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It gives me great honor and privilege to be a part of this journal. I am elated that the first copy of the e-Midas journal has taken its baby steps towards a milestone which is being released on March 15th 2015. Looking at the contents of the journal, I am sure it will be a confluence of scientific knowledge and intellectual interaction between the dental fraternities. In this ever-growing era of modern dentistry, exchange of scientific knowledge and keeping abreast with latest developments is definitely the need of the hour.

Indian Dental Association, Madras Branch has an incredible talent pool of researchers and academicians with vast experience and this journal was a common goal and vision of the branch. I congratulate the outstanding scientific contribution by all the authors of the maiden issue. I would also like to encourage all the Faculties and young minds to bring out their clinical research and publish their findings in the forthcoming issues.

This journal is a landmark achievement and I would like to congratulate the mammoth efforts of Dr. C. K. Dilip Kumar (Editor-in-Chief) and his entire editorial board for the excellent work in bringing out this e-Midas journal in such a short span of time. The entire team was focused, committed and pooled in complete recourses of experience and expertise. I wish for the continuous success of this e-journal and hope it would be beneficial to all cross-section of the readers.
“Be a hero, always say, I have no fear” - Swami Vivekananda

Greetings,
First and foremost I have to congratulate the Editorial board of IDA Madras Branch for their hard work and sincerity in bringing this first issue of e-Midas Journal of 2015.

As a dental professional, updating our knowledge towards the latest technologies and happenings in and around dentistry has become a must. So to meet your quest of knowledge IDA Madras Branch is proud to release E-Midas Journal which will have four issues per year. Apart from academics the journal will also highlight happenings in dentistry, our branch activities of past and forthcoming programs and job opportunities.

I am proud to say that this journal is also accessible to all student members of IDA Madras Branch and articles from students are most welcome. Wishing the young and enthusiastic editorial team headed by Dr.C.K.Dilip Kumar all the best.

Dr. H. Thamizhchelvan
Hon. Branch Secretary
IDA - Madras Branch
I am greatly honoured to become the Editor-in-Chief of e-MIDAS journal, an official journal of IDA Madras Branch. I am extremely grateful to Prof. Dr. V. Rangarajan and Prof. Dr. H. Thamizhchelvan for offering me this opportunity to serve as the new Editor-in-Chief of this journal. I look forward to work with my new young and energetic editorial team and our reviewers to ensure the continuing growth and success of this journal. Now that we’ve begun to change, we will also hope to continue to evolve and have good idea on how to proceed. In guiding the editorial team in the choices we have to make, we ask our readers to help us to explore new ways to make the journal useful: please share your ideas and thoughts with us. We can be reached at emidasjournal@gmail.com. We look forward to hearing from you soon.

I truthfully hope that you will find future issues of interest and that you will enjoy and benefit from reading the publication.

Dr. C.K. Dilip Kumar
Editor-in-Chief
IDA - Madras Branch
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Influenza A H1N1 infection was a dreadful pandemic worldwide during 2009 and it re-emerged in India with high impact in 2013. It was earlier referred globally as Swine flu, since it exhibits two main surface antigens, H1 (Haemagglutinin Type 1) and N1 (Neuraminidase N1), it is now also addressed as H1N1. The primary infection control goal is to prevent transmission of disease. Early detection of a suspected or confirmed case of swine influenza and prompt isolation from susceptible persons will reduce the risk of transmission. This article is formulated to create awareness and to enlist few important points for the dental team as they are more prone to the disease.

The causative agent is an influenza virus predominantly found in pig populations. People do not normally get Swine Influenza A (H1N1), but this strain has acquired the ability to transmit from pigs to humans, and humans to humans. While the disease has resulted in deaths, most cases appear to be mild.

**CAUSATIVE ORGANISM**

The causative agent is an influenza virus predominantly found in pig populations. People do not normally get Swine Influenza A (H1N1), but this strain has acquired the ability to transmit from pigs to humans, and humans to humans. While the disease has resulted in deaths, most cases appear to be mild.

**SIGNS AND SYMPTOMS**

- Fever
- Cough
- Sore throat
- Rhinorrhea
- Myalgia
- Headaches
- Chills
- Fatigue
- Sometimes diarrhoea & vomiting

**MODE OF TRANSMISSION**

- Spread of swine flu is mainly from person to person through air transmission (coughing or sneezing) of people with influenza.
- Infection can spread when a person comes in contact with the respiratory droplets of an infected person and touch his/her own eyes, mouth or nose before washing their hands.
- Swine flu virus does not spread by food.
- Infected people may be able to infect others at the beginning of the 1st day before symptoms develop and up to 7 or more after becoming sick.
- Children, especially younger children, might potentially be contagious for longer periods.

**LABORATORY TEST**

- Nasopharyngeal swab
- Real time-Polymerase Chain Reaction (RT-PCR)
- Viral culture

**CONTROL MEASURES**

A hierarchy of control measures should be applied to prevent the transmission of H1N1 influenza in all health care settings.

To apply the hierarchy of controls, facilities should take the following steps, ranked according to their likely effectiveness:

- Elimination of potential exposures (e.g., deferral of ill patients and source control by masking coughing individuals).
- Personal protective equipment (PPE) for exposures that cannot otherwise be eliminated or controlled. PPE includes gloves, surgical facemasks, respirators, protective eyewear, and protective clothing (e.g., gowns).
- Covering the nose and mouth with a tissue when one coughs or sneezes followed by its disposal into the trash.
- Washing of hands often with soap and water, especially after one coughs or sneezes. Alcohol-based hand cleaners are also effective.
- Avoid touching your eyes, nose or mouth.
- Try to avoid close contact with sick people.
- If you get sick with influenza, CDC recommends that you stay home from work or school and limit contact with others to keep from infecting them.

**SPECIFIC RECOMMENDATIONS FOR DENTAL HEALTH CARE**

- Encourage all dental health care personnel to receive seasonal influenza and H1N1 influenza vaccinations.
- Use patient-reminder calls to identify patients reporting influenza-like illness and reschedule non-urgent visits until 24 hours after the patient is free of fever, without the use of fever-reducing medicine.
- Identify patients with influenza-like illness at check-in; offer a facemask or tissues to symptomatic patients and reschedule non-urgent case. Separate effected patients from others whenever possible if evaluating for urgent care.
- Urgent dental treatment can be performed without the use of an airborne infection isolation (AII) room because transmission of H1N1 influenza is thought not to occur over longer distances through the air, such as from one patient room to another.
- Use a treatment room with a closed door, if available. If not, use one that is farthest from other patients and personnel.
• Wear recommended PPE before entering the treatment room.
• As customary, minimize spray and spatter (e.g., use a dental dam and high-volume evacuator).

**CARE FOR DENTAL TEAM**

- Dental health care personnel should self-assess daily for symptoms of febrile respiratory illness (fever plus one or more of the following: nasal congestion/runny nose, sore throat, or cough).
- Personnel who develop fever and respiratory symptoms should promptly notify their superior and should not report to work.
- Personnel should remain at home until at least 24 hours after they are free of fever (100°F/37.8°C), or signs of a fever, without the use of fever-reducing medications.
- Personnel having a family member who is diagnosed with H1N1 influenza can still go to work but should monitor themselves for symptoms so that any illness is recognized promptly.

**VACCINATION GUIDELINES**

Vaccines can be used as prophylactic method for H1N1 infection. Vaccination is recommended for groups of people as per suggestions of CDC's Advisory Committee on Immunization Practices (ACIP) guidelines (Pregnant women, close attendants or contacts of infants younger than 6 months of age, health care and emergency personnel, young children and adults below 50 years of age, elderly >65 years of age with chronic medical conditions and immunocompromised patients) (CDC, 2009; WHO, 2009).

Two types of vaccines have been developed in India commercially which are:
(Kubavat et al, 2011; Kulkarni et al, 2012; http://www.immune.org/vis)

1. **Inactivated (killed) vaccine:**
   - This vaccine is prepared by Zydus Cadila, Ahmadabad, Bharat Biotech, Hyderabad and Panacea, Delhi.
   - Inactivated (killed) vaccine is a sterile suspension of influenza virus for Intramuscular or deep subcutaneous injection.

2. **Human, Live Attenuated Influenza vaccine, (LAIV):**
   - Pandemic (Influenza A H1N1), freeze dried is a live Monovalent vaccine for administration by intranasal spray.
   - The influenza vaccine contains Influenza virus cultivated on embryonated eggs.
   - It is prepared by Serum Institute of India, Pune and has been launched with the brand name NASOVAC.

**DISCUSSION**

"PREVENTION IS BETTER THAN CURE", the same comes true for this infection too. Dentists and their teams are the most prone community for this infection, CDC recommendations for prevention should be taken into account rather than suffering with the disease. With the vaccine development, it is now possible to control the transmission of Influenza A H1N1. Therefore close contacts of patients and vulnerable age groups must get themselves vaccinated and boosters should be given every year.

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Simplified dental ethics for the students and dental care providers

Dr. Vidyaa Hari Iyer

ABSTRACT

Oral health is an integral part of general health and overall well being of an individual. The practice of dentistry is distinct and different from general medical practitioners. Similar to the code of medical ethics which all doctors are entitled to abide, the dentists' in particular too have to follow the Code of Dental Ethics. Dentists have to continuously update themselves with continuous dental educational programs as dental science is progressing at a rapid rate. They need to understand and recognize the minimum standard of care which is an ever – evolving dynamic entity. Dental professionals have to constantly update the laws and legalities proposed by the governing bodies of the land, provide quality dental care to their patients and protect themselves from legal issues such as medical negligence, malpractice or from fraudulent claims of the patients.

Keywords: Dental ethics, Standard of care, Code of ethics, Dental law, Quality dental care, Medical negligence, Malpractice

INTRODUCTION

As the adage suggests - mouth is the gateway of the body, Dentists are health care providers who play a vital role in society; taking care of one's smile, dental function and esthetics. The dentist makes a commitment to the society that he will uphold the realms of the dental profession, follow and adhere to high ethical standards of care and conduct, will be service - oriented and work towards a goal of providing dental care with equity. This continued service creates a sense of trust in the population over a period of time.

The Code of ethics is an evolving document which came into force as The Dentist's Code of Ethics regulation August 1976 and was recently revised in 2014, published in the Gazette of India, Extraordinary, Section-4 by The Dental Council of India1. This ethical code provides the basic conduct of a professional towards his patients1, towards his fellow dentists1 and towards the society in large. This dynamic code is primarily formulated to aid the dentists a basic guideline to follow, keeping in mind the needs and interests of the dentists and their patients.

The code of ethics is formed by the five fundamental principles: patient autonomy, non-maleficence, beneficence, justice and veracity2. These principles are inter- connected and a balance of these forms the basic guidelines for any professional. Such code of ethics is binding on all members of the dental profession such as dental students, practicing dentists and organisations which patronize dentistry. Ethics provides a scaffold on which the student can build professionalism and camaraderie amongst his peer in dentistry. Any violations of the law can however result in disciplinary action.

The role of dental institutions in promotion of ethics

◆ Dental institutions should take proactive roles in tackling ethical concerns within the formative stages of the dental students.

They should include ethics in their curriculum and give primary importance during the academic trainings.

The three cornerstones of academic dentistry include education, research and patient care. This has to be upheld for the promotion of health care and be beneficial to the patients.

A holistic approach is essential for imparting high – standard of dental education to be on par with International standards.

They should promote students' lifelong commitment to ethical behavior to benefit patients and the dental profession.

The institutions should ensure that patient care is delivered irrespective of social status, caste, creed, religion or medical status of the patient.

Maintenance of accurate patient clinical records with proper past/present family, medical and dental history is absolutely necessary. Such data can be used for statistical purposes to study the possible effects of dental well-being and take measurable cautious action towards prevention of dental diseases.

The role of dental students in promotion of ethics

◆ Dental students should train during their clinical years and internship with a competency to provide humane and compassionate care to all patients.

They should develop clinical skills through handling patients and reason their diagnosis with the acquired academic knowledge during their student tenure.

They should be encouraged to question, reason and be self-critical to induce curiosity and foster intellectual skills necessary for future research in dental science. This will further be stepping stone towards newer science and technology development.

They should respect their co-students' opinions without prejudice, defend their rights, encourage interpersonal relationship and promote team spirit.

They should show shared or collaborative leadership with an emphasis on working as a team and sharing
leadership functions.

- Proper knowledge and understanding of patients' rights particularly related to confidentiality and informed consent should be iterated.
- They should know that patient is the center of care and all interactions including history taking, clinical examination, investigations, diagnosis, treatment planning and treatment, must have the patient's best interest as the focus.
- They should establish a good patient–dentist relationship for effective delivery of dental treatment.
- They should follow code of ethics and understand their role as an individual to prevent, promote and be providers of comprehensive community dental care.

The role of practicing dentists in promotion of ethics

- Dentists have to create and increase awareness amongst the population and aid in prevention of dental diseases like dental caries and periodontal problems.
- Quality uncompromised treatment should be provided with concessional or reasonable rates to the underprivileged.
- All patients should be treated equally and not discriminated on basis of gender, sexual orientation, age, medical status, presence of infectious diseases and/or patients with special needs.
- The dental etiquette within one's practice should include a warm welcome by the supporting staff, a pleasant working atmosphere amongst the team members, rational deliverance of dental care and excellent customer service. This would result in maximum symbiotic long-term and ingrained benefit to both the dentist and patient.
- Universal standards of infection control, sterilization and disinfection, and waste management practices should be followed diligently.
- Dentists should identify patients' expectations and provide adequate guidance before the commencement of the treatment especially in esthetic cases.
- Good and effective communication can bring benefits to a practice, improving patient and staff retention, interest and expectations.
- Trust is developed and nurtured through competence, reliability, politeness, empathy, promptness of work and ability to win patients' through continuous programming and delivery of these intangibles.
- They should identify the patterns and trends of oro-dental diseases with lifestyle changes in diet, habits like smoking, drinking, drug and substance abuse. They should motivate public regarding dental health, generate awareness within community, encourage abstinence of such habits and realize their social and moral responsibilities.
- Maintenance of accurate patient records such as case sheets, dental models, profile and intra-oral pictures and radiographs for a minimum period of 3 years is important. Soft copy preservation of such records is encouraged thereafter.

Importance of emergency care for victims especially in cases of physical abuse, neglect, mass disasters and other cases of medicolegal and forensic interest should be dealt with compassion.

- Dentists must excel in the care – cure standard of treatment and serve as role models for the next generation by providing effective supervision and mentoring for learners.
- They should work as great administrators, promote effective staff management, conduct continuous internal meetings within their practice, note grievances amongst their staff, and reward appraisals.
- Traditionally advertising of one's practice was predominantly only by word of mouth and goodwill from the patients. This created a sense of bond and strengthened the dentist – patient relationship.
- However in modern times subtle advertisements is encouraged to showcase and highlight the uniqueness of one's practice, starting of a new practice, change of ownership through print media and marketing. The dichotomy between the dual role of the dental practitioner as a health care provider and businessman is the crux of advertising. The practitioner has to balance between these two entities to be successful professionally and financially.

- The use of internal marketing tools such as practice brochures, thank you notes for referral, birthday and anniversary wishes, appointment reminders, direct mails to patients about the clinic's progress and upgrade of technology can further build a loyal base of patients for a successful practice. This increases the credibility of the doctor and the practice.

Consumer Protection Act 1995 included medical treatment within the purview of the act, thus emphasizing on medical negligence. All health care providers were liable for negligence which could be classified as civil or criminal. Civil negligence included cases exhibiting simple cases of faulty care or lack of skill and is usually tried in civil courts where the defaulter was liable to pay compensation. However criminal negligence included cases exhibiting gross absence of care or skill and is usually tried in criminal courts where the defaulter is fined or imprisoned. In India, Section 304-A of Indian Penal Code (IPC) is the provision under which a patient can register a case of criminal medical negligence. Under section 88 of the act, the doctor cannot be accused of an offence if he performs a treatment in an act of good faith for the patients benefit, does not intend to cause harm or risk, the patient has been completely explained about the procedure and given consent for the same.
Complaints of medical negligence have to be supported by expert testimony. Expert opinion is an opinion of a person / witness who possesses specialized skill or knowledge in a particular field and his opinion is based on scientific factors of the case using reasonable probability after an examination of the case facts. Hence after proper considerations the case is dealt with in the court of law.

CONCLUSION

Medicine and Dentistry are primarily health professions and not a business. Hence ethical considerations of a practice should be paramount, towards the interests of the patients' and society in large. This paradigm shift towards service would prevent the escalation of medicolegal cases in the future.

REFERENCES


About the Author

Dr. Vidyaa Hari Iyer completed her BDS from Ragas Dental College and Hospital in 1995 and graduated from Symbiosis Center for Health Care in Medicolegal Systems in 2002 with distinction. She has authored a textbook “Dental Ethics and Medicolegal issues” published by Jaypee Publications and authored a chapter “Medicolegal issues related to Oral and Maxillofacial Surgery”. She has a number of national articles to her credit namely “Improve your communication skills - medico-legal perspective”, “How to prevent a litigation - a doctor's perspective”. She has lectured widely on Medical and Dental Ethics and Jurisprudence both in State and National symposiums and conferences namely IMPAI, IMA and IDA.

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Esthetic rehabilitation of discoloured teeth with porcelain laminate veneers - A case report

Dr. Eazhil R¹, Dr. Sridharan R², Dr. Saritha M.K.³, Dr. Peter John³, Dr. Deepak K³

ABSTRACT

Esthetic treatment of discolored teeth presents great challenge to dentists. The demand for tooth colored restoration has grown considerably. Porcelain laminate veneers are one of the conservative treatment options which restores the patients beautiful smile. This case report discusses about the esthetic management of moderate to severe fluorosis patient with porcelain laminate veneer.

Keywords: dental fluorosis, porcelain laminate veneers, esthetics.

INTRODUCTION

Smile is one of the facial expressions that uplifts the positive personality and confidence of an individual. The teeth forms an integral part of the individuals smile. There are some conditions that affect the appearance of the teeth such as discolorations, caries, diastemas and some local and systemic conditions thereby hampering the esthetics of an individual.

Dental fluorosis is an irreversible condition caused by excessive ingestion of fluoride during the tooth forming years. The first documented effect of fluoride on dentition was published by McKay and GV Black. The prevalence of fluorosis in India was first identified by Short et al in 1937 in Nellore.

Dentists are offered with newer materials and treatment modalities to treat this condition. The choice of treatment depends on severity of the condition. Porcelain laminate veneers serves as optimum treatment modality in moderate to severe conditions which restores the esthetics of the teeth. This case report focuses on esthetic replacement of stained maxillary anterior teeth.

CASE REPORT

A male patient aged 26 years reported to the OPD of Department of Prosthodontics & Implantology in Chettinad Dental College and Research Institute, Chennai with chief complaint of unaesthetic appearance of upper front teeth.

On clinical examination, maxillary 6 anterior teeth were intrinsically stained and unaesthetic when the patient smiled (Fig 1). After clinical examination, radiographs, photographs, study casts were performed and case was analyzed. Porcelain laminate veneers were the treatment of choice and the treatment plan was explained to the patient. The patient gave his consent for fabrication of porcelain laminate veneers.
porcelain laminates were fabricated by refractory die technique (e Max). The laminates were tried in for fit, marginal adaptation, shade, shape, symmetry and contacts. Patient’s approval was obtained.

The internal surfaces of the veneers were etched with 9.5% hydrofluoric acid for 20 seconds. The surfaces were washed with water. The veneers were silanized with a silane coupling agent (Monobond Plus, Ivoclar Viva-dent). The enamel was conditioned with 37% phosphoric acid for 30 seconds (Total Etch). Cementation was done using dual cure resin cement (Variolink N, IvoclarVivadent) (Fig 3). Excess cement was removed with a brush, and each surface was photo-activated for 60 seconds.

As with any materials even porcelain laminates have their own pros and cons. They cannot be used when remaining enamel is inadequate. They cannot be used in large diastema cases. Severely stained teeth are not satisfactorily restored with veneers.⁷

Porcelain laminate veneers offer a predictable and successful treatment modality that preserves maximum amount of sound tooth structure. They serve as an excellent treatment modality if the treatment procedure is executed properly and the patient’s maintenance is good. The estimated survival probability of porcelain laminate veneers over a period of 10 years is 91%.[⁷]

CONCLUSION

Porcelain laminate veneers provide successful esthetic long-term service for patients. Porcelain laminate veneers offer more satisfactory results when fabricated cautiously and the results achieved have been gratifying for both dentist and the patient. A thorough diagnosis and treatment planning by dentist and good maintenance by patient helps in achieving long term survival rates of these restorations.

REFERENCES

Prosthetic rehabilitation for a maxillectomy patient – A case report

Dr Peter John¹, Dr Sridhran², Dr Eazhil³, Dr Saritha⁴, Dr Deepak⁵

INTRODUCTION
Maxillary defects can be due to congenital abnormalities or may be acquired and caused by trauma or surgical resections to treat different pathological conditions. An obturator is designed for patients after maxillectomy as a part of management of these defects. It is defined as a prosthesis used to close a congenital or an acquired opening in the palate. The major concerns while restoration is correction of speech, mastication, deglutition, and esthetics. Since the weight of an obturator is often the most common reason to dislodge, it should be as light as possible which is attained by hollowing the prosthesis. By decreasing the weight of the prosthesis, the retention and stability may be optimized to allow the obturator to function comfortably during mastication, deglutition and speech. This case report describes the fabrication of a hollow bulb obturator by a simple impression technique and thereby enhancing the retention, speech, mastication, deglutition and aesthetics.

CASE REPORT
A 20 year old gentle man from Jharkhand, presented with complaints of a swelling in the right cheek for the past 2 years, which was progressively increasing in size, and was associated with nasal discharge. He underwent right lateral rhinotomy in Jharkhand, following which there was no relief of the symptoms. On examination the swelling was diffuse in nature extending from the right infraorbital rim, inferiorly upto the alveolar process, laterally upto the zygoma, medially obliterating the nasolabial and nasomaxillary groove pushing the right lateral wall of the nose medially. He was diagnosed of juvenile psammomatoid ossifying fibroma of right maxilla. Whole of the right maxilla and the floor of the orbit were excised in toto under GA. (Fig. 1)

Fig 1: Clinical Picture of the Defect

Fig 2: Impression made with irreversible hydrocolloid (cavex)

PROCEDURE
The treatment objective was to provide prosthesis to obturate the defect to improve the speech, mastication and aesthetics. Impression was made with irreversible hydrocolloid (cavex) with stainless steel stock tray. Since the defect was more than 10mm in depth and width, it was not blocked because the hydrocolloid can withstand the tearing strength. (Fig. 2)
An impression extending into the defect was made. Master cast poured with Type IV dental stone after beading and boxing. Permanent denture base made with acrylic resin (DPI-heat cure clear acrylic) after minimally blocking the cast with wax. (Fig. 3) A conventional C clasp anteriorly and Adams clasp on the posterior were incorporated for better retention. Trial was done in the patient mouth after trimming to check the fit. Occlusal rims were fabricated and jaw relation done. Wax trial was done after doing teeth setting and adjustments were made chair side. Processing was done conventionally with heat cure resin (DPI-heat cure pink acrylic). A hollow bulb was fabricated by using salt and water technique with self cure acrylic (DPI-cold cure clear acrylic) after the initial processing. (Fig. 4) The obturator was tried in the patient's mouth after trimming and polishing. The soft tissue undercuts present in the defect and the weightlessness due to hollow bulb aided in good retention of the prosthesis. (Fig. 5) The patient was recalled after 24 hours after insertion of the prosthesis, after one week, then after three months and found satisfied.

DISCUSSION

Rehabilitation of patients who have undergone resection of the maxilla requires restoration of function, speech and aesthetics. A prosthesis which satisfies these goals should have good retentive properties also. Reducing the weight of the prosthesis by hollowing the obturator is found to be beneficial. Several techniques have been advocated in the fabrication of hollow obturators. Parel and La Fuete filled the hollow part of the obturator with sugar and covered it with acrylic resin. The sugar was later removed by making an opening in the acrylic lid. Aaron Schneider used crushed ice to fill the defect, which was covered by acrylic resin. Elliott's used clay to fill the hollow bulb, which was later removed by making an opening and flushing it out. Ashok Jhanji and Steve T Stevens resented a technique to make a one-piece obturator using silicone putty. Numerous studies have been put forth in the literature for the fabrication of hollow bulb obturator using variety of materials. These materials used should be biocompatible, impermeable, smooth and easily made. Hollow obturators are made with acrylic resin in either open or closed configuration. However silicone either solely or in combination with other materials has also been used for this purpose.

CONCLUSION

The concept of rehabilitation of patients with large defects of the maxilla with hollow bulb obturators provides a means of enhancing the retention, mastication, deglutition, speech and esthetics in the post-operative period. A prosthesis so designed provides a functional solution to the compromised state of the patient. The size of the maxillectomy defect and its extent is one of the main factors governing the prognosis of the treatment.

REFERENCES

Prosthetic rehabilitation for a maxillectomy patient

e-MIDAS


Treatment of Crowding and Proclination using ClearPath® Aligners

Dr Girish P.V.

INTRODUCTION
The ClearPath invisible appliance involves a series of plastic aligners that are clear, thin and made by advanced 3D techniques involving use of software also. The transparency of these appliances enhances its esthetic appeal for the adult patients as well as aesthetically conscious patients.

ABSTRACT
Adult orthodontic patients requiring orthodontic treatment have always been hesitant to opt for braces. And the reluctance to wear these braces due to their poor esthetic appeal has been a driving force for the development of alternative treatment options.

The ever-increasing demand for aesthetic & comfortable orthodontic treatment and rapidly expanding spectrum of feasible cases has seen ClearPath® Aligner therapy successfully completing thousands of cases in just the Indian subcontinent.

Each aligner is around 0.7mm thick and is designed to move the teeth by up to maximum of 0.25 – 0.3 mm over a 2 week period. All aligners in ClearPath® system are delivered altogether and worn through a pre-defined sequence all throughout the day.

CASE REPORT
Diagnosis:
A 25 yrs old female patient reported to our practice with the chief complaint of severe crowding in Upper and Lower anterior regions. Pretreatment records were made (Fig. 1). The patient was diagnosed of having a Class I malocclusion with crowding.

Treatment Objectives:
1) Decrowding and Alignment of both arches
2) Correction of incisor overlap
3) Reduction in proclination & overjet

After approval from ClearPath, we recorded the PVS impressions and PVS bite registration and sent them along with the case analysis form to ClearPath.

Treatment Plan:
1) Extraction of blocked out 32 for decrowding along with mild IPR in both arches.
2) Using both maxillary and mandibular arch ClearPath aligners to align the teeth as well as close the spaces.

The Virtual Setup:
The virtual setup of the patient was presented by ClearPath approx. 10 days after PVS Impressions & PVS bite were sent. The treatment plan was evaluated and the setup was approved without any modifications. The snapshots of the
The virtual setup are presented (Fig 2, 3, 4, 5, 6).

The virtual setup is a very strong Diagnostic tool to visualize your treatment plan, as well as a strong motivation for the patient.

**Fig 2:** ClearPath Virtual Setup, Upper Occlusal View - Before & After (Source: ClearPath Orthodontics, New Delhi, India)

**Fig 3:** ClearPath Virtual Setup, Lower Occlusal View - Before & After (Source: ClearPath Orthodontics, New Delhi, India)

**Fig 4:** ClearPath Virtual Setup, Frontal View - Before & After (Source: ClearPath Orthodontics, New Delhi, India)

**Fig 5:** ClearPath Virtual Setup, Right Buccal View - Before & After (Source: ClearPath Orthodontics, New Delhi, India)

**Fig 6:** ClearPath Virtual Setup, Left Buccal View - Before & After (Source: ClearPath Orthodontics, New Delhi, India)

**The Movement Record Form (MRF):**

The Movement Record Form (MRF) shows all the movements each aligner is doing in each stage on every tooth (Fig. 7). Since in this case, no movements on molars were given, the form contains fields up to 2nd premolar only.

**Fig 7:** ClearPath Movement Record Form (Source: ClearPath Orthodontics, New Delhi, India)

**IPR Form & Extraction Choice:**

IPR (Interproximal Reduction) was required to relieve the crowding in upper arch, and lower arch was decrowded by extraction of lingually blocked out 32. ClearPath was asked to plan entire IPR before the first aligner only, patient being of travelling nature.
Fig 8: ClearPath Interproximal Reduction and Extraction Form (Source: ClearPath Orthodontics, New Delhi, India)

Aligner Delivery to Patient:
The patient required a total of 22 UPPER and 22 LOWER aligners. The patient was very satisfied with the invisibility of ClearPath Aligners.

Treatment Results:
The treatment progressed smoothly, and got completed in around 11 months. The patient visited us only 1-2 times during entire treatment for follow ups.

The crowding was completely relieved and the patient was very happy as there was remarkable improvement in patient's smile (Fig. 9 and 10)

Fig 9: Occlusal Comparison (Source: Smile Architect Dental Clinic, Bangalore)

Fig 10: Smile Comparison (Source: Smile Architect Dental Clinic, Bangalore)

The overall hygiene maintenance and the level of clinical finish were of acceptable quality. The acceptance of this treatment modality is far more than conventional braces. The detailed views of post treatment results were also recorded and presented in Fig 11.

Fig 11: Post-treatment (Source: Smile Architect Dental Clinic, Bangalore)

CONCLUSION
This case report demonstrates how Clear Dental Aligners have become an esthetic alternative option for correction of malocclusion. They provide a hygienic, convenient and a clear solution as an alternative to fixed appliances for the correction of the malocclusion. **Severe crowding cases can also be managed well with ClearPath® aligners system,** and have been found to be efficient as well as effective in achieving good finish & results.

ABOUT THE AUTHOR
Dr. Girish P.V. completed his Bachelor's in Dental Surgery from V.S Dental College, Bangalore in the year 2003. Immediately he pursued his Masters in Orthodontics from Maruti Dental College and Hospital, Bangalore.

Currently attached to the Himachal Dental College, Sundernagar as an Assistant Professor.

He started his dental practice named SMILE ARCHITECT in the year 2008 in Bangalore and is successfully practicing since then providing quality orthodontic treatments with focus on Clear Aligners since then till date.
Advertisements

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78 N.V.N. Nagar, Chennai-600 040.
Ph: 9841030972, 9444331717  E-mail : blessydental@yahoo.co.in

To Advertise Here
Contact: emidasjournal@gmail.com
ClearPath was incorporated in USA in 2008 after over 8 years of Research & Development with the mission to deliver high quality, affordable, clear orthodontic aligner solutions to the global market. Lately, we have established our headquarters & manufacturing unit in Jeddah, Saudi Arabia to cater to Asian & North African countries. We are the first company to launch clear aligner solutions for correction of malocclusion in Middle East.

ClearPath provides new improved quality aligners through its unique process. These provide a hygienic, convenient and a clear solution for the correction of malocclusion without having to wear brackets and wires. ClearPath Aligners are removable medical grade plastic appliances which patient wears instead of brackets and wires to correct malocclusion. It is a Clear change to the concept of Adult Orthodontic treatment without using conventional methods of wires and brackets.

Please visit www.clearpathdental.com for details.

The company also has a dedicated team of Dentists with a Management degree as Product Specialist in Delhi, Mumbai, Bangalore, Hyderabad, Chennai, Pune, Kolkata and Chandigarh.

Our current sales force is the most qualified and skilled. We have multiple Business Manager in Delhi, Bangalore and Hyderabad. By 2016 end we will have dedicated Business Managers in every state capital.

**ASSISTANT PRODUCT SPECIALIST**

**Locations/Vacancies:** Chennai (2) | Coimbatore (1)

**Introduction**
Candidate should be able to comprehend dental concepts and explain them in ways that are understandable to others. Information that is often very academic in nature needs to be turned into something that can easily be integrated into a business model. These managers are liaisons & account managers specifically to medical communities, private practitioners, orthodontic associations etc.

**Roles & Responsibilities**
- Building credible and solid relationships with the orthodontic community on the ClearPath's behalf resulting in enhanced sales.
- Developing relationships with local orthodontic thought leaders whose opinions and treatment regimens influence the practice of their colleagues.
- Representing ClearPath at specific continuing educational events / programs, medical meetings, conventions and trade fairs / exhibitions.

**Desired Candidate Profile**
- **Education:** BDS Degree in Dentistry (NON NEGOTIABLE). A Management degree/diploma will be given preference.
- **Experience:** Experience in dentistry or sales experience in Dental products will be most preferred option.
- Excellent oral and written communication skills in English.
- Presentable and pleasing personality.

**CONTACT DETAILS**

S.M. Faisal  
Mobile: +91 9910470075  
Email: s.faisal@clearpathortho.com

Dr. Vijeta Tiwari  
Mobile: 08826660132, 08754461779  
Email: vijeta.tiwari@clearpathortho.com
Wanted BDS Resident doctor for morning shift @

Thamizh's Dental Clinic
AB 61, 4th Street, Anna Nagar, Chennai 600040.
Near VBJ & Nalli Silks
Qualification: BDS

Contact:
Dr. H. Thamizhchelvan
+91 - 9884105711
hthamizh@gmail.com

To Add Placement Details and Other Opportunity
Contact: emidasjournal@gmail.com
Paintings of Special Children during Public Dental Expo 2014
Paintings of Special Children during Public Dental Expo 2014
Paintings of Special Children during Public Dental Expo 2014
Paintings of Special Children during Public Dental Expo 2014
Ida - Madras Branch
Office Bearers 2014
BRANCH MEMBERSHIP STRENGTH

Life Members : 394  
Annual Members : 197  
Total : 591  
No.of Student Members : 2000

CDE PROGRAMS

1st CDE Program - Periodontics a Practise Builder for General Practioners
1st CDE Program

TOTAL MEMBERS ATTENDED: 280
2nd CDE Programme – 2014
Symposium on Oral Cancer

Conducted by
Indian Dental Association
Madras Branch
In Association with
Cancer Institute (WIA)
Chennai

To Commemorate WORLD CANCER DAY

Venue: Auditorium
Cancer Institute (WIA), Adyar, Chennai,

Date & Time:
04/02/2013 between 09.00am to 03.30pm

Registration Fees:
₹ 300/- inclusive of Registration kit & Lunch.

For Registration Contact:
Dr. H. Tharnizh Cheivan – Mobile: 9884105711
Dr. K. Madhusudan – Mobile: 9841016816
2nd CDE Program

[Image: Indian Dental Association Madras Branch]

[Image: Cancer Institute (WIA), Chennai]

[Image: World Cancer Day 2015]


[Image: Group of people in a meeting room]

[Image: Two individuals holding a certificate]
TOTAL MEMBERS ATTENDED: 175
INFORMATION ASSOCIATION
Madras Branch

Conducts
3rd CDE Program 2014
On
Comprehensive Prosthodontic Workshop for
General Dental Practitioners
Interesting Lecture and (Video Live Demonstration)

Course Fees: IDA Members — ₹ 300 | Non IDA Members — ₹ 600

For Registration Contact

Dr H. Thamizh Chellvan
Secretary, IDA Madras Branch
AB 61, 4th Street, Anna Nagar,
Chennai - 600 040,
Ph: 044-42172715
Mobile: 9884105711

Dr K. Madhusudan
CDE Convener
9841016816
email: krishmad@gmail.com

Venue: SRM Dental College & Hospitals, Ramapuram, Chennai
Date: 30th March 2014
Time: 9.30am to 4.00pm

Colgate
Principal Sponsor
TOTAL MEMBERS ATTENDED: 200
4th CDE Program - Clear Path Certificate Course

Full Day Certification Workshop

Clear Revolution in Orthodontics

Hosted by

IDA & ClearPath

Indian Dental Association
Madras Branch

Chennai, Tamil Nadu
Sunday 27th April
09:00 AM to 2:00 PM: Workshop
02:00 PM to 3:00 PM: Lunch
03:00 PM to 5:00 PM: Hands on Demo

Venue:

Vivanta
Motel & Resort
By Taj

Honorable Convener:
Dr V Rangarajan (President, IDA Madras Branch)
Dr H Thanizh Chelvan (Branch Secretary, IDA Madras Branch)
Dr Madhusudhan (CDE Convener, IDA Madras Branch)

*Registration Fee INR 2000* fully refundable on first case submission

Course Outline
- History & Evolution of Clear Aligners
- Biomechanics & Force Delivery with Aligners
- Case Selection Parameters of Clearpath Aligners
- Clearpath Orthodontics & Clearpath Systems
- Case Submission and Records Required
- Monitoring Aligner Patients & Patient Instructions
- Clearpath Product Packages and Pricing

Registration Enquiries
Dr Vijeta, ABM, ClearPath Chennai on 8754461779
Dr Giri, ABM, ClearPath Chennai on 9585500989

COURSE FACULTIES

Dr D Arunachalam BDS, MDS
Dean, Priyadarshini Dental College & Hospital
Diplomate, ICOI (International Congress of Oral Implantologists)
Member, American Dental Association (ADA)
Principal Dentist, Smile India, Chennai

Dr Swapnil Gupta BDS, MDS
Product Specialist & Orthodontist, ClearPath
Member, European Orthodontic Society
Member, German Association of Aligner Orthodontics (DGAO)
Consultant Orthodontist at multiple private practices
4th CDE Program

TOTAL MEMBERS ATTENDED: 80
5th CDE Program – Basic Life Support Workshop

TOTAL MEMBERS ATTENDED: 27
Upcoming Event
ICOI Implant Foundation Programme

On 19th & 20th July 2014
Venue: Thai Moogambigai dental college & hospital, Chennai

Speakers:
Dr. Girish Rao, MDS, FDSRCSI(Eng), FFDRCSI(Ire)
Dr. Anandakrishna G N, MDS
Dr. Arunachalam, MDS

Dr. J. Nagarajan V, MDS
Dr. T. V. Padmanabhan, MDS

Contact:
Dr. H. Thamizhchelvan: 9886160781
Dr. Shankar Ram: 9886766741
Dr. K. Madhusudan: 9900522360

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e-MIDAS Chennai/Volume:2/Issue:1/Pages1-62/March2015
6th CDE Program

TOTAL MEMBERS ATTENDED: 195
The 7th CDE Programme by IDA Madras Branch : 28th September 2014

Venue: Savera
“ALL CERAMICS – ESTHETIC YET STRONG” – Single Visit CAD CAM CROWNS
Lectures and Live demonstration of CAD CAM technologies

No of Participants: 30
8th CDE Program on Enhancing Pediatric Dentistry Practise

TOTAL MEMBERS ATTENDED : 147
CDH & OTHER ACTIVITIES

YOUTH MELA 2014 - JANUARY 25 & 26

BENEFICIARIES: 10,000 general public

DENTIST DAY CELEBRATIONS - MARCH 9TH 2014 at TNCA CLUB
CDH & OTHER ACTIVITIES

WORLD NO TOBACCO DAY - MAY 29TH TO 31ST

BENEFICIARIES: 10,000 general public
1000 students & doctors from various colleges covered 10 shopping malls
MEGA SCREENING CAMP IN ASSOCIATION WITH ROTARY INTERNATIONAL - JULY 11

Rotary

DISTRICT COMMUNITY SERVICE - HEALTH, and Food
14 participating Rotary Clubs

Individually invite you for the inauguration of the FREE DENTAL SCREENING CAMPS IN VARIOUS SCHOOLS Covering over 15,000 children

in association with the INDIAN DENTAL ASSOCIATION(MADRAS BRANCH) & LEO MATRICULATION HIGHER SEC. SCHOOL, ANNA NAGAR WEST EXTENSION, J BLOCK, WELCOME COLONY, ANNA NAGAR, CHENNAI - 600 026 on Friday the 11th July 2014 at 8:30 am

Rtn. I. S. A. K. NAZAR District Governor, DI. 3230

has kindly consented to inaugurate the camp in the presence of

Dr. RANGARAJAN President, Indian Dental Association(Madras Branch) & Rtn. Dr. TAMIL CHELVAN Branch Secretary, I.D. Madras Branch

CDH & OTHER ACTIVITIES

BENEFICIARIES: 15,000 general public
IDAMadras Branch & Rotary Club of Madras Mount
along with Rotary International District 3230

Cordially invite your presence for the inauguration of

PUBLIC DENTAL EXPO

&

DENTAL EDUCATION FAIR 2014

By

Rtn. Gary C. K. Huang
Rotary International President

CHIEF GUEST

Rtn. P.T. Prabhakar
Rotary International Director

GUEST OF HONOUR

In the presence of

Rtn. ISA K. Nazar
District Governor
Rotary International District 3230

On Tuesday the 9th December 2014 at 11.00 am

Venue: Dr. M.G.R Janaki College, Adyar, Chennai
Exhibition Timing: 9.00 am to 4.00 pm

Dr. V. Rangarajan
President
IDA Madras Branch

Rtn. Dr. H. Thanishchelvan
Secretary
IDA Madras Branch

Rtn. Dr. N. Nandakumar
Director - Community Service Health
Rotary International District 3230

Rtn. Dr. P.D.G. Shyam Sundar
Counsellor - Community Service Health
Rotary International District 3230

Rtn. Dr. R. Sivam
Advisor - Community Service Health
Rotary International District 3230
PUBLIC DENTAL EXPO 2014

BENEFICIARIES: 2,500
LECTURE SERIES

OROFACIAL PAIN

SRI VENKATESWARA
DENTAL COLLEGE & HOSPITAL
(A Unit of VELS Group, Chennai)
OMRI, Thalambur, Chennai - 600 130

DEPARTMENT OF ORAL MEDICINE,
DIAGNOSIS
& MAXILLOFACIAL RADIOLOGY

In Association With
INDIAN DENTAL ASSOCIATION (IDA)
Madras Branch

FREE REGISTRATION
Presents
CDE Programme on
OROFACIAL PAIN
2nd July 2014 (Wednesday)

CDE POINTS APPLICABLE

Venue:
Dr. ABDUL KALAM CONVENTION CENTRE
(Sri Venkateswara Dental College and Hospital)
Thalambur, Chennai – 600 130.

UG, PG, Staffs and General Practitioners Can Participate
TOTAL NO ATTENDED: 300
CONTINUING DENTAL EDUCATION
– ALKEM & IDA

[Image of attendees at a dental education event]

[Image of speakers at a dental education event]
CARRIER GUIDANCE PROGRAM 2014
CULTURAL FEST
DECEMBER 20TH & 21ST

Totally 2500 students participated and made the event a grand success
2ND CDE PROGRAM
ORAL CANCER WORKSHOP
Camps and Services

Camp Conducted in Association with Rotary District International 3230

Venue: SRKM Vivekananda Centenary Girls Higher Secondary School
No.2, Saravana Street, Mint - 600 079.
Date: 06-01-2015

Total number of student's screened : 599
Total no. of staff's screened : 5
Total no. of smiley's distributed : 300

The first program of this year started with a dental screening and treatment camp, a noble gesture in collaboration with Rotary club of Chennai towers 3230. Sree balaji dental college screened around 600 students at Sri Ramakrishna centenary Vivekananda higher secondary school. Nearly 300 students were awarded smiley badges to children with good oral hygiene. The team was headed by Dr. Anita and Dr. Naresh along with ten students. The primary school was screened by Sri venkateshwara dental college. Dr. Shyam and his team of students had screened around 374 students and also carried out basic dental treatment. 58 scaling and around 32 ART was done on the under privileged children. Dr. Sumeida had coordinated on behalf of rotary. Health education lecture was given by Dr. VIDYAA HARI IYER and it was very informative. She was able to articulate in such a way that the students were able to cope up with her standard and students were greatly motivated and educated regarding the oral health.
WORLD CANCER DAY 2015

CELEBRATED IN ASSOCIATION WITH Cancer Institute

Venue: MARINA BEACH
Date: 04-02-2015

180 students participated from Ragas, Saveetha, Chettinad, Tagore, G D C, Vels and Balaji. Certificates and Healthy refreshments were given to all participants. Thanks to the entire team for making the event a grand success.
DENTIST DAY CELEBRATION 2015

IDA - Madras Branch
Welcomes you for
Dentist Day Celebration 2015

6.00 - 6.15 pm  - Inauguration
6.15 - 6.45 pm  - “Secret Mantras of building practice”
                - Sekar Dhandapani (Managing Director - Amar Group)

Guest of Honour
Dr. M. Balasubramaniam
(Immediate Past State President - IMA)

Followed by Games
Tattoos, Bouncing Castle, Tambola, Mirror Car, Bollon Shooting
DJ Music – Dinner with fellowship
Charges Rs.400 per person

Dress code: Formal, Please avoid collarless T-shirts
UPCOMING EVENTS

Month: April
Implant Course: Chettinad Dental College
Contact Person: Dr. Sridhar - 9444170808

Month: May
No Tobacco Day: IDA - Madras Branch
in association with Rotary 3230
Contact Person:
Dr. Bhuminathan / Dr. Kishore - 9884428808

Month: June
Symposium on Oral Cancer - SRM Katangallathur
Contact Person: Dr. Ganesh - 9791074294