacare Pandikkad

Executive committee meetings:

4th Executive committee meeting was held after CDE At K.P.M .Residency ,Perinthalmanna on 20th July 2014 ,4p.m-5pm.

5th executive committee meeting was held Malabar Tower Manjeri on 23rd August, 8-10pm.

On 14th September 2014 , after CDE Extra Oridinary General Body meeting for accepting Minimum treatment charges were held at Peevees Arcade, Nilambur.

6th Executive committee meeting was held at Sarafiya Huts , Wandoor on 22nd October 2014 8am-10pm.

On behalf of the Executive committee I would like to thank all members, respective co-ordinators & Faculties for making these events possible. IDA Eranad also like to thank Dr.Shoma Anil , Secretary of Women's Dental Council & Dr.Anil.G, State CDE convenor for supporting our request to host a state Level CDE program & Women's dental council's CDE program was allotted to our branch.

KUNNAMKULAM BRANCH

CDE

4th CDE on "ASEPSIS AND INFECTION CONTROL IN DENTAL CLINIC" by Dr George sakariya was held on 31st august 2014 at liwa tower kunnamkulam.The programme started by welcoming the gathering by the president Dr mohammed faris,introduction of speaker was done by Dr Joji George.

ONAM CELEBRATION

Onam celebration of IDA kunnamkulam was held on 14th September 2014 at IMA hall.programme started 3pm ,we had competions like payassam making, tea making ,sticking bindi, banana eating,pookala malsaram,tug of war, followed by cultural programmes like light music ,dance, mimicry by our own family members.by 9pm adjourned for dinner.

CHILAMBOI

IDA kunnamkulam participated in CHILAMBOLI 2014 and Dr bastin got special appreciation prize

4th Executive meeting IDA kunnamkulam was held on 10th October 2014 at liwa tower kunnamkulam.we decided to host kerala state executive and childrens day

WOMEN DENTAL COUNCIL

IDA kunnamkulam WDC donated dress materialss, mats, deteragents to the inmates of SNEHALAYA oldage home at mundathikode, thrissur under the leadership of WDC chairperson Dr Elizabeth nini raphel on 19th October 2014

THIIS YEAR IDA KUNNAMKULAM HOSTED TWO STATE PROGRMMES.

1 IDA kerala state 4th executive hosted by IDA kunnamkulam was held on 26th October 2014 at liwa tower kunnamkulam.The programme started welcoming the gathering by the branch president Dr mohammmed faris,around 100 members from different branches attended the meeting.

2 IDA kerala state childrens day celebration " MERIT DAY 2014" hosted by IDA kunnamkulam was held on 14th November 2014 at town hall guruvayoor . The programme started at 4pm by cultural events by students of different schools followed by health talk and interaction class by Dr sunil Mohamed and later magic show by Mr preeth azikode. The award ceremony started by 7pm ,Prof pc Thomas was the chief guest of the evening,Dr Mohammed sameer IDA kerala state 1st vice president presided the function.the programme was also attended by MLA Babu m pallissery, Dr Alias thoms IDA national president elect ,Dr siju a polouse ,Dr Fazil IDA kerala state vice presidents. Around 700 students their parents,principals, headmasters, teachers of different schools attended the function.

ATTINGAL BRANCH

August 2014

Over Night Executive Trip (ONET 2014)

An overnight executive trip was held on Aug 16 & 17th to Anantya resorts, Vaikundam estate, Tamil nadu. Almost 17 executive members had attended the event.

IDA Attingal wesite relaunched (17/08/14)

IDA Attingal website was relaunched at the 5th branch executive by Dr. Anish .P, Vice President of Kerala Dental Council. The website address is www.idaattingalbranch.org

September 2014

CDE Program No. 3 : The third branch CDE program of IDA Attingal branch for 2014 was conducted on 14th Sept 2014 at Park Rajadhani hotel, Ulloor, Thiruvananthapuram. The topic of the programme was Challenges & Progress in Head and Neck Cancer management. The faculty were: Dr. Ramesh (Specialised in Oral Medicine & Maxillofacial Radiology)
-Introduction of Oral Cancers
Dr. Cessal Thomachan (Radiology Oncologist, Asso. Prof. of Head & Neck Dept., RCC. TVM) -Current Concepts in the management of Oral cancers
Panel Discussion
Moderator - Dr. Biju (RCC TVM) Panelists - Dr. Shaji Thomas (Surgical Oncology-Additional Prof. of Head & Neck Dept. RCC, TVM) - Dr. Cessal Thomachan (Radiology Oncologist, Assoc. Prof. of Head & Neck Dept., RCC. TVM)

October 2014

7th branch Executive meeting

The 7th executive meeting of IDA Attingal branch was held on 7th Oct 2014 at Attingal club, Attingal, 7.00pm. The various proposed projects and programmes for the year 2014, were discussed. CDE, CDH, Editor, Hope & Image convenors gave their respective reports

Hosted Kerala State Sports & Games meet - SPIDAK 2014

The annual IDA Kerala state sports & games meet for 2014 was hosted by IDA Attingal branch. SPIDAK 2014 was conducted on 12th October at LNCPE & Technopark club, Thiruvananthapuram. 10 branches of IDA Kerala state namely IDA. North Malabar, Wayanad, Nedumbassery, Malanadu, Central kerala, Mavelikkara, Pathanamthitta, Kollam, Trivandrum & Attingal had participated for the event. The chief guest of the inaugral function held at LNCPE was Dr. Ciju A. Paulose, the 2nd VP of IDA Kerala state. The valedectory function was inaugrated by DySP of Attingal, Mr. Prathapan Nair.
Overall championship trophy and cash prize of Rs. 10,000 won by IDA Wayanad. Overall runners up trophy and cash prize of Rs. 5000 won by IDA Central Kerala. Dr. Johny Xavier of IDA Central Kerala was awarded as the best sportsman and Dr. Kavitha of IDA Wayanad was awarded as the best sportswoman.

November 2014

ASAP Program: The President Dr. Arun S & Dr. Abhilash G.S had participated in the ASAP program conducted at Attingal Govt. College. Course coordination and doubts were cleared regarding the training session.

8th branch Executive meeting: The 8th executive meeting of IDA Attingal branch was held on 16th Nov 2014 at Kayaloram resorts, Panayil Kadavu, Vakkom, 5.00pm. The various proposed projects and programmes for the year 2014, were discussed. CDE, CDH, Editor, Hope & Image convenors gave their respective reports




MALABAR BRANCH

CDE PROGRAMMES:-

1) Title:- "Asepsis in Dental Practice - Guidelines for effective infection control" Faculty:- Dr. George Skariah, MDS (Asst.Prof. Govt. Dental College, TVM)
Date: -31.08.2014 Venue :-IDA Hall, Calicut
2) Title:- "Contemporary rotary endodontics"
Faculty :- Dr.Prabhath Singh, MDS(Assoc. Prof.,Amrita School of Dentistry, Kochi)
Date :- 14.09.2014 Venue :- IDA Hall, Calicut
3)Title :-" Veneers & Luminers"
Faculty:- Mr. Tarek Feissali (Gen.Manager, QA)
Date:- 28.08.2014 Venue :- IDA Hall, Calicut
4) Basic Life Support (BLS) training programme
Faculty :- Dr.Ajil Abdulla M.D
Date:- 09.10.2014 Venue :- IDA Hall, Calicut

CDH ACTIVITIES

Awareness Class:- Conducted an awareness class at Malabar Christian College, Calicut on 20.10.2014. Dr.Shyam Kishore was the speaker.
Dental Camps:- Conducted a school dental camp at Bhavan's School, Chevayur, Calicut on 23.08.2014.

EXECUTIVE COMMITTEE MEETING

EC Meeting No.3 Date: -30.07.2014 Place :-IDA Hall, Calicut
EC Meeting No.4 Date :-08.10.2014 Place :-IDA Hall, Calicut

OTHER ACTIVITIES:-

PRATHYASHA:--The free denture programme "Prathyasha" was conducted by our branch successfully this year on 12.10.2014. We donated 55 dentures to well deserving candidates. Dr.Antony Thomas, IPP.,IDA Kerala was the chief guest.

IDA Branch Shuttle Tournament :- The branch shuttle tournament was held on 31.08.2014. at the Police Club, Calicut. Dr. Nizaro Siyo, President, IDA Kerala distributed the prizes.

Colouring Contest:- A colouring competition for primary class students was organized on the occasion of children's day on 14.11.2014. Students from many schools in and around Calicut participated.

Hepatitis B Screening camp:- Hepatitis B Screening and Antibody titre value estimation were done for our members at a camp on 09.10.2014.