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Taurodontism in eight deciduous molars

MDS Entrance Coaching Programme

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Contents

President's Message

Dr. K.N. Pratap Kumar

Dear Colleagues,

Greetings to You!!!

2008-2009 IDA Kerala State Office is now nearing the half way mark. The second issue of KDJ is now in your hands. What do you feel? It is the esteemed members to asses the quality and potential of the team. I am delighted to see that all the branches are functioning exemplary well and a handful of quality members are emerging in each branch. Let me express my sincere appreciation and best wishes to each one of you for helping me out to execute the State IDA projects and activities as planned. All my Cabinet members are extra vigilant, supportive and positive in their action.

Are you good? Most people will respond, "Yes"! Ask them, "What makes you good"? They would say

- I do not cheat .so I am good.
- I do not lie, so I am good
- I do not steal that makes me good.

Just think of the person who says "I do not cheat". Well, that only means that he is not a cheat. And the person who say they don't lie and steal, only mean that they are not liars and thieves. But that does not make them good. A person becomes good when he actually does good rather than not doing wrong. A person of values would be one who has qualities such as Fairness, Compassion, Courage, Integrity, Empathy, Humility, Loyalty and Courtesy. What make people with these qualities good people? It is because thee are the kind of people who are dependable, stand for justice, help the needy, make life better for themselves & those around them.

Ethics or lack of it is evident in every profession. Lawyers bend the truth. Parents and children alike tell white lies. Accountants, political leaders, & secretaries often falsely reports. Greedy doctors are no exemption. When we cheat the people around us, most of all we are cheating ourselves. We are preparing ourselves to be cheated. Additionally, when we cheat others, we start believing that others will do the same to us and we become suspicious and pessimistic. Some people will never be ethical. Would you face yourselves if you did not do the right thing for your client?

Live with enthusiasm, direction and a sense of purpose. The greedy and inconsiderate who seeks immoral pleasures must be stopped. Yes life is a competition and we have to compete but to win fairly, decently and by the rules. People who have no morality may say "my behavior is okay, your interpretation was faulty". Can this be treated as fair?

Set backs are inevitable. A set back can act as a driving force and also teach us humility. In grief, you will find courage and faith to overcome the set back. Learn to become victors, not victims. Ask yourselves after every set back. What did I learn from this experience? Only then will you be able to turn a stumbling block in to a stepping stone.

All success stories are stories of great failures. The only difference is that every time they failed, they bounced back. Failure is the high way to success. "Obstacles are those frightful things you see when you take your eyes off your goal".

LET US LEARN FROM OUR FAILURES AND LET US LEARN TO EXCEL IN LIFE AND IN PROFESSION.

Yours in IDA

Dr. K.N. PRATAP KUMAR

Dr. K. Nandakumar

Continuing professional advancement programmes

The pace of advancements that dental professionals face today is unimaginable that today's profile will have no resemblance with that of tomorrow. Loads of dental materials fall upon us, carrying along with them tons of necessary and unnecessary information. Dental implants of twentieth century are drastically transformed both in design and in surface character during 21st century. A practicing dentist cannot cope up with the changes but there is no excuse in avoiding the changes because the society expects quality service which is comparable to that available any where in the world. Our patients no longer belong to our own locality but they are international. India will continue to stay as a dental health care destination in the future. I would like to emphasize on the need for upgrading professional competency. DCI has proposed a recertification process which is the main method of ensuring dentist's competence. New regulation for continuing dental education makes it mandatory for the practicing dentist to undergo professional advancement programmes. Each practicing dentist has to earn 150 points within a period of five years. Attending a full day programme will fetch 6 points. Recognised dental colleges can organize programmes and which will be granted blanket permission to assign the points. IDA programmes may have to get preapproval from the state dental council. In this context IDA has to chart out programmes well in advance – at least for six months and get the preapproval. District level programmes have to be conducted in coordination with the state so that every member can get easy access to professional advancement. Publications, presentations, research work and teaching assignments should also be given credit points. Another scope of this system is that there will be effective industry-practice participation leading to a brighter future. Let us sit together and plan academic programmes which would suit our future requirements.

IDA National President's Message

Lt Gen (Dr) Paramjit Singh
PVSM, AVSM, VSM and Bar (Retd)
Dir PG Studies Prof and HOD Dept. of Prosthodontics
Swami Devi Dayal Hospital and Dental College
Barwala, Haryana

Lt Gen (Dr) Paramjit Singh

Dentist of the future must contribute towards reducing the burden of oral diseases by maintaining and improving oral health, since the health of the oro-facial region is directly connected with general health and well-being and are essential for the quality of life of all Indians.

The ultimate objective of the future dentist is to be competent in managing traditional as well as new challenges in oral health. He/she must be able to practise evidence-based, comprehensive dentistry independently, in group practice and in close collaboration with other health professionals. In addition, a more medical orientation of dental education is needed which will result in the need for curriculum changes in the content and form of the 5 years' dental training.

The basic knowledge and skills of tomorrow's dentist as acquired during the training should represent the first stage in an educational continuum that should last throughout a dentist's entire practising life and enable the dentist to prevent and treat all frequently appearing oral diseases. Sound basic training must enable a practising dentist, on his own initiative, to partake in further training and professional development according to his needs.

Indian Dental Association aims in building a strong foundation today for the dentists of tomorrow. I hope the Kerala Dental Journal will be a guiding light in nurturing the spirit of the future dentist and I wish you all the best.

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Mouth mirror is a primary and essential diagnostic instrument used by dental surgeons. Different designs are available at present. First surface glass mirrors, concave magnifying mirrors, disposable mirrors are all in use today. Along side the modern mouth mirror, you find the picture of a magnifying collapsible mirror advertised in the catalogue of S S White technologies.

S.S. White Technologies, Inc was started in Philadelphia by Dr. Samuel Stockton White in 1844 with a work force of three. Samuel Stockton White was born on June 19, 1822. By the age of 21 he was practicing dentistry and in 1844 young Samuel set up his own tooth factory in the attic of a house in downtown Philadelphia

Aranmulakkannadi which was in use in Kerala during the 14th century has never found a place in dentistry because dental treatment was not popular those days.

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Spirit-level markers for facebow articulation

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Chandrasekharan Nair K, ***Jayakar Shetty, ****Vishwanath G, ** Divya Hegde

Abstract

Objectives: To relate maxilla with the facebow using spirit-level markers attached to the facebow and without using spirit-level markers and to compare the orientation of the occlusal plane obtained when face bow transfer was done with and without incorporating spirit levels. **Methodology:** Three patients were subjected to facebow transfer with and without spirit-level markers attached to the facebow. Plaster index was made using the relation of the maxillary occlusal rim to the lower member of the articulator after face bow transfer with spirit-level markers attached. This index was made for future comparison of face bow transfer without using spirit-level markers. The discrepancy between the occlusal rim and the plaster index was made measurable by making a putty index. **Results:** The angle formed between the two lines conforming to the upper and lower borders of the putty index when projected and measured varied between 3 and 4 degrees.

A semiadjustable articulator gets simulatory status when the mandibular hinge axis and the articulator hinge axis are made to coincide and the maxillary cast is attached to the upper member. This process is carried out through face bow transfer which ensures a faithful three-dimensional relationship between the axis and the maxilla. Conventional face bows are placed directly on the patient and the face bow is related to the maxilla through an occlusal rim and a fork assembly. Once the clutches are tightened, this becomes a singular unit and when transferred to the articulator the position of the maxillary cast can be found out. (Fig 1.)

For reasons of obtaining ease of operation, some models of articulators have been incorporated with wide intercondylar distance, that is, 160 mm against the conventional 110 mm. In wider articulators, spring bows cannot be used for reasons of fatigue and manufacturers provide a transferring jig which makes the whole process of face bow transfer much easier. The transfer jig allows the relationship transfer through a rod which is attached to the occlusal rim by a fork and clutches. (Fig. 2)

The transferring rod has to be positioned vertical when the face bow is related to the head. The upper border of the earpiece and orbitale indicator of the spring bow make it related to Frankfort Horizontal plane. The transferring rod attains verticality when the spring bow is positioned horizontal. If the verticality of the rod is not maintained while tightening the clutches, the interrelationship maintained between the rod and the occlusal rim might not be identical when it is placed on the transfer jig attached to the articulator. During the clinical stage, the verticality of the transferring rod can be ensured by ensuring the horizontality of the spring bow for which there is no inbuilt verificatory provision. It is in this context the present study was designed to ensure horizontality by incorporating spirit-level markers on to the spring bow. (Fig. 3)

The objective of the present study was:

To relate maxilla with the facebow using spirit-level markers attached to the facebow and without using spirit-level markers and to compare the orientation of the occlusal plane obtained when face bow transfer was done with and without incorporating spirit levels.

Methodology

Three patients were subjected to facebow transfer with and without spirit-level markers. The patient was made to sit upright on a stool keeping the head unsupported. The bite fork attached to the maxillary occlusal rim was placed in the patient's mouth. The stem of the fork was then attached to the transfer rod and this assembly to the face bow. The face bow was kept related to the FH plane. This was perfectly made horizontal by attaching spirit-level markers on the upper border of the face bow. The clutches were tightened when the bubble attained the central position in the spirit level. (Fig. 4)

Once tightened, the face bow was detached from the assembly and the fork attached to the transfer rod was fixed on the transfer jig. The maxillary cast was placed on the record base and it was mounted on to the upper member of the articulator. A plaster index

Fig. 1 Semiadjustable articulator with conventional face bow

Fig. 2 Wide view semiadjustable articulator

Fig. 3 Spring bow with spirit-level markers attached

Fig. 4 Bite fork attached to the face bow with spirit level

Fig 5. Facebow transfer through transfer jig

Fig. 6 Plaster index

Fig. 7 Articulation of face bow without spirit-level markers attached

Fig. 8 face bow transfer without spirit-level markers attached with the previously prepared plaster index

Fig. 9 Putty index made of the discrepancy.

Table 1. *Discrepency of the occlusal plane recorded with and without spirit level.*

Patient 1	4 degree
Patient 2	3 degree
Patient 3	4 degree

was then made which extended from the lower member of the articulator to the occlusal rim conforming to the anteroposterior plane of the maxillary occlusal rim. This index was made for future comparison of face bow transfer without attaching spirit-level markers.

The entire assembly was detached and using the same occlusal rim and fork, the same patient was once again subjected to face bow transfer, but this time without attaching spirit-level markers. After the maxillary cast was mounted on the articulator using the second transfer, the plaster index made before was attached to the lower member of the articulator. The discrepancy between the occlusal rim and the plaster index was made measurable by making a putty index. (Fig 7, 8 and 9)

Results

The lines conforming to the upper and lower borders of the putty index was projected and the angle formed was measured (Table 1).

Discussion

In both the groups, there was no congruence of the occlusal plane. When horizontality of the face bow was not ensured by incorporating spirit level, heads moved in an upward direction possibly by a reflex compensation to the weight of the face bow assembly. If spirit levels are not incorporated, accurate horizontal positioning of the face bow is not possible. The weight lead to a discrepancy in orienting the occlusal plane when related to the articulator.

Conclusion

Orientation of the occlusal plane changes when transfer jig is made use of if horizontality of the spring bow is not ensured. Spirit-level markers if attached to the facebow, ensures horizontality of the face bow easily.

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Heat perception in complete denture wearers

*** Hari B., * Sadhvi K.V., * Anupama M.S.,**
**** Chandrasekharan Nair K., *** Jaykar Shetty, **** Vishwanath G., **** Divya Hegde**

Abstract

Objectives: To find out whether wearing of complete dentures affect heat perception and to find out whether a modified denture incorporating a metallic insert would improve heat perception. **Methodology:** Heat perception test was done before and after wearing the denture on ten individuals using water kept at different temperatures, viz 10°C - 60°C. The subjects were asked to identify the warmth or coldness of the water with respect to control kept at 25°C. The same experiment was conducted in ten patients in whom the patients previous dentures were duplicated and modified by incorporating the metal inserts in the palatal rugae area. **Results:** All the subjects with modified dentures showed an improvement in heat perception. Denture wearers recorded lowered heat perceiving capability. **Conclusion:** It was evident that there was a decrease in the intensity of heat perceived by the subjects when they wore the dentures. With the modified dentures there was enhancement in the heat perceiving capability.

Oral mucosa is highly sensitive to temperature variation because of that an individual can distinguish temperature change. The heat sensing neurons both cold and heat receptors are highly concentrated in the rugae region of the hard palate and the tip of the tongue[1, 2]. When hot or cold food is consumed the temperature change can easily be distinguished by an individual if no prosthesis is worn. In a complete denture wearer considerable portion of the oral mucosa is covered and hence it is presumed that heat perception would be reduced, but there is no documented evidence. The present study was designed in this context.

Objective

The objectives of this study were to find out whether wearing of complete dentures affect heat perception and to find out whether a modified denture incorporating a metallic insert would improve heat perception.

Methodology

Heat perception test

Ten completely edentulous individuals were selected for the study and the heat perception test was conducted before and after wearing the denture. Water kept at different temperatures viz., 10°C, 20°C, 40°C and 60°C was used. Each individual was first made to wash the mouth with water kept at 25°C which acted as a control. After that 10 ml each of the samples of water kept at different temperatures were used to wash in a sequence of 60°C, 20°C, 40°C and 10°C. Patient was not aware of the sequence. In between an interval of 5 minutes was allowed and control water was used to wash the mouth. The individuals were asked to distinguish whether the water of the experimental group was hot or cold in comparison to the previously used water which was the control. Cards consisting of arrows were given to each individual and was asked to indicate in

Table 1 *Heat perception expressed by the subjects at different temperatures. Control was kept at 25ºC and the sample size is 10.*

	60°C				20°C				40°C				10°C			
Subjects	Hot	Warm	Cold	Very cold	Hot	Warm	Cold	Very cold	Hot	Warm	Cold	Very cold	Hot	Warm	Cold	Very cold
Without dentures	10						10			10						10
With dentures		10				10				10					10	
With modified dentures	10						10			10						10

All the subjects response to the different temperatures were similar.

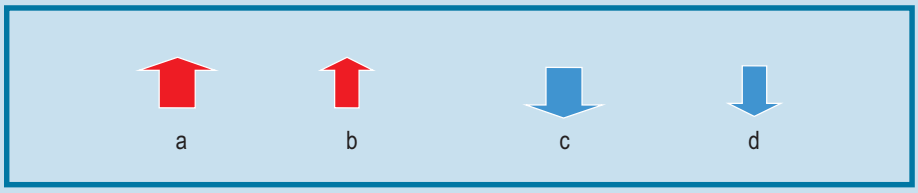

Fig. 1 Cards served as analogue scale, a. Hot b. Warm c. Very cold and d. Cold

Fig. 2. Perforation made in the palatal rugae area of the denture.

Fig. 3. Silver plate of 0.5 mm thickness adapted to the marked area in palatal rugae of the cast.

Fig. 4. Silver plate adapted to the denture, which is fused with the autopolymerizing resin.

the card whether it was hot, warm or cold in comparison to the control. The card served as an analogue scale (Fig .1).

Use of modified dentures to show the improvement in heat perceiving capability of individuals.

Experiment was conducted on ten patients. Their previous dentures were duplicated and that was modified as follows and the experiment was carried out. A cast was made out of the duplicate denture and perforation was made in the palatal rugae region (Fig.2). Silver plate of 0.5 mm thickness was adapted on to the cast (Fig. 3) matching the perforation. Then the perforated denture was placed on the cast and the silver plate was sealed to the denture with autoploymerizing resin (Fig. 4). The modified denture was tried in the patient and stability and retention was checked. Heat perception test was conducted on each individual without dentures, with dentures and with modified duplicate dentures.

Results

Heat perception test

All the subjects, without dentures, could perceive the temperature accurately. They could easily perceive the given liquid as hotter, warmer or cooler than the control. But with the dentures in place, they could feel the heat or cold, but with lesser intensity than what they felt without the denture (Table 1). For example when water of 60°C was given without dentures they could feel it was hotter than the control but with the same sample after wearing the dentures, it was perceived that heat was of low intensity.

Dentures with modified palate

Patients noticed that they were able to perceive the heat better than with the conventional dentures (Table.1). The enhanced perception when the modified denture was used can possibly be attributed to the superior conductivity of the silver plate.

Conclusions

It was concluded that the there was a decrease in the intensity of heat perceived by the patient while they wear the dentures. It can also be concluded that there is a need for the change in the denture design to improve the patient's heat perceiving capability. Impaired taste and heat perception have been the complaints of complete denture wearers but those are not addressed by the dental profession with due consideration. This paper is an attempt to validate the assumptions on heat perception and to provide adequate evidence.

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Maxillary open sinus lift

* Nandakumar K., ** Vishnu Mohan, *** Prasad T.

Abstract

In maxillary posterior edentulous regions, vertical height between the crest of the residual ridge and floor of the antrum is less than ten mm, there is need to do open sinus lift and grafting and placement of dental implant immediately or delayed. We are presenting a case of open sinus lift and grafting and immediate implant placement. The system of implant used was MIS system.

Introduction

The maxillary posterior edentulous region presents unique challenging conditions in implant dentistry, compared with other regions of the jaws. The maxilla is 35 times more frequently edentulous than the mandible. The available bone is lost from the interior expansion of the sinus after tooth lost. Involving the residual ridge region. The bite force is greater in the posterior region compared with the anterior region. The external volume of bone resorbs towards the palate, which requires a cantilevered buccal cusp for ideal esthetics of the final restoration. All of these factors increased stress on the implants. However, despite all these concerns, treatment modalities designed specifically for this area allow it to be as predictable as any other intra organ region. Most noteworthy of this treatments are sinus grafts to increase available bone height, modified surgical approaches that relate to bone density, and progressive bone loading during the Prosthodontic face of reconstruction. The posterior maxilla represents the most predictable area for synthetic bone-grafting procedures. However, it is important to note that a pre requisite to be procedure is the presence of healthy, natural anterior teeth, including atleast the maxillary canines.

Surgical techniques

There are four types of implant surgical techniques

1. Subantral Option-1: Conventional Implant Placement

The first treatment option in the posterior maxilla, SA-1 performs to 12 mm or more of bone height available. This corresponds to straight forward conventional implant Placement without any sinus graft surgery.

2. Subantral Option-2: Sinus Lift and Simultaneous Implant Placement

Subantral Option-2 (SA-2) is a sinus lift and simultaneous implant placement. It is selected when the available bone height is 0 to 2 mm insufficient in length for idle implant length. This usually ranges from 10 to 12 mm of vertical bone height between the floor of the maxillary antrum and the crest of ridge, depending on the density and width of the existing bone. The goal of the sinus lift surgery is to increase the vertical bone height up to 2 mm, using the acces implant osteotomy to maintain a height of 12 mm. This technique is other wise known as close sinus graft surgery. Here an osteotomy is prepared at least 2 mm short of the floor of the antrum. Then using a cupped shaped osteotome, the floor is tapped up to 2 mm beyond the prepared osteotomy. A greenstick type of fracture is created in the antral floor and elevates the bone and sinus membrane over the broad based osteotome.

3. Subantral Option -3 : Sinus Graft with Delayed Endosteal Implant Placement

The third option of endosteal implant placement in the posterior maxilla is indicated at least 5mm of vertical bone height is present between the crest of the ridge and the antral floor and the width of the available bone is greater than 5mm. This is an open sinus lift surgery. Here sinus mucous membrane is elevated to the desired level and sinus graft is placed. The implant is placed 6 months later after the maturation of the graft.

4. Subantral Option -4: Sinus graft with Simultaneous Implant Placement

Forth Option is selected when the bone height is between 6 to 8 mm is present between the crest of the ridge and the antral floor and the available width of the bone is greater than 5 mm.

A Case Report of Subantral Option – 4

A 65 year old lady came with a complaint of missing posterior maxillary teeth and needs dental rehabilitation. Pre-surgical OPG and IOPA reveals bone height is

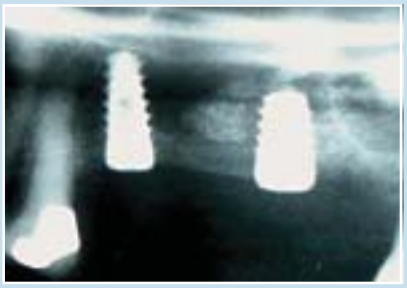
PREMEDICATION FOR SINUS GRAFT SURGERY

	Systemic	Local
Antibiotic	Amoxicillin 1 g I hour before surgery, plus 500 mg qid 5 to 7 daysOrClindamycin 300 mg 1 hour before surgery, plus 150 mg tid 5 to 7 days	Ampicillin or clindamycin
Decongestant	Pseudoephendrine1 tablet tid on day of surgery ,and on 2 days after surgery if perforation of membrane	Oxymetazoline 0.05 % or phe nylephrine 1%1 hour before surgrey until 2 days after surgery.
AntiInflammatory (Glucocorticoid)	Dexamethasone 9 mg morning of surgery; 6 mg morning after surgery, 3 mg morning 2 days after surgery	
Analgesic	Acetaminophen with codeine	

Pre-operative OPG showing the Site of Implant 25, 27, 36, 37

Post-operative OPG showing the Implants in 25, 27, 36, 37

Site 27 requires Sinus Graft Lift



Sinus Graft Lift with Simultaneous Implant 27

Diagramatic Presentation of Sinus Graft with Implant

7 mm between the crest of the ridge and the antral floor. An open sinus lift surgery and simultaneous implant placement were planned.

A crestal incision on the palatal aspect of the edentulous ridge ensuring atleast 3 mm of the attached tissue on the facial aspect of the incision made from the hamular notch to the canine area is preferred incision line design. An access window is made on lateral wall of the maxillary antrum with rotary bur. The most superior aspect of the lateral access window should be approximately 5 mm below the superior aspect of the soft tissue reflection. The anterior vertical line is scored 5 mm distal to the anterior vertical wall of antrum. The distal vertical line on the lateral maxilla is 15 mm from the anterior limit of the window in the region of the first molar. Inferior score line of the rectangular access opening on the lateral maxilla is placed 2 to 5 mm above the antral floor. A flat ended metal punch and mallet are used to gently separate the lateral window from the surrounding bone, while still attach to the thin sinus membrane. A larger periosteal or sinus membrane elevator is introduced through the lateral access window

Site showing (25, 27)
Gingival Former

Site showing (25, 27)
prepared Abutment

Site showing (36, 37)
Gingival Former

Site showing (36, 37)
prepared Abutment

Fabrication of 3 unit Ceramic Bridge (Upper) and
Two crown (lower) in model

Ceramic Crowns in Occlusion

along the inferior border. Once again, the crest portion is placed against the window and the sharp margin is dragged along the floor of the antrum, while elevating the sinus membrane. The periosteal elevators further reflect the membrane off the anterior wall to a height of 14 to 16 mm. Two implants of 10 mm with 4.2 and 8 mm with 5 mm diameter is placed in the premolar and molar region . Medik hydroxyapatite bone graft is mixed with antibiotic and saline is placed into the elevated antral floor region. Incision is closed with resorbable suture. Six month later , after graft maturation three units of bridge was inserted.

Implant system - (1) MIS Medical Implant System (www.mis-implants.com)

M.I.S Implant Technologies Ltd. Produces an oral system which includes self tapping dental implant in a wide range of sizes. MIS Implants are two-stage implant system manufactured from pure titanium. These implants meet the international Standards Organization 9000 regulations. All implants are supplied sterile in specially designed tubes.

(2) Graft material – BoneMedik-S (Silicon Contained Coralline Hydroxyapatite Bone Graft Substitute (Patent No. US 7,008,450) BoneMedik – S is a non-osteogenic bone graft substitute similar in structure and composition to human cancellous bone. This is manufactured by Meta Biomed Co., Ltd. (www.meta-biomed.comBone)

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Management of collapsed adult patient in a dental clinic setting

* Venugopalan P.P.

Background

A patient collapsing while in the dental chair is not only an embarrassing situation but also a real medical emergency. Such situation can happen at anytime. Dental doctors should be able to manage collapsed patient. All collapsed patients should be considered as cardiac arrests, unless otherwise proven. This is a medical emergency where the time and the presence of mind are so crucial.

Basic life support (BLS) is the most effective management strategy to save the life of a collapsed patient in any setting. BLS is evidence based structured approach to save lives. Unfortunately BLS is not emphasized adequately even in medical curriculum.

International organization like ILCOR (International Liaison Committee Of Resuscitation), AHA (American Heart Association), RCUK (Resuscitation Council United Kingdom) and other professional bodies have formulated a structured approach in Basic and Advanced Life Support. They revised these guidelines in every five years. Latest guidelines were proposed in 2005. BLS, ACLS (Advanced Cardiac Life Support) guidelines are the most scientific and evidence based approach so far available. This article is based on American Heart Association 2005 guidelines.

Basic Life Support Approach

If somebody has collapsed, the following steps are to be followed.

A : Assessment and airway

B : Breathing

C : Circulation

D : Defibrillation

Each step should be followed in two levels, first assess and then manage appropriately. Eg. Assess airway, if airway is obstructed, relieve the obstruction so that all together there will be 8 steps in BLS sequence. Each step should be followed in a YES or NO pattern.

STEP 1

Assess and manage airway

In any scenario, managing a collapsed patient, should start with assessment of responsiveness. Just do "shake and shout."

"Are you OK."

If patient is responsive, just reassure. If he is not responding, do the following steps.

1. Call for help, Activate emergency medical services, get an AED.(Automated External Defibrillator)
2. If patient is dental chair, adjust the dental chair to neutral position.
3. If the patient is in prone position shift to supine position.
4. Loose tight dresses
5. Open up the airway using HEAD TILT AND CHIN LIFT. If victim is involved in trauma-do JAW THRUST. NO head tilt should be done in trauma victims.
6. If there is any visible foreign body, secretion or vomittus or blood in the airway, clear it

Fig.1

Remember

1. Loud nosy breathing is the sign of obstructed airway.

2. The tongue is the commonest cause for airway obstruction

Fig.2 Tongue obstructs airway

Fig.3 Head tilt chin lift

Fig.4 Jaw thrust

STEP 2

Assess and manage Breaths

Assess Breathing by LOOK, LISTEN, AND FEEL

- Look for Chest movement
- Listen breath sound
- Feel for warmth of breath

Fig.5

If victim is not breathing

Provide 2-rescue breath, each breath should last for one second with adequate chest rise.

Methods

1. Mouth to mouth ventilation
   - Standard technique to provide up to 16 % of O_2
   - Risk of direct contact

2. Mouth to mouth ventilation using a barrier device.
   - Face shield is barrier device
   - Prevent direct contact with victim
   - Towels or clothes are not recommended

Fig.6

3. Pocket mask
   - Effective way to provide mouth to mask ventilation
   - No direct contact with victim

Fig.7

4. Bag-mask ventilation
   - Most effective way to provide rescue breathes
   - No direct contact
   - Can maintain life for a long time
   - You can provide high concentration of O_2 up to 80 % to 100 %

- Apply cricoid pressure (To prevent gastric distention and regurgitation during bag mask ventilation

Fig.8

Fig.9 Cricoid pressure

If the patient unresponsive but breathing normally

Shift the patient to recovery position for observation (Do not shift Trauma patients to recovery position.)

Fig.10 *Recovery position*

Advantages

1. No risk of aspiration
2. No risk of airway obstruction

STEP III

Assess and manage circulation

Check carotid pulse in the anterior groove of the sternocledomastoid at the level of thyroid cartilage. Try to assess carotid pulse up to 10 seconds

Fig.11

If no pulse

Start external cardiac compression. Shift the patient to hard surface or floor.

Compression site on the sternum just below the inter mammary line

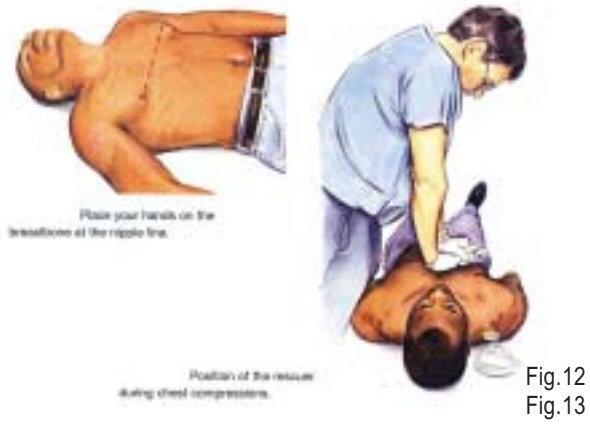

Fig.12
Fig.13

Apply the following rules strictly

- Push hard
- Push fast 100/mt
- Adequate chest recoil in between
- Minimum interruption in between
- Change the rescuer in every 2 mts
- Provide 30 compression

2005 Guideline emphasis so much on compression. Advocated compression ventilation ratio is 30:2; and reassess the patients pulse and rhythm every two minutes or after 5 CPR cycles.

STEP 4

Assess and manage arrest rhythm

Defibrillation

Principles of early defibrillation

Early defibrillation is crucial for victims of sudden cardiac arrest for the following reasons.

- The most common initial rhythm in witnessed sudden cardiac arrest is ventricular fibrillation (VF) when VF is present, the heart quivers and does not pump blood.
- The most effective treatment for VF is electrical defibrillation(delivery of shock to stop the VF)
- The probability of successful defibrillation decreases quickly over time
- VF deteriorate to asystole if not treated.

The earlier defibrillation occurs, the higher the survival rate When VF is present, CPR can provide a small amount of blood flow to the heart and brain but cannot directly restore an organized rhythm. Restoration of a perfusing rhythm require immediate CPR and defibrillation within a few minutes of the initial arrest. Figure 14 displays the sequence of events that must occur the successful resuscitation from cardiac arrest.

Without bystander CPR, the chance of survival from VF Cardiac arrest declines by 7% to 10 % without defibrillation Bystander CPR improves survival from VF cardiac arrest at most defibrillation intervals

Structure and Function of AEDs

AEDs are computerized device that are attached to a pulseles victim with adhesive pads. They will recommend shock delivery only if the victims heart rhythm is one that a shock can treat. ASEDs give rescuer visual and voice prompts to guide rescuer actions.

The word automated actually means semiautomatic, because most commercially available AEDS will advice the operator that a shock is needed but will not delivery a shock without an action by the rescuer (i.e., the rescuer must push the SHOCK button)

A small number of fully automated AEDs are now in use. If a fully automated defibrillator detect a rhythm that a shock can treat, it will deliver a shock without operator intervention.

Adhesive electrodes attach the AED to the patient. Most AEDs operate in the same way and have similar components. The following sections present common aspects of AED function and operation, including troubleshooting information.

Inappropriate Shocks or Failure to shock

Several factors can affect AED analysis

Patient movement (eg, agnoal gasps)

Repositioning the patient

AEDs are extremely safe, especially when used properly

AED operation

Use AEDs only when victims have the following 3 clinical findings:

No response
No breathing
No pulse

The patient in cardiac arrest may demonstrate agonal gasps. Agonal gasps are not effective breathing. A victim who has agonal gasps and does not respond and has no pulse is in cardiac arrest. Remember that agonal gasps are not effective breaths.

The universal AED: Common steps to operate all AEDS

Once the AED arrives, put it at the victim's side, next to the rescuer who will operate it. This position provides ready access to the AED controls and easy placement of electrode pads. It also allows a second rescuer to perform CPR from the opposite side of the victim without interfering with AED operation.

AEDs are available in different models. There are small differences from model to model, but all AEDs operate in basically the same way. The following tables lists the 4 universal steps for operating an AED.

Step	Action
1	Power on the AED
2	Attach electrode pads to the victim's bare chest
3.	Analyze the rhythm
4.	If the AED advices a shock, it will tell you to be sure to clear the victim
5.	Begin CPR with chest compressions as soon as the AED gives shock

AEDs

Fig.14

For Further Reading

BLS for Healthcare Providers – Student Manual, 2006 American Heart Association, www.americanheart.org/cpr

Circulation December 13, 2005; 112 (Suppl. 1): 1 - 211, http://circ.ahajounrals.org

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Case Report

Taurodontism in eight deciduous molars

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Abstract

Taurodontism is a dental anomaly characterized by enlargement of the pulp chamber, which may reach proximity of the root apex. It refers to a tooth form characterized by an external block configuration, which has a very low incidence in deciduous dentition and often goes unnoticed by the clinician. It often gives a challenge to pulpal therapy. This report presents a case of taurodontism in which eight deciduous molars were affected.

Introduction

Taurodontism is a dental anomaly characterized by enlargement of the pulp chamber, which may reach proximity of the root apex. The teeth involved are almost invariably molars or premolars – sometimes only a single tooth and other times several molars in the same quadrant. The condition may be unilateral or bilateral. It may affect the deciduous or permanent dentition. This condition is probably the result of a failure of the epithelial root sheet to differentiate early and induce the normal root formation. In some families it is inherited as autosomal dominant triat, with no gender predilection.

Sir Arthur Keith[1] introduced the term taurodontism in 1913 and it was first described by Gorjanoric - Kramberger in 1908[2]. According to Keith, taurodontism was a distinctive characteristic of Neanderthal man. The incidence of taurodontism has been reported to be lower than 1% in modern man, 3% in primitives, Eskimos & American Indians[3]. In United States, most reports shows a prevalence of 2.5 to 3.2 % of the population are affected by this. Seow and Lai[4] found that 34.8% of 66 patients with hypodontia had at least one mandibular first permanent molar that showed taurodontism compared with only 7.5 % of a control group, without hypodontia. Shifman and Buchner[5] reported that in one case, eight teeth were taurodonts, and four of those were molar teeth. They stated that majority of the affected teeth occurred singly, and the mandibular second molar was the tooth most frequently involved.

The unusual nature of this condition is best visualized by the radiograph. Involved teeth are frequently found to be rectangular in overall shape rather than tapering towards the roots. The pulp chambers extremely large with a much greater apico-occlusal height than normal. The pulp lacks the usual constriction at the cervical region of the teeth and the roots are exceedingly short. The bifurcation or trifurcation may be only a few millimeters above the apices of the roots.

Shaw in 1928 [6], classified taurodontism in to hypo, meso and hyper taurodontism, on the basis of the apical placement of the pulp chamber floor. The degree of taurodontism can also be classified as mild, moderate or severe.

This report presents a case of taurodontism in which eight deciduous molars were affected.

Case report

A 6½ year old girl reported to the Dept. of Pedodontics, Govt. Dental College, Trivandrum. The girl complained of pain in relation to lower right & left posterior teeth since two weeks duration. She was moderately built, well nourished and there was no relevant medical and family history. Intra oral clinical examination showed normal soft tissue appearance. Hard tissue examination revealed large carious lesions extending to the pulp chamber on lower right and left deciduous molars. (75 and 85). All teeth appeared normal in size and shape clinically. Horizontal jaw relation showed anterior cross bite. (fig. 1)

Intra oral periapical radiographs of both sides showed pulpal involvement of 75 & 85 which had enlarged pulp chambers with short roots. The radiographs were suggestive of taurodontism. Based on clinical and radiographic findings, a diagnosis of chronic pulpitis of 75 & 85 was made. Since these teeth were taurodontic, extreme care were taken during pulpal treatment to prevent hemorrhage and perforation. Pulpectomy was done with zinc oxide eugenol and idoform paste. Teeth were restored by stainless steel crowns. She is undergoing orthodontic treatment for correction of anterior cross bite.

Full mouth IOPA and orthopantamograph were taken to rule out taurodontism of the remaining teeth, and it was revealed that all the deciduous molars were taurodontic (fig 2, 3)

Fig. 1

Fig. 2

Orthopantamograph Fig. 3

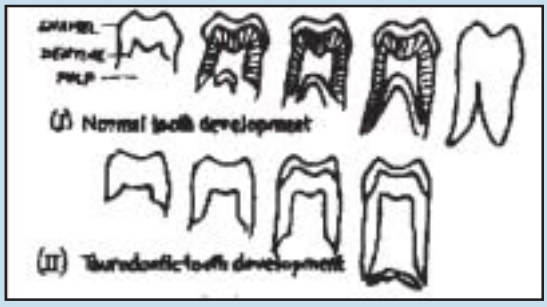

Fig. 4

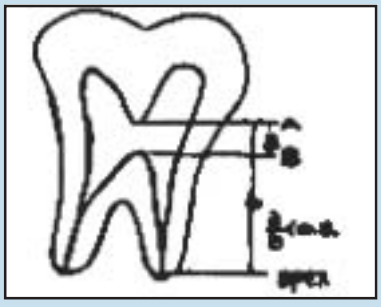

Fig. 5

Discussion

Taurodontism usually affect mandibular teeth than maxillary teeth. Keith described the taurodontic tooth shows tendency towards enlargement of the body of the tooth at the expense of the roots, in contrast to what is seen in the teeth of modern man. Feichtinger and Rossiwal[7] considered that to define taurdontism the distance from the furcation to the amelocementum joint should be greater than cervico-occiusal distance (fig. 4).

In 1978 Shifman and Chanannel[8] established more objective criteria on the basis of determined measurement of the tooth. A tooth is taurodont when the distance from the lowest point of pulp chamber roof (A) to the highest point of the floor (B) divided by distance from A to root apex is 0.2 mm or greater and of distance from B to cemento enamel junction (CEJ) greater than *2.5* mm (fig. 5*)*.

Taurodontism can appear either as an isolated trait or may be associated with certain disease such as hypophosphatasia or alteration of the sex chromosomes such as Klienfelter syndrome, or Downs syndrome, X chromosome anuploid syndrome with ectodermal defects.

Hammer[9] proposed that development site of the taurodoent is in Hertwig's epithelial root sheeth and not in the odontoblast, since dentinogenesis of the root is not impaired.

Diagnosis is usually done by routine radiographs. Most important aspect of this rare dental anomaly is in view of difficulties encountered in performing endodontic treatment. During endodontic treatment, there is increased chance of hemorrhage and it can be mistaken for perforation. The chance of perforation is greater because of abnormal pulpal configuration. Conventional obturation material like Zinc oxide eugenol in bulk may take longer time to resorb which may delay the natural exfoliation of the tooth. So Vitapex is the best obturating material because of its resorbable properties.

Clincians shall be alerted to the possibility of taurodontism with its accompanying clinical difficulties in their usual practice.

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Case Report

Clear cell variant of calcifying epithelial odontogenic tumor

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Abstract

Clear cell variant of Calcifying Epithelial Odontogenic Tumor (CEOT) is one of the rare odontogenic tumors. These tumors have a different biologic behaviour and seem more aggressive with a higher recurrence rate. The clinical, radiographic and histopathological findings of a case of clear cell variant of CEOT in the posterior maxilla associated with an impacted third molar in a 35 year old male is discussed in this paper.

Calcifying Epithelial Odontogenic Tumor (CEOT) represents about 1% of all odontogenic tumors[1]. Occurrence of clear cells in these tumors is seen less frequently[2]. Clear cells have been described in ameloblastomas, calcifying odontogenic cysts, lateral periodontal cysts, gingival cysts and CEOT. It is not clear if the clear cell variants of the odontogenic tumors have a different biologic behaviour, even though these tumors seem more aggressive with a higher recurrence rate[3]. The clinical, radiographic and histopathological findings in a case of clear cell variant of CEOT in the posterior maxilla associated with an impacted third molar in a 35 year old male is presented in this paper.

History

In early 2005, a 35-year-old man was referred to A. B. Shetty Memorial Institute of Dental Sciences, Mangalore, Karnataka, India for a swelling on right side of face, which had increased gradually over a period of 6 months (Fig 1). On extraoral examination, the swelling was well defined, firm in consistency and extended from ala of the nose to malar prominence and from infraorbital ridge to angle of mouth, measuring approximately 3x3 cm. Skin over the swelling appeared normal. It was tender on palpation. Intraorally, the swelling extended from right maxillary tuberosity to right cuspid obliterating the buccal vestibule, with normal overlying mucosa (Fig 2). Intraoral periapical radiograph revealed a radiolucent lesion with distinct borders around the impacted third molar (Fig 3). CT Scan showed a hypodense region involving the posterior maxilla around the impacted tooth (Fig 4). Differential diagnosis of odontogenic keratocyst and odontogenic tumors like adenomatoid odontogenic tumor, CEOT were considered. Resection of the mass was performed under general anaesthesia. The resected specimen exhibited a cystic lining enclosing the impacted third molar (Fig 5).

Histopathological findings

The excised specimen was fixed in formalin and subjected to routine histological procedures. The sections were then stained with haematoxylin and eosin and congo red stains. Light microscopic examination showed connective tissue capsule and epithelial lining with tumor mass. Epithelial lining was stratified squamous epithelium and was of 3-4 cells thick in most of the areas (Fig 6). Tumor cells arising from the lining were seen arranged in the form of sheets and islands of proliferating polyhedral epithelial cells. They were closely packed with distinct cellular outline having eosinophilic cytoplasm and prominent intercellular bridges & nuclear pleomorphism (Fig 8). Several large areas of rounded clear cells appeared to arise from the CEOT tumor cells (Fig 9). Areas of homogenous hyalinised material suggestive of amyloid like substance was noted (Fig 10). It exhibited apple green birefringence under polarized light with congo red stain. Basophilic areas of calcification were noted in these homogenized areas. The tumor stroma was highly vascularised. Thus a diagnosis of CEOT was arrived at.

Discussion

The CEOT was first introduced into the scientific literature almost 50 years ago by J J.Pindborg[3]. The eponym "Pindborg Tumor" was first introduced into literature in 1967 to further describe this interesting and unique odontogenic tumor[4]. Clinically CEOT presents as a typical intraosseous, expansile, painless mass that

Fig. 1 Clinical photograph showing swelling on right side of the face.

Fig. 2 Intraoral presentation of the lesion.

Fig. 3 Orthopantomograph with a radiolucent lesion around impacted third molar.

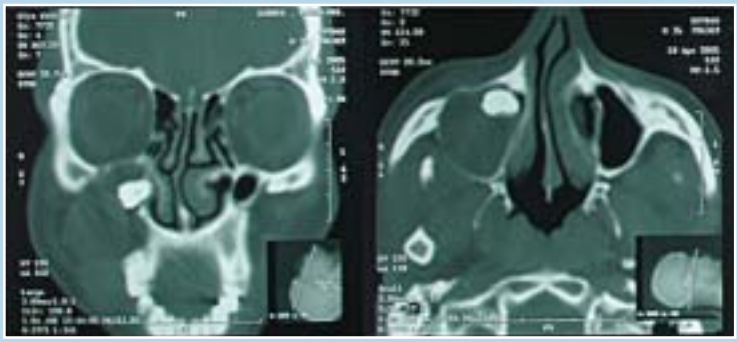

Fig. 4 CT Scan showing hypodense region in the posterior maxilla

Fig. 5 Resected specimen.

exhibits slow growth. Age of occurrence in most of the cases is between 30-50 years with no definite sex predilection. On radiographic evaluation, this lesion usually presents as a unilocular or multilocular radiolucent area. In certain cases, this neoplasm may exhibit calcified structures of variable density and size. This tumor is typically associated with an unerupted or impacted tooth, usually a mandibular third molar. Microscopically, the CEOT is composed of polyhedral epithelial cells that exhibit a granular eosinophilic cytoplasm which are believed to originate from the stratum intermedium. Other characteristic microscopic features include the presence of an amorphous, homogeneous, eosinophilic amyloid like material and foci of calcification in the form of lamellar concentric structures (Liesegang's rings), sometimes seen in large amounts. Occasionally the tumor cells may exhibit a clear, vacuolated cytoplasm (clear cell variant)[5,6.]

Histologic variants of CEOT are clear cell, pigmented, langerhans cell containing, non-calcifying, malignant, combined CEOT and AOT and CEOT with myoepithelial cells[7,8].

The clear cell variant of CEOT has been described in a limited number of cases[1,9,10]. In the literature, there is a wide age range from 16 to 68 years, and the mean age being 45.9 years, which is slightly greater than that for the more usual type of CEOT. The gender ratio is approximately equal. A majority of this variant occurs in the anterior or posterior regions of the mandible, and its frequency in the anterior mandible tends to be higher than the more usual type of CEOT. In contrast, our case exhibited in the posterior maxilla. Unlike our case, this variant is associated with an unerupted tooth less frequently.[7,8]

Clear cells may occur, in odontogenic tumors, singly or in clusters. The true nature of clear cells in CCEOT is still not known. They may result from fixation artifacts or may reflect a+ particular functional state of the tumor cells. Clear cells in CEOT appear to develop from the tumor cells by accumulation, then loss of periodic acid schiff (PAS) positive material until they appear empty[1]. Several reports have indicated the presence of clear cells with glycogen granules in the CEOT. These cells are considered to be either degenerating, or cells with some features of cytodifferentiated epithelial cells[11]. Kumamoto et al[7] reported a rare case of clear cell variant of CEOT in the maxilla where immunohistochemical and ultrastructural analysis detected cytoplasmic glycogen granules in the clear cells and positive immunoreactivities for cytokeratins 8,13 and 19; filaggrin and anti-ameloblastoma antibodies suggesting an odontogenic epithelial origin[7].

In our case a differential diagnosis of clear cell odontogenic tumor (CCOT), clear cell odontogenic carcinoma (CCOC), metastatic renal cell carcinoma and salivary gland tumors such as mucoepidermoid carcinoma, clear cell adenocarcinoma, epithelial-myoepithelial carcinoma, acinic cell carcinoma and

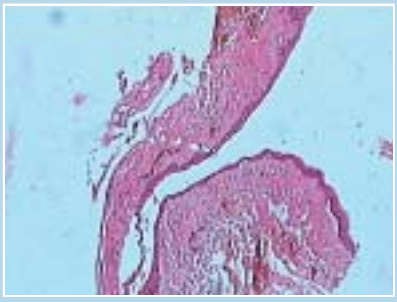

Figure 6: Stratified squamous cystic epithelial lining (Haematoxylin-eosin stain; magnification x10)

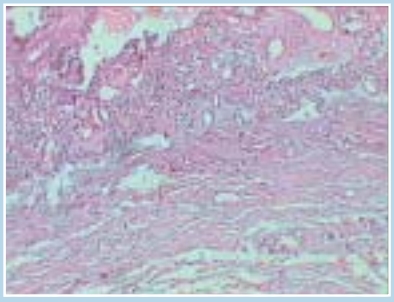

Figure 7: Tumor cells with connective tissue capsule (Haematoxylin and eosin; magnification x10)

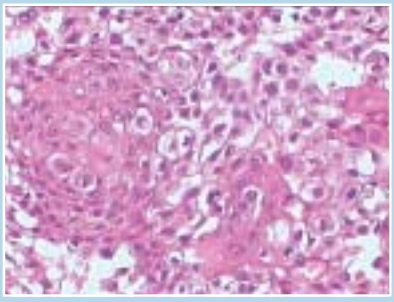

Figure 8: Polyhedral tumor cells with eosinophilic cytoplasm, nuclear pleomorphism and prominent intercellular bridges (Haematoxylin and eosin; magnification x40)

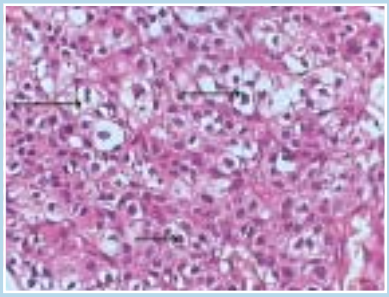

Figure 9: Tumor cells showing clear cells (arrows) (Haematoxylin and eosin; magnification x40)

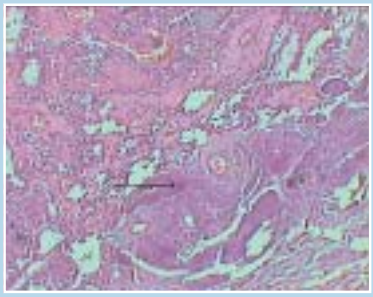

Figure 10:Tumor cells with eosinophilic homogeneous amyloid like substance with calcification (Arrow) (Haematoxylin and eosin; magnificationx10)

oncocytoma were considered. CCOT or CCOC do not exhibit amyloid like material deposition. The clear cells in CEOT lack the cellular and nuclear pleomorphism that can be found in the clear cells of clear cell odontogenic tumor and clear cell ameloblastoma. Renal cell carcinoma presents with lipid deposition and vascular components in support of its histologic diagnosis, unlike our case. Salivary gland tumors with clear cell components are usually positive for mucin, somewhere in the lesion as opposing to the present case where no mucin positivity was noted.

It is not clear if clear cell variants of odontogenic tumors have a different biologic behavior. As reported earlier, occurrence of the clear cells may prove to be a sign of increased tumor aggressiveness indicating a more radical surgical approach[1]. Recurrence rate of 22% has been found for CCEOT as compared to a 14% overall recurrence rate reported for CEOT. Recurrences have been reported in CEOT also after 16 years[2]. There is no recurrence in our case as of date.

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Prosthetic rehabilitation of a case of radical orbital exenteration for rhino-oculo-cerebral aspergilloma

* Noxy George Manjuran, ** Sreelal T. , *** Harshakumar K., **** Ravichandran R.

Abstract

Fabrication of oribital prosthesis for orbital exenteration is a challenging task. Inability to camouflage the lines of juncture between skin and prosthesis and movable tissue beds cause hardships during fabrication. A case of prosthetic rehabilitation of radical oribital exenteration for rhino-oculo-cerebral aspergilloma which received a combined orbital and ocular prosthesis is presented here, highlighting the difficulties encountered during impression making and fabrication of the prosthesis and methods adopted to reduce their negative effect on the esthetics of the final prosthesis.

Introduction

Fabrication of esthetic orbital prostheses is a challenge. Conversation with others is often initiated with eye contact and slight discrepancies in the position of the eye. Lid contour, or color of the prosthesis are immediately noticed by the observer. In orbital defects in particular, an unesthetic prosthesis creates more psychological trauma for the patient than does no prosthesis at all.[1]

Surgical resection of the orbital mass is dependent on its nature and extent. Orbital exenteration involves the en bloc removal of all contents of orbit including eye globe, optic nerve, extra-ocular muscles and nerves etc. As the surgical margins of the defects extend beyond the confines of the orbit, prostheses are less esthetic because of the inability to camouflage the lines of juncture between skin and prosthesis. As the prosthesis extends beyond the orbit, movable tissue beds may be encountered, resulting in further exposure of the lines of juncture.

Case Report

A 45 yr old male patient was referred to the Dept of Prosthodontics, Govt. Dental College Trivandrum from Medical College Trivandrum with past history of multiple surgeries for left sided nasal polyp (Fig 1).

The histopathological diagnosis was recurrent rhinocerebral, ethmoid and left orbital aspergilloma. (Fig 2, 3) He had underwent bifrontal craniotomy, left orbitotomy and sub-total excision of the granuloma. During the immediate post-operative period, he developed central retinal artery occlusion. He further developed left sided proptosis, absent vision and palsy of 3, 4 and 6 cranial nerves and for which he later underwent left orbital exenteration, total removal of tumour and orbital skin grafting. (Fig 4, 5)

Treatment Plan

The patient was an unsuitable candidate for implant-supported prosthesis as there was not much bony wall of orbit, left behind after surgery.[2] (Fig 6)

An "Ocular-cum-orbital prosthesis" was planned for the patient. A two stage impression procedure was decided upon. Prior to beginning of fabrication, the patient was informed of the nature of the defect and the choices available for restoration [3]. Photographs of prostheses restoring similar defects were displayed, to educate him.

Impressions

The impression making was executed in two stages. The first stage was to record the "intra-orbital" portion. The second stage was to record the facial component by a facial impression technique. Initial impression of the surgical defect was made with putty silicone impression material. The impression was poured, in dental stone. A custom "orbital" impression tray was fabricated with autopolymerizing acrylic resin (Fig 7). The purpose of the facial impression was to record the periorbital tissue bed as accurately as possible. Prior to obtaining the impression, the custom impression tray was inserted into the surgical defect. A string was attached to the stem to apply traction to avoid relative posterior displacement of the tray. A thin layer of irreversible hydrocolloid impression material was applied over the adjacent tissues. Unfolded gauze was

Fig.1 Picture at the time of presentation to the department

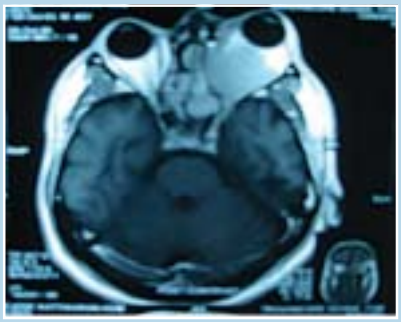

Fig. 2 Pre-operative MRI picture showing a homogeneously enhancing mass arising from the left sided ethmoid region, extending into the left orbit and into the anterior cranial fossa floor.

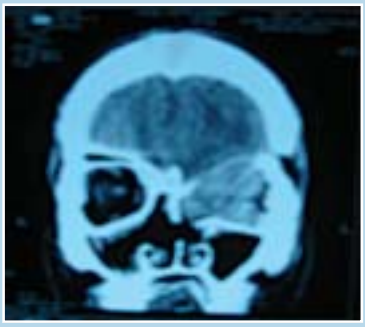

Fig. 3 Pre-operative coronal CT section demonstrating the orbital mass

Fig. 4 The post-operative axial CT image shows absence of globe, extraocular muscles, optic nerve and lateral walls of the ethmoid air cells

Fig. 5 Post-operative coronal CT section demonstrates the defect in the roof of the left orbit and communication with left nasal cavity

Fig. 6 Closer view of the defect

embedded within the material. Several thin layers of impression plaster was applied (Fig 8). During the procedure, the patient was asked to keep the normal eye closed in a relaxed manner to prevent undesirable contraction of residual lid musculature on the side of defect and to prevent distortion of the defect (Fig 9).

A hollow acrylic bulb was prepared from the intra-orbital portion of the defect on the cast (Fig 10). This bulb was found to be snugly fitting in the patient's defect. A stock ocular prosthesis was selected. This was attached to the bulb with wax and the entire apparatus was transferred to the patient (Fig 11). The patient was made to stand in a relaxed position with the normal eye focused on a distant point. The pupils were used as reference points for evaluating ocular positioning. This acrylic bulb along with the custom eye was invested and processed in the conventional manner[4].

Sculpting

At the next appointment, sculpting of the periorbital tissues was effected to mimic those of the normal eye, as closely as possible. (Fig 12) To ensure appropriate lid contour of the normal eye, the sculpting was performed during the middle of the day. The patient was at rest and relaxed to avoid fatigue and anxiety affecting lid contours. The lines of juncture were feathered and ended beneath the eyeglasses or the shadows cast by them. The lines of juncture were kept deliberately not beyond the area covered by the eyeglass frames, for, such margins were difficult to camouflage. The acrylic bulb with the custom eye was then invested in the conventional fashion. The prosthesis was processed in acrylic resin and tinted both intrinsically and extrinsically[5]. Synthetic eyelashes were attached to the underside of the upper eyelid and the prosthesis was completed. (Fig 13, 14)

Conclusion

Fabrication of an ocular-cum-orbital prosthesis is a time-consuming and laborious procedure, but brings

Fig 7. Diagnostic cast and a custom "orbital" impression tray.

Fig 8. Facial impression

Fig 9. Master cast

Fig 10. Hollow acrylic bulb in-situ

Fig 11. Stock ocular prosthesis and the hollow bulb

Fig 12. Try-in of the waxed prosthesis

Fig 13. The final prosthesis with eyelids and synthetic eyelashes

Fig 14. Completed prosthesis in-situ

about a rewarding outcome as far as the self esteem of the patient is concerned. The two-stage orbital impression technique employed provides better retention than one-stage technique.

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Case Report

Oral lichenoid lesion in a child

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Abstract

Hyper sensitivity to amalgam has been reported in some individuals due to mercury released either by corrosion or electrochemical reaction which clinically presents as oral lichenoid reactions. Such lesions have been reported more commonly in elderly individuals. The article describes a case of oral lichenoid reaction in a 12 year adolescent. The probable causes, diagnosis and treatment of such lesions are discussed.

Amalgam has been used as a dental restorative material since its inception in 1831 for people all over the world, with few adverse effects. It is good for dental use because it is strong, long lasting, well fitting, easy to handle, and cheap[1]. Conventional silver amalgam fillings consist of about 50% mercury and 50% alloy powder containing silver, tin, copper, and zinc. Mercury and mercury compounds appear to be the most common allergens in amalgam, with the other metals being rarely responsible for allergic reactions[2]. The biocompatiblility of dental amalgam or more specifically, the toxic and allergic potential of mercury, its main constituent has received tremendous attention in recent years[3].

Biodegradation of dental materials is of fundamental importance to their biocompatibility because release of elements from them is nearly always necessary for an adverse reaction to arise. With amalgam alloys, mercury may be released due to dissolution, evaporation, corrosion or other form of degradation. Electrochemical reactions between amalgam and oral fluids; mechanical forces to which the restoration is subjected are major form of interaction that result in degradation of amalgam. The corrosion resistance of the alloy is due to formation of a protective oxide film. Under certain circumstances the stability of the protected film can be damaged and metallic mercury is released[4]. Released mercury is taken up by oral soft tissues. In some patients this results in toxic or allergic effects that present as *oral lichenoid lesions or oral lichenoid reactions* (OLL).[5]

The clinical and histologic appearance is similar to idiopathic oral lichenplanus, a mucocutaneous disorder. But unlike oral lichenplanus, the lesion arises in proximity to amalgam restorations, especially which are defective. Though the exact etiology is not clear, it is said to be a form of allergic contact stomatitis[2]. The lesion has been more commonly reported in elderly individuals. This case report describes a case of oral lichenoid reaction in a child patient.

Case report

A 12 year old female patient had a complaint of burning sensation on left cheek for the past one week. Her medical history was not significant. Oral examination revealed presence of a white lesion on left buccal mucosa. The lesions measured approximately 10mm in length at the level of occlusal plane of the occluding molars extending from the region corresponding to first permanent molar to second molar. The lesion showed a reticular pattern with a reddish inflamed area surrounding it (Fig 1). The patient had silver amalgam restorations on 16, 26 and 46. 36 had an amalgam restoration with secondary caries. (Fig 2 & 3) 11, 12 had a class III cavity and 37, 47 had Class I cavity. Patient's oral hygiene was fairly good.

A clinical diagnosis of oral lichenoid reaction was made. The parent was informed of the condition and a decision to replace amalgam restoration on 36 and 46 was made. Interestingly, the mother also had a history of white lesions occurring on buccal mucosa which subsided after the restorations were replaced with ceramic crowns.

At 3 month follow up the burning sensation had subsided and healing of the lesion was noted. At 6 month follow up normal mucosal appearance was seen.

Discussion

The term Oral lichenoid lesion (OLL) is commonly used to describe oral lichenplanus (OLP) lesions that develop in contact with dental restorations, lesions associated with medications, those with graft versus host disease and lesions associated with systemic diseases[6]. The prevalence of OLL is seven times higher in women than men. It is most prevalent in 45-65 year age group[7]. Clinical appearance is as white or red patch with pain and soreness accompanying in most cases. Four types are distinguished: reticular, erosive, atrophic and ulcerative. The most common areas of location are molar and retromolar areas of buccal mucosa and lateral border of the tongue. Lesions are in complete or parital contact with amalgam restorations[3]. Clinically and histologically the lesions cannot be distinguished from

Fig. 1 Lichenoid lesion in the left buccal mucosa

Fig. 2 Amalgam restorations in upper arch

oral lichenplanus[8]. Lichenplanus is a cutaneous disease with or without oral manifestations. Oral lichenplanus has similar clinical manifestations except for the absence of amalgam restorations in proximity to the lesions. Patients are usually between 30-60 years, more commonly women. Lichen planus is thought to be a cell mediated reaction with T lymphocytes as the main effector cells[9].

Topographical relationship between the lesion and restoration is the main difference between OLL and OLP when the medical status and type of lesions were similar. If OLL is related to a causative factor, the removal of this factor may result in resolution of the clinical lesion. This contrasts with patients having OLP who may require palliative care and monitoring over many years. The premalignant nature of OLP is a major concern[3,10].

The etiology of OLL is still uncertain. It may be oral manifestation of chronic irritation in some patients or clinical result of delayed hypersensitivity in others. Fernstrom et al [11] were the first of many authors to claim a connection between type IV allergy to mercurial compounds released from dental amalgam and OLP. Immunocytochemical studies support the notion that it is a true delayed hypersensitivity reaction with transepithelial route of entrance of haptens[12]. The corrosion products are thought to act locally to alter the antigenecity of basal keratinocytes that then become the target for cell mediated autoimmune damage. Bolewska et al [5] reported substantial accumulations of mercury were visible in both fibroblasts and macrophages as compared to patients with oral lichenplanus. Regardless of the cause, a long period of exposure seems to be required before OLL manifests.

Clearing of oral lesions after removal of amalgam restorations in such patients has been reported. This improvement was found within one week to 3 months of replacing amalgam restorations with greatest improvement when the lesion is in close contact with OLL[8]. The substitution of amalgam by another material is based upon a positive patch test to mercury and/or anatomical relationship with amalgam restoration. However the clinical value of epicutaneous patch test to materials used in dentistry is unclear and regression of oral mucosa lesions after removal of amalgam has been found regardless of the results of the patch test. Dunsche, et al [7] suggest that the removal of amalgam fillings can be recommended in all patients with symptomatic OLR associated with amalgam fillings because an improvement or healing of OLR can be expected for 97% of patients if no cutaneous LP is present.

Patch test is often used for the diagnosis of allergic contact dermatitis. Allergic contact stomatitis is associated with actual or potential allergic hypersensitivity of the skin and hence patch test is often employed. Patch test results may vary substantially depending on the compound that is used. Patch testing to mercury compounds is problematic, with possibility of irrelevant irritant reactions. For example, mercury chloride used in patch tests has been suggested to be highly irritant[2]. A limiting factor of the patch test is false positive or false negative results arising from the test methodology or concentration of the test compound. A positive test result to one compound of mercury does not imply a response to all compounds or mercury itself. Even patients with negative patch tests showed healing of lesion after replacement of restorations. This was shown in a study by Issa et al.[8] where they concluded that the patch test is a limited predictor of amalgam replacement. They also showed that the topographical relationship between lesions and restorations is a more useful prognostic indicator.

Parafuctional habits may also exacerbate lesions close to restorations. Psychological aspects, life style of patient, genetic susceptibility have also been proposed to be predisposing factors[13]. Immunological or toxic reaction to plaque accumulation on the surfaces of the restorations has also been suggested as a cause of OLL. Such lesions disappear with improved oral hygiene[14]. It is also noted that the restorations associated with

Fig. 3 Amalgam restorations in lower arch

Fig. 4 Healing of the lesion after the restorations on left side were replaced with composite

lichenoid lesions are poorly contoured, corroded and old. Hence corrosion of amalgam restoration or perhaps the biofilm present on such restorations may contribute to the development of hypersensitive reaction rather than material itself[15].

Substitute materials for amalgam include gold, composite, porcelain, glass ionomer and acrylic[10]. No material is absolutely safe and adverse reactions have reported to these materials also, but are far fewer than amalgam[16]. Removal of amalgam restorations in contact with OLL is sufficient for adequate healing in most cases. In long standing cases total removal of all amalgam restorations, even if it is not in contact with the lesion is recommended.[7]

Conclusion

Lichenoid reactions to amalgam have not been commonly reported in children. In case of a white lesion in proximity to amalgam restoration lichenoid reaction should be considered in differential diagnosis in children. The clinical appearance and healing of the lesion after replacement of amalgam restoration is diagnostic of this lesion. Dental amalgam has been proven to be an effective restorative material in wide range of clinical situations with considerable longevity. As lichenoid lesions due to amalgam have been reported in only minority of patients, amalgam can still be considered as a safe material.

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Tobacco and alcohol related mucosal lesions

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Tobacco has been variously hailed as a gift from the Gods, the miraculous cure all for life's physical ills, a solace to the lonely soldier or sailor, a filthy habit, a corrupting addiction, and the greatest disease-producing product known to man. It is now unequivocally clear that tobacco use in any form; be it smokeless or smoking, is dangerous, destructive and deadly. It is very aptly said that the mouth is meant for nourishment and not for punishment and should not be used as an entry pass for ruthless disease such as cancer. In this scenario indeed, it is unfortunate and disappointing that India happens to be the third largest producer and consumer of tobacco.

Columbus is credited to have discovered tobacco six hundred years ago in Cuba and that medical historians believe it to have migrated to India some four hundred years ago, but even more than 2000 years old ancient Indian scriptures contain its reference. However, it is neither a matter of pride nor social acclaim but simply a scourge of ignorance, otherwise how do we explain the use of tobacco smoking and smokeless tobacco as a symbol of prestige, Prosperity and Paragon for centuries all over the world.

The smoking of tobacco is supposed to have originated in remote antiquity from the religious ceremonies of the people of Central America and Mexico. There are ancient stone carvings, which show Maya priests blowing tobacco smoke through a pipe towards the sun and the four points of the compass. Time has turned the Maya priests into a vague memory, but the practice of smoking introduced by them has lived on. Sadly on these myths, beliefs and social damages, Tobacco industry belligerently burgeoned before it could dawn in the second half of the twentieth century that it has already led millions to goals and gallows. The daunting statistics abounding highlights the agony, anguish and affliction tobacco has inflicted for centuries on mankind.

The WHO data (The Tobacco Atlas – 2002) says, "Tobacco kills morethan AIDS, legal drugs, illegal drugs, road accidents, murders and suicide combined. Tobacco kills more men in developing countries than in the industrialized countries. Alarmingly, of the present living population, half a billion people will eventually be killed by tobacco. Despite all the tantalizing facts and figures regarding tobacco ill effects, the number of new recruits to tobacco habits is rising alarmingly. Even toady, despite all awareness programmes the average number of cigarettes smoked per day per head in the world is 15. In India, which has reached up to the third stage of demographic cycle, the exact figures are not available but are expected to be between 14 to 22.

On a worldwide basis, the present phase of the fight against cancer is characterized by particular emphasis on certain areas that includes the detection and elimination or avoidance of risk factors in carcinogenesis, the diagnosis of precancerous stages and improving the prognosis by starting optimum therapy as possible. It was the great educational reformer Pestalozzi who said, observation is the basis of all discoveries, and this holds true very particularly for the detection of oral cancer and its precancerous stages. Tobacco users need to become more informed about the relationship between tobacco use and oral disease. Indeed, dentistry has been involved in tobacco related issues for years. Who better to address this important health issue with patients than individual dentists and the profession as a whole?

The state of Kerala is located on the West coast of Southern India with an area of approximately 38,900km^2. Kerala has a high prevalence of chewing tobacco and smoking habits, with 59.1% of the population practicing atleast one of the tobacco habits leading to a high risk of oral cancer.

Oral cancer is one of the foremost prevalent cancers in Kerala though this is preventable and curable if deleted at an early stage. It has a high mortality rate due to late detection 90-95% of all oral malignancies are squamous cell carcinomas. This is one of the 10 most common cancers in the world and a major health problem in India. It forms 10% of the establish new cancers that occurs in all parts of the body each year. Generally oral cancer occurs more commonly among men than women depending upon the content and type of tobacco habits prevalent among them. According to WHO reports about 90% of oral cancers in South East is attributed to tobacco use. A growing recent menance is the use of commercial chewable tobacco (Pan sugar, gutta percha etc). The user of which are affected by oral lesions at a younger age.

Most cases of oral cancer are preceded by a number of oral precancers. In a study conducted in the Department of Oral Medicine & Radiology, Govt.

Tobacco related oral lesions

Leukoplakia

Leukoplakia with malignant transformation

Commissural Leukoplakia

Oral Submucous Fibrosis

Oral Submucous Fibrosis with ca-tongue

Oral Submucous Fibrosis with leukoplakia

Dental College, Trivandrum during the period Dec 2002 to May 2003 more than 28.4% of patients with tobacco and alcohol consumption had oral precancers or cancers. Whereas less than 0.72% of non habitués had oral cancers and non had oral precancers. This shows that precancers may be warning signals in those with deleterious oral habits. It is evident that oral health care promotion directed towards moderation of alcohol consumption and avoiding tobacco use it may have the potential to reduce the frequency of significant oral prevalence of cancers.

The study shows the recent trend in the younger generation indulging in the habit of chewing commercial arecanut products, which they probably think are safer than the other tobacco products. Single habitués predominate than that those mixed habits.

Common oral lesions seen are namely squamous cell carcinoma, leukoplakia, oral submucous fibrosis, candidiasis and lichenoid reactions and nicotina palatine.

The total duration of the habits and the occurrence of lesions were observed to have positive association. Majority of patients with cancer, leukoplakia and oral submucous fibrosis had a longer duration of habit of smoking chewing and alcohol consumption.

While the betel tobacco quid chewers manifested oral submucous fibrosis within a span of more than twenty years, those with commercial arecanut habit manifested oral submucous fibrosis with in 5 years of initiation of habit.

This absence of betel leaf and its carotene with higher proportion of dry weight of nuts was responsible for oral submucous fibrosis. Betel leaf many afford some protection to the oral mucous membrane against the harmful alkaloids of areca nut. There are already indications in India of an increased occurrence of oral submucous fibrosis due to this product and it is likely to reach an alarming proportion in the near future. Its implication is that oral cancer occurrence would also increase correspondingly. This phenomenon observed is quite alarming and deserves special caution. Aggressive campaigns aimed at elimination of commercial areca nut chewing are thus warranted in addition to contained efforts to prevent the spread of other tobacco habits.

Encouragingly primary prevention has been demonstrated to be practicable and useful in reducing the incidence of OSF and therefore efforts must be initiated in this direction.

An inverse relationship between socioeconomic status and the presence of habits and oral mucosal lesions was observed. Betel chewing was the predominant habit in single and multiple habitués and in those who had oral cancer, oral submucous fibrosis and leukoplakia. Regarding oral cancer, the buccal mucosa was the most common site of involvement.

Majority of the patients with oral cancer were in the age group of 56-65 years whereas in those without habit, the shift to the younger age group of 36-45 years was observed. The occurrence of oral cancer in females without habits in a younger age group was noted which

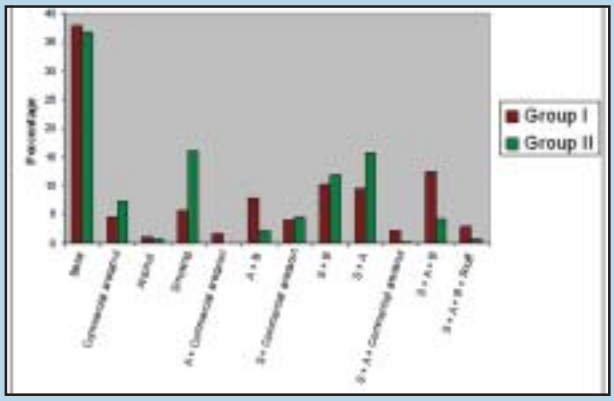

Fig. 1

Group I – Habitués with lesions
Group II – Habitués without lesions

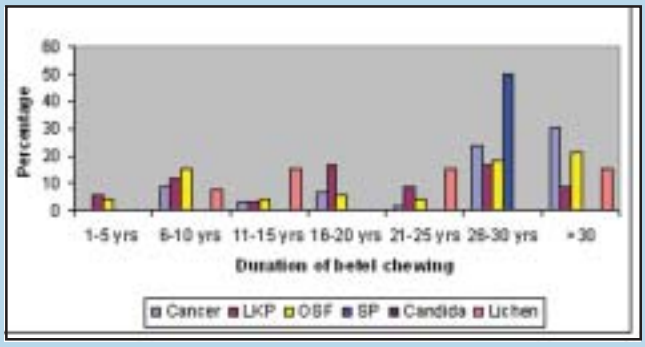

Fig. 2

suggested the possibility of various etiological factors in oral carcinogenesis other than tobacco and alcohol. The shift in age to a younger age group noted in oral submucous fibrosis patients high lights the fact that the commercial arecanut products that are marketed in attractive foil packs and tins mislead the younger generation. It was observed that the frequency and the duration of habit play a significant role in developing oral precancers and cancers. It was also noted that while the conventional betel chewers developed oral submucous fibrosis in a long span of time, the commercial arecanut chewers developed oral submucous fibrosis within a very short span of time. Majority of the patients with oral cancers / precancers were non-vegetarians.

All forms of tobacco and alcohol are harmful and have been found to carry relative risks of disease, greatly increasing the burden of health expenditure, throughout the world, including India. The absolute numbers have increased because of the steady increase in the world population and its progressive aging with major implications for cancer control.

Regardless of its form, since tobacco use is the most clearly identified cause of oral cancers; cancer screening and tobacco cessation counseling by dental practitioners should be emphasized as an essential strategy in comprehensive tobacco control effects. Oral cancer screenings may provide an excellent opportunity for raising public awareness and providing patient education, and counseling regarding behavioural risk factors and how to decrease them.

Occurrence of precancerous lesions help in identifying a subset of the population at higher risk to develop oral cancer from among a high risk population of tobacco habitués. This has obvious implications for instituting preventive measures. The preventive measures should be in the form of curbing the use of tobacco products and alcohol through public education. The educational efforts should be targeted against the rural population, so that would result in a significant health benefit to the population.

When it comes to the prevention of oral cancer-related deaths, reducing the use of tobacco and alcohol related products should be a priority for all dental professionals. Even brief interventions can help. Dentists have more reason than ever to become informed participants in tobacco intervention techniques. The concept of the role of Dental health has changed considerably during the recent years, now it is not mere alleviation of pain and disease but it aims at maximum physical and social-well being. A more comprehensive dental health care programme is required which includes Promoting positive Dental health, Preventing disease, Detecting and treating disease at the earliest opportunity so as to prevent disability consequences or at least limit them to the minimum extent and rehabilitating individual, Health education to the public and advancement of research in this field.

Thus the dissemination of information about oral precancers and cancers and awareness of the disease, especially among those who have high risk factors, may lead to a decrease of risk factors associated with the disease, as well as early detection and reduction in incidence and survival rates in our country.

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Research Findings

Reducing stress can positively affect your oral health, and potentially your bottom line.

CHICAGO— February 2, 2009— Faced with plummeting investments and an unsteady job market, many Americans are feeling the effects of the recent economic crisis. In fact, a recent study by the American Psychological Association found that over 80 percent of Americans rank money and the economy as significant causes of stress. And while chronic stress can lead to a host of health problems, including a weakened immune system and increased blood pressure, it can also take its toll on periodontal health. If left untreated, periodontal disease may result in even more serious, and potentially expensive, overall health complications.

Stress and Your Smile

According to Dr. David Cochran, DDS, PhD, President of the American Academy of Periodontology and Chair of the Department of Periodontics at the University of Texas Health Science Center at San Antonio, stress can make an individual more susceptible to harmful habits that negatively impact oral health. "Stress may lead an individual to abuse tobacco or alcohol, and to possibly even neglect his or her oral hygiene. These lifestyle choices are known risk factors for the development of periodontal disease, which has been connected to several other chronic diseases, including heart disease and diabetes.

A study published in the February 2009 Journal of Periodontology confirmed that stress may interfere with oral hygiene. In the study, 56 percent of participants self-reported that stress led them to neglect regular brushing and flossing. In addition, the hormone cortisol may also play a role in the connection between stress and gum disease. Chronic stress is associated with higher and more prolonged levels of cortisol; previous research has found that increased amounts of cortisol in the bloodstream can lead to a more destructive form of periodontal disease.

"During periods of high stress such as what we are currently experiencing in this economic climate, individuals should seek healthy sources of relief such as regular exercise, eating a balanced diet, and getting adequate sleep," says Dr. Cochran. "Doing so can help maintain a healthy mouth, and potentially help ward off other negative health concerns."

Preserve Your Gum Line, Improve Your Bottom Line

Reducing stress in an effort to avoid gum disease may not only help sustain overall health, but it might also help your pocketbook as well. A study published in the Journal of Periodontology, 2007 found that preventing periodontal disease may be one way to help lower your total health care expenses. In the study, patients with severe periodontal disease had 21 percent higher health care costs as compared to those with no periodontal disease. Severe periodontal disease (periodontitis) involves bone loss and diminished tissue attachment around the teeth. And since past research has shown that periodontal disease may lead to other serious health conditions, striving to maintain oral health may help diminish the need to incur additional health care expenses, and ultimately help reduce overall health care spending.

"In these stressful times I encourage my patients to pay even more attention to their teeth and gums," says Dr. Cochran. "And in turn, since preventing gum disease may help reduce overall health care expenses, maintaining a healthy mouth may actually be a stress reliever in itself."

Research suggests chronic inflammation links gum disease to other disease states.

CHICAGO—November 24, 2008—Brush after every meal. Floss daily. See your dental professional regularly. These instructions make sense coming from your dentist to help you sustain your oral health. But now not only dentists, but also many physicians are stressing the importance of maintaining oral health in an effort to keep the rest of the body healthy. Research has long suggested an association between gum disease and other health issues— including heart disease, stroke and diabetes— but now scientists are beginning to shift their focus to understanding why these connections exist. An emerging theory, and one gaining support from researchers worldwide, is that inflammation may link the mouth to the body.

Inflammation is the body's instinctive reaction to fight off infection, guard against injury or shield against irritation. Inflammation is often characterized by swelling, redness, heat and pain around the affected area. While inflammation initially intends to heal the body, over time, chronic inflammation can lead to dysfunction of the infected tissues, and therefore more severe health complications.

According to Dr. Susan Karabin, Past President of the American Academy of Periodontology (AAP) and a practicing periodontist in New York City, periodontal disease is a textbook example of an inflammatory disorder: "For many years, dental professionals believed that gum disease was solely the result of a bacterial infection caused

by a build-up of plaque between the teeth and under the gums. While plaque accumulation is still a factor in the development and progression of gum disease, researchers now suspect that the more severe symptoms, namely swollen, bleeding gums; recession around the gum line, and loss of the bone that holds the teeth in place, may be caused by the chronic inflammatory response to the bacterial infection, rather than the bacteria itself."

Periodontists, the dentists specially trained in the prevention, diagnosis and treatment of gum disease, hypothesize that this inflammatory response to bacteria in the mouth may be the cause behind the periodontal-systemic health link. Many of the diseases associated with periodontal disease are also considered to be systemic inflammatory disorders, including cardiovascular disease, diabetes, rheumatoid arthritis, chronic kidney disease and even certain forms of cancer, suggesting that inflammation itself may be the basis for the connection.

"More research is needed to pinpoint the precise biological mechanisms responsible for the relationship between gum disease and other disease states," says Dr. Karabin. "However, previous findings have indicated that gum disease sufferers are at a higher risk for other diseases, making it more critical than ever to maintain periodontal health in order to achieve overall health."

To avoid gum disease, Dr. Karabin recommends comprehensive daily oral care, including regular brushing and flossing, and routine visits to the dentist. If gum disease develops, a consultation with a dental professional, such as a periodontist, can lead to effective treatment. Patients diagnosed with gum disease should also disclose all health conditions to his or her dental professional, and be sure to update other health care professional on his or her periodontal health.

Antioxidants in green tea may help reduce periodontal disease

CHICAGO—March 5, 2009—With origins dating back over 4,000 years, green tea has long been a popular beverage in Asian culture, and is increasingly gaining popularity in the United States. And while ancient Chinese and Japanese medicine believed green tea consumption could cure disease and heal wounds, recent scientific studies are beginning to establish the potential health benefits of drinking green tea, especially in weight loss, heart health, and cancer prevention. A study recently published in the *Journal of Periodontology,* the official publication of the American Academy of Periodontology (AAP), uncovered yet another benefit of green tea consumption. Researchers found that routine intake of green tea may also help promote healthy teeth and gums. The study analyzed the periodontal health of 940 men, and found that those who regularly drank green tea had superior periodontal health than subjects that consumed less green tea.

"It has been long speculated that green tea possesses a host of health benefits," said study author Dr. Yoshihiro Shimazaki of Kyushu University in Fukuoka, Japan. "And since many of us enjoy green tea on a regular basis, my colleagues and I were eager to investigate the impact of green tea consumption on periodontal health, especially considering the escalating emphasis on the connection between periodontal health and overall health."

Male participants aged 49 through 59 were examined on three indicators of periodontal disease: periodontal pocket depth (PD), clinical attachment toss (CAL) of gum tissue, and bleeding on probing (BOP) of the gum tissue. Researchers observed that for every one cup of green tea consumed per day, there was a decrease in all three indicators, therefore signifying a lower instance of periodontal disease in those subjects who regularly drank green tea.

Green tea's ability to help reduce symptoms of periodontal disease may be due to the presence of the antioxidant catechin. Previous research has demonstrated antioxidants' ability to reduce inflammation in the body, and the indicators of periodontal disease measured in this study, PD, CAL and BOP, suggest the existence of an inflammatory response to periodontal bacteria in the mouth. By interfering with the body's inflammatory response to periodontal bacteria, green tea may actually help promote periodontal health, and ward off further disease. Periodontal disease is a chronic inflammatory disease that affects the gums and bone supporting the teeth, and has been associated with the progression of other diseases such as cardiovascular disease and diabetes.

"Periodontists believe that maintaining healthy gums is absolutely critical to maintaining a healthy body," says Dr. David Cochran, President of the AAP and Chair of the Department of Periodontics at the University of Texas Health Science Center at San Antonio. "That is why it is so important to find simple ways to boost periodontal health, such as regularly drinking green tea—something already known to possess certain health-related benefits."

Diagnose

Diagnose the following case

*** Rani Mol P., ** Girija .K.L., *** Tinky Bose, **** Anita Balan**

Fig 1

Fig 2

Fig 5

Fig 3

Fig 4

A 56 year old lady came to the OPD of Government Dental College, Thiruvananthapuram, with a painful swelling of the lower part of right side of face of 1 week duration. Patient had first noted the swelling 1 year back. The swelling gradually increased to the present size. She had pain in that region since 1week. There was history of extraction of 42-46 four years back due to decay.Extraoral examination revealed a firm tender swelling of size 4x3 cm on the right side of face extending 2 cm from the angle of the mouth to 2cm anterior to the angle of mandible (Fig 1). There was a slight expansion of the lower border of mandible. On intraoral examination there was a diffuse swelling of 4x5cm with obliteration of the right mucobuccal fold and expansion of the buccal cortical plate extending 1cm from the midline and posteriorly beyond the third molar region (Fig 2). The swelling was firm but was tender towards the posterior region.

Radiographic examination revealed well defined multilocular radiolucency with scalloped margins of size 4x5cm extending 1cm from 41 to the mesial root of 48(Fig3,4). There was resorption of the mesial and distal roots of 47. There was marked expansion of the buccal cortical plate and slight expansion of the lingual cortical plate (Fig 5).

1. What is the most probable diagnosis?
2. What are the differential diagnoses?

*** PG student, ** Lecturer Trainee, *** Assistant Professor, **** Prof and HOD, Dept of Oral Medicine and Radiology, Government Dental College, Thiruvananthapuram**

Answers

1. Ameloblastoma
2. a. Odontogenic Keratocyst.
   b. Dentigerous cyst.

Ameloblastoma usually presents as well defined multilocular lesion but in rare cases may present unilocular appearance. In most cases there will be expansion of cortical plates. OKC usually will not produce marked expansion of cortical plates. Dentigerous cyst is always associated with the crown of an impacted tooth.

Quiz

** Ranimol P. , *** Anita Balan

Q1. A 46 yr old male presented with a vesicle of buccal mucosa of a few days duration and urticarial rashes of skin. He had no ocular or genital manifestations. In histology the basement membrane was attached to the connective tissue rather than epithelium. The most probable diagnosis for this condition is

A. cicatricial pemphioid B. bullous pemphioid
C. Behcets disease D. Hailey Hailey disease

Q2. The site with the highest risk of malignant transformation in leukoplakia is

A. ventral surface of tongue B. floor of mouth
C. lip D. buccal mucosa

Q3. Identify the lesion

A. mucocele B. lipoma
C. ranula D. epidermoid cyst

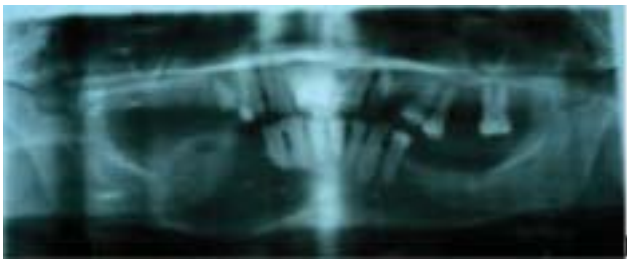
Q4. An ulceroproliferative lesion of more than 4 cm size was noted on the lower left alveolar ridge of a patient along with bilateral node (<3cm) involvement. Stage the pathology.

A. T2 N0 M0 B. T3 N2 M0
C. T4 N2 M0 D. T4 N1 M1

Q5. A 13 yr old boy came with a complaint of discolouration of both his primary and permanent dentition. His siblings and one of his parents also had similar dentition. The most probable diagnosis

A. Amelogenesis imperfecta
B. Dentinogenesis imperfecta
C. Flurosis
D. Tetracycline staining

ANSWERS 1.B, 2.B, 3.C, 4.C, 5.A, 6.B, 7.C, 8.A, 9.B, 10.D



Q6 The multilocular radiolucency seen in the radiograph of a 54 yr old female is most likely to be

A. Dentigerous cyst B. Ameloblastoma
C. Adenomatoid odontogenic tumor
D. Central ossifying fibroma

Q7 The syndrome related to unilateral vesicle formation associated with pain is

A. Trotter's syn
B. Eagle's syn
C. Ramsay hunt syn
D. Reiter's syn

Q8. This is a file photograph of the most rapidly growing tumor which almost doubles its size in 1-3 days. Which is this aggressive tumor?

A. Burkitts lymphoma
B. Rhabdomyoma
C. Sarcoma
D. Hemangioendothelioma

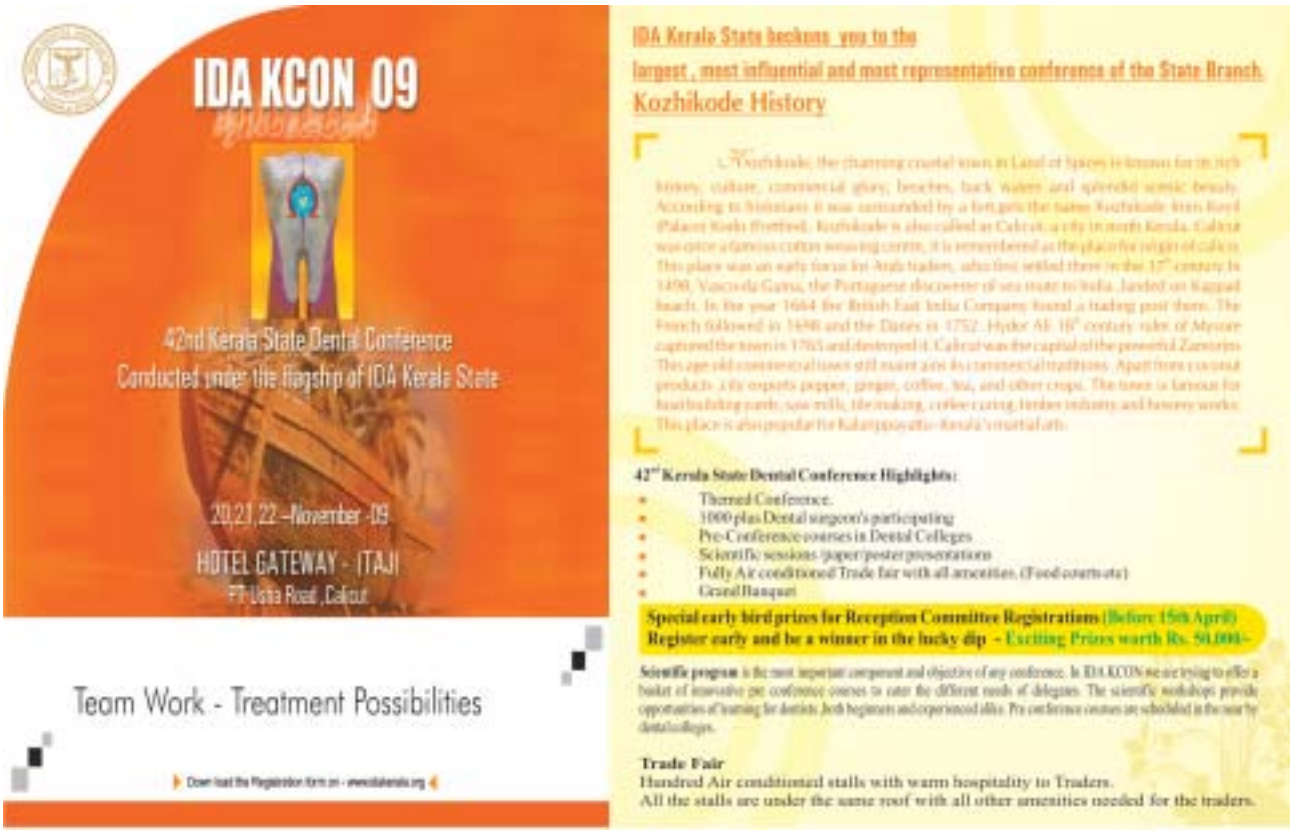
Q9. The most accurate diagnosis for this lesion can be obtained by

A. FNAC
B. Incisional biopsy
C. Radiographs
D. Exfoliative cytology

Q10. Which is the first line of treatment for this condition

A. Flap surgery
B. Antimicrobial therapy
C. Gingivectomy
D. Scaling and root planning

***Postgraduate Student, **Professor & Head,
Dept. Oral Medicine & Radiology,
Govt. Dental College, Trivandrum.**



Golden Jubilee Celebrations of GOVT. DENTAL COLLEGE

THIRUVANANTHAPURAM (1959-2009)

Highlights of Golden Jubilee Celebrations

Family Get together : 11th and 12th July

CDE Programmes : 2nd Saturdays / 2nd Sunday

Valedictory Function : 20th December '09

Marching towards Greater Heights.....

Organsing Secretary: Dr. T. Sreelal, Mob: 09847068404
Govt. Dental College, Medical College Campus,
Thiruvananthapuram - 695 011. Tel: 0471-2444092,
www.gdctvm.net

Attention Trivandrum Dental College Graduates!

The Golden Jubilee committee earnestly plea to one and all of you to send your recent contact address, mobile no. and email ID to gdctvm@gmail.com or addressed to the Principal of the college to prepare the updated alumni directory for the midyear family get-together.

IDA Kerala State Dental Doctors Sports meet

IDA Kerala State Dental Doctors Sports meet 2009 will be held at D.D. Retreat, Thammanam, Ernakulam on the 9th of August 2009 from 8:00 AM to 3:00 PM. Dr. Vinod Mathew is the Sports Committee Chairman and the events included for tournament are Shuttle Badminton and Table Tennis. In Shuttle Badminton, Games will be held in the mens doubles (2 teams per branch) and singles(2 singles teams), 45 & above doubles (1 team) and singles (2 teams), womens singles (2 teams) and doubles (1 team) categories.

In Table Tennis, games will be held in Mens and Womens section, each of those sections will have 2 doubles and 2 singles teams per branch. For more details contact Dr. Vinod Mathew @ 94470 55598 or drkattookaran@yahoo.co.uk . Brochures regarding the same event will be sent to all the Local Branch Secretaries and presidents soon.

Attention Members

The cut off date for the concession in affiliation fee for joining IMAGE is Sept 31st.The affiliation fee will be Rs 5000/- instead of Rs 3000/ - from Oct 1st onwards.

For Hepatitis B Vaccination programme **"Srradha 2009"** Hindusthan Latex has agreed to provide Vaccines at a concession rate of Rs 100 for 3 vaccinations. For details contact Local Branch secretaries or Dr. Biju A Nair. Mob: 9446551010

Kerala Dental Journal

Subscription Rates: Free distribution for all the members of the Indian Dental Association Kerala State
Rs. 500 per issue, Rs. 2000 for 1 Year (4 issues), Rs. 3500 for 2 years (8 issues), Rs. 5000 for 3 years (12 issues).

All correspondence may please be sent to the following address :
Dr. K. Nandakumar, Hony. Editor, Kerala Dental Journal
Neelambikam, Attukal, Manacaud, Trivandrum, Kerala - 695 009
Phone: 0471-2459235 / Cell: 09447066100 / e-mail: editorkdj@gmail.com

Secretary's Report and Association News

Secretary's Message

My dear fellow Members,

This year IDA activities are moving on a fast track with the momentum initiated by the active members like you. The state level celebrations of IDA Kerala State Dentist's Day was celebrated in a befitting manner and I congratulate the exquisite show by IDA Mavelikara branch .The first state level CDE programme was conducted on 22nd February at Trivandrum. The programme was well organized jointly by the IDA Kerala State CDE wing,Kerala Dental Council and IDA Trivandrum Branch.The application form for joining IMAGE is available with the local branch secretaries .IDA state office had a meeting with IMAGE officials at IMA Head Quarters Trivandrum .IMA is going to withdraw the concession of affiliation fee sanctioned to IDA .The affiliation fee will be Rs 5000/- after Sept 30th. I request all the members who have'nt, to join at the earliest so that they can avail the concession. As a part of this years presidential theme "Learn to Excel in Life and in Profession" we embarked many projects. I request all of you to co-operate with the endeavors of IDA Kerala State. I once again appeal all of you to register for the 42nd Kerala State Dental Conference and make it a grand success

REPORT OF ACTIVITIES

Second State Executive meeting

The meeting was held on 01-2-09 at Hotel Grand, Valanchery,Malappuram hosted by IDA Malappuram Branch. IDA Malappuram Branch President Dr Mohammed Sameer welcomed the gathering .Dr KN Pratap Kumar in his presidential address welcomed the executive members and congratulated IDA Malappuram branch for hosting the meeting.While outlining in brief this years programme he stressed the importance of membership growth .He acknowledged IDA Central Kerala Kottayam, the coordinators Dr. Eapen Thomas and Dr Anukesh P for conducting the office bearers workshop "TUNE 2009" in an exemplary manner. He mentioned about the collaboration of IDA with Govt.of Kerala regarding the health card for school children and oral cancer detection programme "Prabudtha Keralam" joining hands with Health Dept Govt. of Kerala.

Condolence

The house condoled the sad demise of Dr Ashok Gopan's sister,Dr Suku M Koshy's father ,Dr AV Sreekumar's father and father in law of Dr Prasad George.

National Awards

IDA Kerala State won the National award for the best State Branch for all round activities. Dr. CK Ashokan won the special appreciation award for the Best State branch President, Hon. Secretary Dr Antony Thomas won the BR Chopra award for the Best State branch secretary and Editor Dr Santhosh Sreedhar won Dr Bellie's award for the best state branch journal.

The house also congratulated IDA North Malabar branch and IDA Central Kerala Kottayam for receiving the National awards .

State Executive congratulated the awardees .

IDA KSED Release

IDA Kerala State Directory (KSED) was released by Dr Vijayasankaran by handing over a copy to the president Dr KN Pratap Kumar during the second state executive meeting.

CDE Programme .

The first State CDE programme of IDA Kerala State in association with Dental Council of Kerala for the year 2009 was hosted by IDA Trivandrum branch .The topic was Redifining Esthetics The art and science of all ceramic restorations and the faculty was Dr. Sarath Shetty.

CDH

The CDH Convenor Dr. Anil G spoke about the projected programmes for the year.Early Cancer Detection Programme – Prabudtha Keralam,Srradha, the Hepatitis immunization programme and the Smoke free institution programme .It was decided to conduct the Dentist's Day celebrations at Mavelikara . The Hon Secretary suggested to honour the promising IDA Member from each local branch during state level Dentist's Day celebrations. CDH convenor Dr Anil.G detailed the guide lines which has to be followed for the CDH activities .He said that the president and the CDH convenor had an interview with the Health Minister and the National Rural Health Mission(NRHM) in charge Dr Yamini and got assurance to incorporate IDA into the mission by allotting space for the dental health check on the health card proposed to be distributed among schools .The house appreciated the efforts and agreed to proceed with the plan.

Hon. Minister Sri. Mons Joseph inaugurated the SRADHA 2009 (The Hepatitis –B– immunization Programme), Prabudha Keralam (Oral Cancer Awareness & Detection Programme) and Smoke Free Dental Institutions on 6th march during the inaugural ceremony of Dentist's Day Co-operative Auditorium Mavelikara.

IDA HOPE

Dr. Sreekumar Nambiar presented the report. He said that Rs 2.65 lakhs was given to the bereaved family of Dr Raju KS. News Letter of IDA HOPE has been sent to all members of IDA Kerala State.

Budjet -2006-07

The proposed budget for the year 2008-09 was presented by Hon Secretary during the second state executive meeting.

IDA IMAGE

The State President Dr Pratap Kumar,Secretary Dr Antony Thomas and the secretary of IDA Trivandrum branch Dr Suresh Kumar G attended a meeting with IMAGE officials at IMA Head Quarters Trivandrum .The IMAGE has consented to extend the concession of the affiliation fee up to Sept 30th .The IDA office tabled the requirements of IDA regarding IMAGE and the IMAGE officials reciprocated in positive.

Dentist's Day

We observed Dentist's Day on 6th March at Co-operative Auditorium Mavelikara. The State level celebrations were hosted by IDA Mavelikara Branch.The co-ordinators Dr Anil G and Dileep Varghese Jacob and the members of IDA Mavelikara Branch deserves special plaudits for making the Dentist's Day a grand success.

DENTIST'S DAY AWARDS

Outstanding Clinician & Teacher Award

Dr. Chandrashekaran Nair
Dr. Varghese Mani
Dr. George Varghese
Dr. C.V. Pradeep

Special recognition

Dr. CR Vijayasankaran

IDA Kerala State honored the following members for receiving the National Awards.

Dr. C.K. Ashokan	(National Award for the best state President)
Dr. Antony Thomas	(National Award Best State Branch Secretary)
Dr Santhosh Sreedhar	(National Award Best Journal)
Dr. Sherry M Joseph	(National Award Best Local Branch President)
Dr. Anil Kumar PK	(National Award for all round activities-Local Branch)
Dr. Anil Thunoli	(National Award for all round activities-Local Branch)

Promising IDA Members Award

Dr. M.K. Prakasan	IDA Alappuzha
Dr. Vasudevan Vinay	IDA Attingal
Dr. Sherry.M. Joseph	IDA Central Kerala Kottyam
Dr. Jolly Amooken	IDA Chalakudy
Dr. Sreekumar. P. Nambiar	IDA Coastal Malabar
Dr. Josey Mathew	IDA Green Valley
Dr. Rajagopal. N	IDA Kasargod
Dr. Siby. T. Chennankara	IDA Kochi
Dr. Shahab Mohammad	IDA Kodungallur
Dr. Habeeb Mohammad	IDA Kottarakkara
Dr. Hariprasad	IDA Kunnamkulam
Dr. Joseph. CC	IDA Malabar
Dr. Jaymon.K. Alias	IDA Malanad
Dr. Mohammad Harris	IDA Malappuaram
Dr. Prasad. T	IDA Mavelikara
Dr. Joji Cherian	IDA Nedumbassery
Dr. Balasubramaniam. C	IDA Palakkad
Dr. Rajesh. V	IDA Pathanamthitta
Dr. Anil. Kumar. G	IDA Quilon
Dr. K.N. Thomas	IDA Thiruvalla
Dr. Arun. R	IDA Trivandrum
Dr. Mini Cherian	IDA Vembanad Kottayam
Dr. Poji Menachery	IDA Wayanad

I must place on record my heart felt appreciation to all senior members and other colleagues who were physically present to accept our honour .

Dr. Antony Thomas
Hon. Secretary IDA Kerala

REPORT OF IDA KERALA STATE DENTIST'S DAY HELD ON MARCH 6th 2OO9 AT MAVELIKARA

The Dentist's day celebrations were divided into 3 sessions.

1. Morning session: Public Function (Oral cancer awareness seminar & Seminar on oral Hygiene)
2. Afternoon Session: Inter collegiate cultural competitions.
3. Evening session: Inauguration of IDA Kerala State Dentist's Day celebration and awards ceremony.

Shri. Jagathy Sreekumar and Shri. Mons Joseph, Minister for PWD, speaks at Dentists Day

Dr. Anil G., IDA State CDH Convenor and Co-ordinator receiving the *Prabudha Keralam Banner* from the Minister at the Dentists day

Senior members Dr. Varghese Mani, Dr. K. Chandrasekharan Nair, Dr. George Varghese and Dr. C.V. Pradeep honoured at Dentists Day.

1. Public Function: Chief Guest. Sri. M. Murali. MLA (Mavelikara) The meeting started at 10.30.am. The Hon. MLA inaugurated the function by lighting the traditional lamp. IDA Kerala State President Dr. KN Pratap Kumar delivered the Presidential address. This was followed by felicitation by the guest of honour, Sri. Kurien Pallathu(Municipal Health Standing Committee Chairman) & Sri. Ajith(Municipal Councilor). IDA State Secretary Dr. Antony Thomas & IDA Kerala State CDH Chairman Dr. Anil.G addressed the gathering followed by vote of thanks by the Secretary of IDA Mavelikara Branch, Dr. Sunil Mathew Thomas. The first session was on Oral Cancer awareness and prevention. The guest speaker was Dr. K.J.Mathew (Rtd. Prof. Community Medicine, MCH, Kottayam).

The Second Session was on General Oral Hygiene. The guest speaker was Dr. Alex.K.Varghese (Prof. HOD of Oral Pathology, Pushpagiri College of Dental Sciences, Thiruvalla).

The Health Kits sponsored by Colgate Palmolive Ltd. Were distributed to the public. Various units of Kudumbasree, Elders Forum, Municipal staff attended the Seminar. The meeting concluded at 01.00 pm.

2. Afternoon Session: Inter collegiate cultural competitions. The inaugural function of the cultural competitions, Titles - Tooth Jewels 2009 was called to order by Dr. Pratapkumar, President, IDA Kerala State. The president inaugurated the function by lighting the traditional lamp followed by Dr. Antony Thomas, Hon. Secretary IDA Kerala State. Four Dental Colleges participated in the competitions, namely, Mar Baselious College of Dental Sciences Kothamangalam, Azzeezia College of Dental Sciences Kollam, Indira Gandhi College of Dental Sciences, Muvattupuzha & Pushpagiri College of Dental Sciences.

The Overall Championship was Won By Baselious Dental College, Kothamangalam. The second Place was conferred to Pushpagiri College of Dental Sciences, Thiruvalla.

3. The Evening Session: Inauguration of IDA Kerala State Dentist's Day Celebration. Chief Guest. Sri. Mons Joseph (Hon. Minister) Guest of Honour. Sri. P.C. Vishnunath(MLA)Celebrity Guest. Sri. Jagathy Sreekumar (Cine Artist).

Thanking you,

Dr. Anil G, State CDH Convenor and Co- ordinator
Dr. Dileep Varghese Jacob, Co-ordinator
Dr. Sunil John Mathew, Sec.IDA Mavelikara Branch

Report of the STATE CDE PROGRAMME of IDA KERALA STATE

Topic	:	**Redifining Aesthetics**
Faculty	:	**Dr Sarath Shetty**
Venue	:	**IMA Hall, Trivandrum**
Date	:	**22nd Feb 2009, 9.30 - 5.00 pm**
Participants	:	**204 participants**

The first state cde programme of IDA Kerala state for the year 2009 was hosted by IDA Trivandrum branch .The venue was at IMA Hall, Chakai, Trivandrum .

The programme started at 9.30 am.IDA Trivandrum branch president Dr.Mukesh.T welcomed the gathering. IDA Kerala state president Dr. Pratapkumar.T inaugurated the programme by lighting the lamp. Dr. Mathew Joseph, President Kerala Dental Council, Dr. K. Nanda Kumar Editor KDJ, Dr.Sarath Shetty faculty of the programme, Dr. Sony Thomas IDA Kerala state vice president, Dr Pradeep, Member KDC, Dr Vinoth MP member KDC were present in the occasion .

Dr Pratapkumar, president, IDA Kerala state delivered his presidential address followed by Dr Sony Thomas, Dr. Mathew joseph delivered felicitations.

The CDE Programme: **REDEFINING AESTHETICS, The art and science of all ceramic restorations** at 10.15 am by Dr. Sarath Shetty. In the morning session he elaborated on the science of new generation materials there indications, and how to incorporate them in our daily practice to deliver beautiful restorations which will last a long time.

In the after noon session he continued with his lecture on the tooth preparation, selection of materials, impression procedure, temporization and final cementation of the prostesis.

The Table demonstration was held from 3.15 pm onwards. The demonstation was on crown preparation ,the proper use of retraction cord, impression procedure and how to make provisionals and the cementatioin of the final prosthesis .

There were a total of 204 registered participants and were provided with lunch, tea, snacks.

Dr. T. Sreelal, HOD Dep of prosthodontics, GDC Trivandrum had a few comments about the program and handed over a memento to the faculty.

We thank the IDA Kerala State,Kerala Dental Council and Dentsply, and all those who work behind the program to make the programme a great success.

Thanking You,

Dr. OV Sanal - State CDE Convenor
Dr. G Suresh Kumar - Secretary, IDA Trivandrum.

Dr. Antony Thomas Hon. Secretary IDA Kerala State receiving the BR Chopra Award for the Best State Branch Secretary from DR . KB Sinize the director of Bhaba Atomic Research Centre during the All India Dental Conference held at Nagpur .

Dr. CK Ashokan President IDA Kerala State for the year 2008 receiving the award for the Best State Branch president from DR . KB Sinize the director of Bhaba Atomic Research Centre during the All India Dental Conference held at Nagpur .

Dr. Santosh Sreedhar Hon. Editor IDA Kerala State for the year 2008 receiving Dr Bellie's award for the Best State Branch Journal from DR . KB Sinize the director of Bhaba Atomic Research Centre during the All India Dental Conference held at Nagpur.

IDA NORTH MALABAR BRANCH

Installation Ceremony of New office bearers of IDA North Malabar 2008-2009

Installation ceremony of new office bearers of the branch for the year 2008-09 was held on Sunday 30th November 2008 at Kairali Heritage, Kannur. Dr.P Chandramohan,Vice Chancellor,Kannur Univrsity was the Chief Guest and the Dr.K N Prathap Kumar President- IDA Kerala State and Dr.C K Ashokan Imm Past President,IDA-Kerala were the guests of honour. Dr.Valsalan. K.V programme co-ordinator welcomed the gathering.After the presidential address Dr.P.K.Anil Kumar presented the the presidential awards.After that he installed the new president Dr.Mohammed Shaheer. New President installed the office bearers. Dr.Santhosh Sreedhar 3rd Vice President ,IDA-Kerala felicitated on the occasion.

EXECUTIVE COMMITTEE MEETINGS.

10-12-2008 ———— 1st Executive Committee Meeting. The first executive committee meeting of IDA North Malabar Branch was held on 10-12-2008 at Hotel Mascot Beach Resort at 8.pm.President Dr Mohd Shaheer called the meeting to order. After the silent prayer President welcomed the gathering and gave the

presidential address. CDE and CDH convenors detailed about their plans for the coming year. Editor and IDA Hope representative also shared their ideas in executive Committee.Various sub committees have formed. House decided conduct Christmas &New Year celebration on 27-12-08. After the discussions Secretary delivered the vote of thanks and President adjourned the meeting for Dinner.

Dental Check-up Camp:- Dental Camp on 7-12-2008 at Alachery sneha bhavan.About 200 inmates were examined and selected most of them for further treatment procedures.

IDA KUNNAMKULAM BRANCH

INSTALLATION CEREMONY on 27/12/08

The installation of new office bearers was conducted at Sopanam Heritage by Dr. K. N. Prathap Kumar. Hon President IDA Kerala State .Thirty two members and their families had attended the meeting.

FIRST EXECUTIVE MEETING on 01/01/09

The first executive meeting was held at Kairaly Tourist Home, Guruvayur. Seventeen members had attended the meeting.

SECOND GENERAL BODY MEETING on 30/01/09.

The 2nd General body meeting was conducted at Nunu Tower Guruvayur. Scientific Presentation on Medical Emergencies in dental office was done by Dr. Gregory. Dr. M. K. Poulose kutty shared his twenty five years of experience in dental Practice and then Dr. Sunil Mohammed MDS (Paedo) Reader, Royal Dental College Gave a talk on "**Pulp Therapy**"

CDE PROGRAMME on 15/02/09

The first CDE programme was conducted at SOPANAM HERITAGE ,Guruvayoor. The topic was.

DIRECT COMPOSITE RESTORATIONS SIMPLIFIED

This talk was arranged in association with DENTSPLYACADEMY. The faculty was Dr GopiKrishna.V (Asst.Professor,Meenakshi Ammal Dental College, Chennai) The lecture was well appreciated and attended by 57 members and the HANDS ON COURSE after lunch had 8 participants

IDA WAYANAD BRANCH

Report of activities

03.01.2009; Installation ceremony of the new president and office bearers held at Hotel Brahmagiri, Mananthavady. Prof.T.Mohanbabu was the chief guest. IDA Kerala State President Dr. Pratap Kumar installed the new president. IDA Kerala State Hon. Secretary Dr.Antony Thomas was the guest of Honour.

19.01.2009; 1st executive meeting of the year held at Hotel Woodlands, Kalpeta. 10 members were present. Action plan for the year 2009 discussed

21.01.2009; Free dental checkup and oral hygiene was taken at GUP School Padinjarathara. Dr.Sajith P.C, Dr.Rejith M and Dr.Sheeba attended the programme. 700 children were present. Oral hygiene instructionpamphlets were distributed.

IDA KOCHI BRANCH

IDA Memberships: Every effort is being made by the Secretary to improve the membership strength of IDA Koch Branch. There has been gradual but tremendous improvement in the Membership strength this year when compared to the last year. As of now we have 176 ordinary memberships, 23 life memberships, 26 new memberships and 100 student memberships. Excluding the student memberships the total number stands at 225.

Executive Committee Meetings: IDA Kochi held its third ECM at Landmark Hotel on the 12th of February at 08:20pm. The Meeting was attended by 19 Executive committee members. During the meeting the Secretary elaborated on the Christmas New Year get together which had a large attendance. The notable difference was that all the programs were organized by the IDA Kochi doctors and their children. Everyone appreciated this get together function. The secretary also spoke on efforts to improve membership strength of our branch, the commendable achievement of previous editor Dr. Siby T Chennankkara on getting the National Award for the best local branch journal award and wished the very best to the new editor Dr. Alice Siby in releasing better journals this year. Decision regarding the Scientific Speaker meeting by Dr. C. P John and Dr. Jim Philip were made. First Inter Branch CDE by Kochi branch was also discussed and decided during the meeting. The secretary announced the post offered to him by the state- State Sports committee chairman and also discussed on the proposal for the state sports meet at Kochi. It was decided to celebrate Dentist Day on March 6th at St. Alberts School.

The Free Dental Clinic representative Dr. Gopakumar is informing all the Executive committee members on their turn to come to the FDC on the first and third Sundays of every month and making sure the Clinic is running smoothly. Dr.Raju Kurien Ninan and Dr. Rajesh Kottooran contributed sample medicines for the clinic.

BIDA – IDA Kochi Journal: The editor Dr. Alice Siby and the Secretary Dr. Vinod Mathew were kept busy with the effort to bring the first issue of this calendar year. The messages, Articles, sponsorships, layouts, pictures etc were worked, edited by them for making the final layout. The magazine is almost ready for release.

Community Dental Health Program – IDA Kochi

The program was conducted at Chinmaya Vidalaya School for

Primary Children from classes I to IV on the 25th of February 2009. IDA Kochi Branch represented by Dr. Ram Mohan and Dr. Vinod Mathew [Hon. Secretary] were instrumental in organizing and conducting the community dental health program.

The program was intended to bring awareness on oral hygiene and dental caries to the children. Three hundred children attended the class which involved talk by both the doctors supplemented by audio visual aids. Colgate sponsored combo tooth brush and paste kits for all the children. The management and the staff of the School thank IDA Kochi and Colgate for their kind gesture. Colgate Sales Manager Mr. S. P Nair, Chennai Head Mr. Prasad and Representative Mr. Siju also attended the program. Secretary thanked Colgate for the kind help offered to IDA in reaching out to the public.

IDA Kochi Website: IDA Kochi website is improving by day and it gives a gist of the association. Various details such as upcoming events, contact address, history of IDA Kochi, Activities of the association etc along with pictures of various programs are displayed in the site. It is a user friendly site and is undergoing updating on constant basis. The webpage address is www.idakochi.org

IDA Kerala State held the second Executive Committee meeting and CDE during this period.

KDJ distribution: The KDJ parcel received at the secretary's office is being distributed to the members.

DRS: DRS forms were distributed to all those who requested and their applications were sent to the concerned office.

SMS Online program: IDA Kochi has subscribed SMS Online program to send short message services to its members.

IDA ATTINGAL BRANCH

REPORT FOR THE MONTH – JANUARY & FEBRUARY, 2009

The new office bearers of IDA Attingal branch for the year 2008-09 got installed in a exotic venue at Technopark Club, Kazhakkuttom, TVPM, Kerala. We started the new official year by remembering Dr.Rajukrishna Swamy's family, where state IDA President Dr.Prathapkumar, Dr.Anil, state CDH convener, were present. The ex-committee members of IDA Attingal Branch, Dr.Abhilash, Dr. Ashok Gopan, IDA Hope Convener Dr.Rudy, Dr.Anil Kumar, Dr.Sudeep and Dr.Subramoniam met the grieved family. A cheque for Rs.2,65,000 /- was handed over to Dr.Raju's family by Dr. Prathap Kumar, Presidentm IDA Kerala State.

During the installation ceremony, we all remembered the demised person. After installation ceremony all the members with family members attended ganamela, fellowship and dinner.

Ist Ex: Committee meeting was held at Hotel Ganga, Attingal. Important decision regarding CDE Programme and other matters were discussed.

Ist CDE Programme for the year 2008-09 of the branch was conducted at Hotel Hidustan Retreat Varkala. The eminent speaker Adv.Shyam Padman gave knowledgeable talk regarding the topic "*Legal Care for Medical malpractices*". A grand dinner made the end of the programme.

IDA CENTRAL KERALA KOTTAYAM BRANCH

Executive committee meeting

First executive committee meeting was held January 6th 2009 at Kottayam club at 7.30 p.m. All members of the executive committee attended. Discussed about presidents & secretary's seminar. President invited all the members of central council and state executive to be permanent invitees. Activities for the year were discussed.

1. Presidents & Secretaries seminar: On11th January 2009 our branch hosted the presidents & secretaries seminar at Hotel Arcadia. It was well attended By office bearers of local branches of IDA Kerala state. Various programmes and talks were held .

Dental Exibition and Dental Check up Camp

Our Branch in association with Govt dental college Kottayam participated in MEDEX exhibition held at medical college campus Kottayam from 15/1/2009 to 18/2/2009.A dental exhibition cum check up was conducted for the general public.

1. Adoption of orphanage. On 17/1/2009 our branch adopted the blessed Alphonsa Sneha Nivas Orphanage Chaganacherry. Dr Augustine represented our branch.

Free dental check up & treatment. Dental check

up and free treatment camp was held on 17/1/2009 at Alphonsa Sneha Nivas orphanage Changanacherry. Dr Augustine and DR Sushi attended the camp

Release of Journal The first issue of the branch journal SMILE was released on 22/2/2009 by IDA State President Dr Pratap Kumar by handing over the first issue to senior member Dr Romesh Mani in the presence of the Editor Dr Robbin Theruvel. The Journal was well appreciated for the quality of its content.

IDA NEDUMBASSERY BRANCH

31st January 2009: 1st General body meeting and family get together was held at Hotel Gee Bee Palace, Angamaly at 8.00 p.m.

The speaker for the evening was Dr. Jaibin George, who spoke on the topic "Basics in Oral Implantology and Clinical case discussion".

14th February 2009: 2nd Executive Meeting at Hotel Gee Bee Palace Angamaly.

06 March 2009: Dentist Day Celebrations:- On 03 March 2009, we held a Press Conference to propagate the Dentist Day Celebrations. A wide coverage was given by the print and electronic media. Pamphlets were distributed few days prior as so were announcements throughout the territory of IDA Nedumbassery.

The celebrations on 06 March were inaugurated by the cine artist Ms Meera Nandan. It was presided over by Dr. Vinu PR, president of IDA Nedumbassery.

The formal function was attended by around 1000 people. This was followed by awarness classes on various topics of concern to the common man and discussions to clarify certain misconceptions in dentistry. The classes taken by Dr. Santosh Thomas were very well appreciated by the public.

This was followed by a screening camp and distribution of the oral hygiene kits.

In the evening we had a family get-together in which our member Dr. Saju Simon spoke on the topic common **surgical procedures in dental practice**.

This was followed by cultural programmes and dinner.

CDE Activities:

1 March 2009: Hands on programme on Endo-Esthetics an inter-branch CDE programme was held at the Best Western Hotel. The speaker was Dr. Gopi Krishna V. The pre-lunch lecture class was followed by post-lunch hands-on course.

CDH Activities:

1. An awareness class and screening camp was held at Thamarachal on 17th February 2009. 600 people attended the camp and about 60 people were treated.
2. Dental camp was held at our adopted project, Mathruchaya Balabhavan.
3. Dental treatment camp was held at our adopted project Daivadan Old Age home on 20th January 2009. National Dental Conference, Nagpur

Dr Jaibin George from our branch attended the Conference at Nagpur.

IDA PATHANAMTHITTA BRANCH

INSTALLATION CEREMONY of Dr. Thomas Varghese as the 8th president of the branch was held at Hotel Bhagwath Gardens, Chenganur on 4th January. Dr. Thomas Varghese installed his team of office bearers under oath namely: President elect: Dr. Suku Koshy, Vice presidents: Dr. Eugene Varghese Joseph & Dr. Biju U Nair, Hon secretary: Dr. Gigu Zakariah Philip, Jn secretary: Dr. Manoj M Kumar, Asst. Secretary: Dr. Muraleekrishnan M, Editor Journal: Dr. Rajesh V, Rep to CDE: Dr. Sujith PR, Rep to CDH: Dr. Ralu Varghese Kulathooran, Rep to IDA HOPE: Dr. Rajesh Sadasivan, Rep to IDA IMAGE: Dr. Pradhish B, Executive Committee Members: Dr. Raj Mohan R, Dr. Binu Chacko, Dr. Johnykutty Jacob. Dr. Giboy Kurain (Hon Treasurer) is already part of the team. **Inauguration of branch activities** was done by Mr. Rajan Kannathu. & of the **Mega project "Kaniyu 2009"** was done by Dr. George Varghese, Principal Govt Dental College Kottayam.
MEMBERSHIP STRENGTH presently stands at 94 Annual Members & 3 Life Members with 10 new members added to the list.
SIX BRANCH EXECUTIVE COMMITTEES were held during the year. Four at Govt Guest House, Pathanamthitta on 2nd December, 22nd December, 10th February& 8th March. One meeting each was held at Hotel Zion, Kozhencherry on 11th January & the residence of Dr. Jacob Korah on the 31st of March 2009.
CDH REPORT: DENTAL TREATMENT CAMPS in coordination with Y's Men Club, Mallassery was held at Mannera Govt LP School, Konni on 18th January. Dr. Thomas Varghese, Dr. Jacob Korah, Dr. Rajesh V & Dr. Hema Rajesh attended the camp and gave treatment, medicines & oral health packets to 178 patients.
FOUR DENTAL AWARENESS & CHECK-UP CAMP was held namely at Govt. SV LP School, Kanjeetukara, on 6th January,

2009,MSCLPSchool, Mannarakulanji PO, on 26th February 2009,SNDP VH School, Kanjeethukara PO, on 5th March 2009, Govt. UP School, Vazhamuttom PO, on 17th March, 2009. The branch would like to thank its president Dr. Thomas Varghese, Dr. Gigu Zakariah Philip, Dr. Rajesh V, Dr. Ralu Varghese Kulathooran, Dr. Sujith PR Dr. Abraham Varghese, Dr. Elizabeth Varghese, Rotary Club of Pathanamthitta Metro, Mass Media section of District Medical Office, Pathanamthitta & JCI Omallor.
SEMINAR ON ROAD SAFETY & ANTI-TOBACCO AWARENESS was taken for Auto & Taxi drivers of Mallassery town, at YMCA Hall on 22nd March, 2009. Class on Anti-tobacco awareness was taken by Dr. Rajesh V. The branch would like to thank Dr. Johnykutty Jacob, Dr. Rajesh V, YMCA Mallassery & Y's Men Club, Mallassery.

IDA PALAKKAD BRANCH

Installation Ceremony of the new office bearers were conducted. Dr. Samuel K. Ninan presided over the function. It was held at Palakkad on 3rd January 2009.

The Ist CDE conducted on 15-02.2009 at Gazala, Palakkad at 3 pm.

Speaker: Dr. Arun Sadasiuvan, MDS

Topic: "Achieving Periodontal Regeneration in General Practice with Special Stress on Bone Graft Technique"

IDA MALABAR BRANCH

Installation Ceremony: The new set of office bearers took oath in the glittering installation ceremony on 4th of January. District Collector Dr. A. Jayathilak was the Chief Guest. The installation ceremony was called to order sharp at 6.30 pm. After the presidential address and presentation of the presidential awards by the outgoing President Dr. Joseph. C. C, Chief Guest Dr. Jayathilak gave a thought provoking speech. He appreciated our School Dental Health programme. After that, the IDA State President Dr. K. N. Prathap Kumar installed the new president. Dr. Prathap Kumar gave a wonderful speech, touching all aspects of IDA.

In his acceptance speech, the new President Dr. Girish Kumar. P. K gave a brief outline of the programmes going to be conducted in the current year. He stressed the need for strengthening interaction among members and the need for more and more family oriented programmes and programmes for dental students. The new Secretary Dr. Manoj Joseph Michael proposed vote of thanks. Performance by the artists of Folklore Academy followed.

Ist Executive Meeting : The first executive meeting of the IDA Malabar branch was held on 15-01-2009 at IDA Hall, Asokapuarm at 7.30 pm. 27 executive members were attended the meeting along with 3 observers. Various subcommittees were formed and important decisions were taken. President Dr. Girish Kumar released the detailed programme chart for the year 2009. It was decided to conduct a monthly meeting on second Wednesday of every month at 7.30 pm at IDA Hall. COC meeting of 42nd KSDC followed this executive meeting.

IDA QUILON BRANCH

Installation Ceremony 2008-09

The installation of new President, Dr. Kiran K.S and his team of office bearers was held on 21st of Dec. 2008 at Ramavarma club Audm. State President Dr.K.N.PratapKumar was the Chief Guest. Hon. State Sec. Dr. Antony Thomas and VP Dr. Sony Thomas were the dignitaries. "Candle lit Vigil" was observed for the remembrance of the brave hearts, who sacrificed their lives for the nation in 26/11 Mumbai attack. Secretary Dr. Joseph Edward proposed the vote of thanks followed by variety entertainments by the IDA family of Quilon. The grand musical night ended with fellowship and dinner.

CDH Programme:

A treatment camp was conducted on 22nd Feb. at Kannanelloor were 280 patients benefited. Dr. Manoj Augustine conducted a seminar on Tobacco and Oral cancer, which was well appreciated. Dr.Ayyappan was the student's co-ordinator.

CDE Programme:

"Challenges in Composite Restorations" by Dr. Feblin Lobo was held on 29th March at Hotel Nani , Kollam , were almost all the members of the branch participated.

IDA MALANADU BRANCH

First General Body Meeting : The General Body Meeting of IDA Malanadu branch was held on 20.01.09. Tuesday 8 p.m. at Amritha Hotel Mekkadampu. After the Silent prayer the meeting was call to order by the Dr. Jose Paul. Dr. Joby J Welcomed the gathering. Secretary Dr. Jaymon K Alias presented the secretaries report and was duly passed. In his presidential address Dr. Jose Paul mentioned about the plans for the future IDA Year. After the discussion Dr. Giju George proposed the vote of thanks, Then the meeting is adjourned for fellowship and dinner.

Dentist Day Morning programme: IDA Malanadu branch in association with Colgate Palmolive decided to conduct Dentist Day March 6th 2009 in a grand mannar.It was decided to give 501 free dentues to the poor and needy patients.

The free Denture Camp was started by 9.30am at Taluk hospital, Muvattupuzha. After the silent prayer Dr. Giju George welcomed all to the camp. In this Presidential address Dr. Jose Paul Stressed about the need for charity and thanked Colgate Palmolive for the sponsorship. Smt. Mary George Thottam Muvattupuzha Muncipal Chair person Inaugurated the camp. Mr. K I Navas, Dr. Elsamma Paul and Dr. Joseph Kurian Felicitated the camp .Secretary Dr. Jaymon K Alias Preposed the vote of thanks. A total of 266 patients attended the camp. The Screening camp was conducted by our members and 128 patients were selected and were refered to their nearest IDA Malanadu Branch members Clinic.

Dentist day - Evening Programme: The Dentist day cum family Meeting was held on 6th March 09 8pm at Diana Auditorium, Koothattukulam. After the silent prayer secretary Dr. Jaymon K Alias welcomed all to the programme. The Cake cutting was done by Dr. Jose Paul. In his presidential address Dr. Jose Paul Mentioned about the importance of Oral Health Care and the aids for this. Appreciation Awards were given to Cine Artist Ms. Dhanya Mary Varghese for her excellent acting in the movie "Thalappavu" Another award given to Cine Artist and TV anchor Ms. Rajeswary Rajkumar for her excellence in the film field. 12 Senior members who have completed 25 years of successful Dental Practice were also honoured during the meeting. Top scorers of the near by Dental colleges were awarded during the function. Dr. Giju George Proposed the vote of thanks and thanked colgate Palmolive for the sponsorship

The meeting was followed by different entertainment programme by our own members. A Fashion Show and skit was done exclusively by our members. This was followed by Songs, Dance and Karoke by our members and their families also.This was followed by fellowship and Dinner.

IDA TRIVANDRUM BRANCH

State CDE Program :Redefining aesthetics:The art and science of all ceramic restorations,Feb 22:

IDA Trivandrum branch hosted a CDE programme in the IMA hall on the 22nd February 2009. The programme was a state level programme co sponsored by the Kerala dental council . The faculty for the programme was Dr Arvind shetty from Mumbai. Dr shetty is a well known prosthodontist and a academician, who had functioned as faculty in many CDE programs organized in various parts of India.Dr Shetty enriched the knowledge base of the gathering with practical tips and demonstrations regarding ``All ceramic restorations'. The programme was without doubt , one of the largest continuing education programmes conducted by ida ,with more than 200 registered participants

Dr Nanda kumar editor of the Kerala state dental journal released the first copy of The Probe 2009 and presented the first copy to the president of the IDA kerala state branch Dr Prathap kumar KN

Successful completion of Hepatitis vaccination program:

The immunization program was organized at the Credence hospital, Ulloor, Trivandrum in the month of February 2008. 43 members got inoculated as per the above regime.. Dr Bejoy John Thomas and his team of dental assistants deserves all the credit for efficiently managing the long time immunization program