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Dear Reader,

Can Blue turn into Green??

@ The Dentcare, nothing is impossible.

The World Environment Day spells an alarming need for blue water and pristine air; Creation we have deliberately taken for granted.

What have we created instead? A conundrum for our loved ones.

A vexed question demands serious thought for a lasting solution. We can win over it, like we have for Epilepsy.

As the air clears, June will offer us the much needed respite as well as exuberance as our precious ones return "back to school". Discover within our script, homework that could benefit. God be with our children as they turn a new chapter in their lives.

India will experience RejuveNation in the coming days. Its people have new reason to believe in a promising future.

The true experiences you carry in your heart from the Dentcare are reflected in our pages. You have reconnected with our senses and have left us with indelible memories. Rest assured, you remain our biggest asset always.

Remember, Microgreen could be the real "Key to" diet!!

Does Blue have the X-Factor to #Make Me Move? Reason enough for intrigue this season.

Yours truly,

Prof. (Dr.) George P. John

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CAUTION: When viewing the techniques / procedures, theories and materials that are presented, you must make your own decisions about specific treatment for patients and exercise personal professional judgment regarding the need for further clinical testing or education and your own clinical expertise before trying to implement new procedures.

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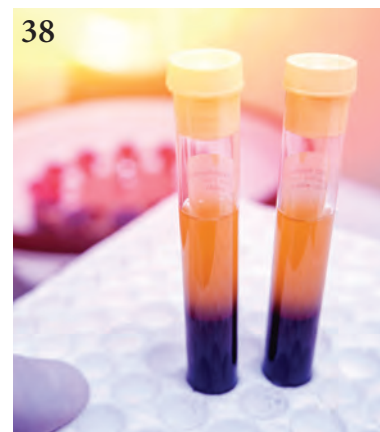
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Truth Alone Triumphs



FROM MD'S DESK

The world is advancing faster than we can comprehend. Newer inventions and scientific breakthroughs have improved the quality of life of humans. There is also an unprecedented rise in the number of an ultra-wealthy population.

But how many people realise the fact that money can be lost but it is the character that lasts. Do Honesty and Integrity really exist in our modern society?

It can be unequivocally stated that Honesty hardly exists in the modern world and that people commonly connote the word – **Honesty**, differently. Honest people are now generally considered as good-for-nothing individuals. People who, are derelict in their duties; dishonest in the workplace; evade payment of tax; engage in corruption and nepotism (use of power or influence to get unfair advantage for one's own interests), are generally considered as successful individuals in society.

Is this the real progress of our society?

I shall relate a story that will help broaden your mind and instill moral values in you.

There once lived a renowned monk in a beautiful monastery with a number of pupils. His teachings were known to be very effective and many of his students later became celebrated men of charismatic qualities.

One day, one of the pupils was caught stealing from his fellow student and it was reported to the monk. But the hermit took no action against the boy. A few days later, the same boy was caught red-handed when he was pilfering something. And again the monk did nothing to punish him. This angered the other students who drew up a petition asking for the dismissal of the thief. They threatened to leave the

hermitage en masse (all together) if the boy was allowed to stay in the monastery.

The sage convened a meeting of the students. When they had assembled, he told them: "You are all good boys who know what is right and what is wrong. If you leave, you will have no trouble in joining some other school. But what about your brother who does not even know the difference between right and wrong? Who will teach him if I do not do it? No, I will not ask him to go even if all of you 'leave for good'."

Hearing these words, tears coursed down the cheeks of the boy who had stolen. He made up his mind to lead an honest life and later he became a renowned man noted for his integrity.

It is a painful fact that the darkness of untruthfulness and deception have spread deeper into our society. It is better to light a candle than to curse the darkness. Everyone should live a truthful and honest life by seeking absolute truth in everything we do since **Honesty and Integrity** help sharpen our perceptions; promotes openness; empowers and enables us to develop consistency in our speech and action. Therefore, hold it tight.

Let us all strive to nurture a culture of Honesty and Integrity in our lives, setting a mighty example for the future generations. May the Almighty God help us all to lead an exemplary life! ☺

Mr. John Kuriakose

Managing Director

DentCare Dental Lab Pvt. Ltd.



THE X-FACTOR

There are a lot of special skills that a Clinician can and must acquire. In dentistry, besides having a technical understanding of the various procedures, a Clinician should also possess something that is referred to as the 'X-Factor'; that is special talents, abilities, or qualities.

Before looking at what the 'X-Factor' is, one must understand that despite having well-defined treatment protocols to address various clinical conditions, there may be numerous situations in our clinical practice where adherence to these protocols may become impossible. This could be due to

- Multiple complications that exist simultaneously with overlapping symptoms
- Some dental problems may require immediate attention, necessitating higher priorities while others may be put off as they need not be addressed on a priority basis

Addressing multiple dental problems individually may become challenging due to complex clinical situations. For example, a Root Canal Procedure can be performed to treat an Endodontic Infection. However, when an endodontically treated tooth is prepared for a Crown, the Clinician may realize that there is insufficient interocclusal clearance with the opposing tooth. This may call for the intentional endodontic treatment of the opposing supra-erupted

tooth so as to accommodate the prosthesis. This complication may be avoided if a Clinician can properly assess the situation and devise a treatment plan accordingly.

Considering such complications, it is important to keep in mind that each patient is unique and there cannot be a standardized approach to treat all patients alike. Each patient requires a customized treatment plan keeping in mind a holistic treatment approach. In such a scenario, the critical understanding and clinical knowledge of a Dentist comes into play.

The unique acquired ability of a Clinician to read through a situation based on his / her experience and knowledge and the dexterity to handle multiple overlapping dental problems without compromising function, along with creating and maintaining a balance between function and aesthetics bearing the longevity of treatment outcome in mind can be commonly referred to as the 'X-Factor'. It is the edge that a Dental Practitioner ought to acquire over years of practice.

The X-factor is an acquired skill that comes with observing, understanding, learning, and exercising critical judgment either supervised or unsupervised, over years of practice. Strategizing a treatment on the basis of priority is an important factor. However, the success of drawing an efficient treatment plan



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does not only revolve around planning treatment procedures but also around knowing which procedures to be avoided so that a more holistic approach can be planned. 'Holistic' means the entire oral cavity, including the teeth and their respective functions and aesthetics.

An illustration will help one understand what the X-factor is in a clinical situation.

Clinical Situation I

A patient came to the Clinic with the complaint of a decayed tooth. He had a pain associated with the tooth initially, but it subsided over time. Occasionally, he noticed a swelling in the gums around the tooth. With pressure, there was pus from the gingival sulcus. After careful clinical and radiographic examinations, a diagnosis of an Endo-Perio Lesion was made.

The presence of Tooth Decay indicated that the Lesion was primarily an Endodontic Lesion which progressed to Secondary Periodontal Infection. Hence, the Endodontic Infection was addressed first. After waiting for the apical infection to heal, the periodontal problem was treated.

However, the prognosis might depend on a lot of factors. There can be a situation where an infected tooth might be efficiently restored to its full functionality. In another situation, a Secondary Periodontal Infection might be so severe that the prognosis may not be significantly favorable.

In such a situation, it would be ideal to consider the means of conserving the alveolar bone, keeping the option of Dental Implant Restoration in mind. This decision comes only with a critical assessment of the situation and a mentally projected vision of the future outcome.

Clinical Situation II

Another patient came to the Clinic with approximately 60% of missing teeth, which were extracted due to severe Dental Caries. The patient complained that he had Difficulty in Swallowing. The remaining teeth were periodontally sound and did not have any pathologic mobility.

Should a Clinician retain the remaining healthy teeth and replace only the missing ones or Should all the teeth be removed and a full-mouth rehabilitation by means of Dental Prostheses be considered?

There may be numerous clinical situations where such questions can arise. The decision of a Clinician can significantly influence the choice of a treatment

modality. In fact, a Clinician's perception and analysis of a clinical situation can also influence a patient's perception about choosing an ideal treatment option for him.

Most often than not, there tends to be a lot of prejudice / bias against various treatment approaches, both in the minds of a Clinician and a patient. This bias may be on account of various factors, such as time, money, effort, knowledge / expertise, popularity, complexity, facility, perception / understanding, and experience.

Some situations may require a Clinician to take calculated risks. These situations are opportunities where a clinician is required to prove his mettle and resilience.

Clinical Situation III

A Clinician proposed the extraction of a mesially tilted healthy tooth that is distal to an edentulous space, so as to rehabilitate the mouth with a more stable denture. The Clinician considered this as a strategic benefit with regards to the path of insertion, retention, and stability of the denture.

However, the patient may look at it as the loss of an otherwise healthy tooth. If the denture is fabricated without removing the distal natural tooth, complications with regard to denture stability, food lodgment, and the undue force on the natural tooth can become a challenge.

Eventually, the tooth will have to be extracted, and another denture that suits the dental profile will have to be fabricated and fixed. This can be avoided at any cost if an experienced Clinician can anticipate such a situation beforehand. Therefore, taking adequate time to discuss and formulate treatment strategies so as to arrive at a consensus with the patient is of utmost importance even before the beginning of a treatment process.

A Clinician must keep in mind that every patient is unique and so are their treatment needs. Communication of ideas and opinions between clinician and patient is very essential for devising a suitable treatment plan. If neither of them understands the perspectives and opinions of the other, the very initial step of efficient treatment planning will cease to take shape. It is always crucial to keep an open mind and not be driven by preconceived notions or ideas.

Conclusion

The ability to read through a clinical situation is a crucial factor that helps a Clinician formulate a customized treatment plan that entails a successful outcome. Besides, it is very critical to view the holistic outcome of treatment with regards to aesthetics and function when addressing complex dental problems.

In challenging circumstances, a Clinician may have to make critical decisions. And for that, a Clinician ought to acquire professional competence and skills or the 'X-Factor'. ®



The majority of Febrile Seizures occurs within the first day of the onset of a Fever and may occur either before or after the onset of a Fever

Febrile Seizures

A Febrile Seizure, also known as Fever Fit or Febrile Convulsion, is a Seizure associated with high body temperature but without any serious underlying health problems. It is commonly seen in children between 6 months and 5 years of age. Febrile Seizures occur more in boys than in girls and affects about 3% of children. The majority of Febrile Seizures occurs within the first day of the onset of a Fever and may occur either before or after the onset of a Fever.

The Fevers that may trigger Febrile Seizures include Viral / Non-infectious Diseases, Common Cold, Chest / Ear Infection, and Diarrhea. Studies have shown that there is a small increase in risk for Febrile Seizures 5 to 12 days after a child has received the first immunization with Measles, Mumps, and Rubella (MMR) Vaccine.

Generalized Tonic-Clonic Seizures (GTCSs), a type of Seizure that involves the entire body, are the most



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commonly found Seizures followed by Tonic (a brief Seizure consisting of a sudden onset of increased tone in the extensor muscles) and Atonic Seizures (a type of Seizure consisting of partial or complete loss of muscle tone). In some children, the onset of a Seizure can be of either unilateral or focal onset.

Meningitis should be appropriately diagnosed and thoroughly monitored or ruled out, particularly in children under 2 years of age, as it can pose a risk for Febrile Seizure.

Febrile Seizures tend to run in families. If a child's parents, brothers / sisters, or other close relatives have had a Febrile Seizure, the child is more likely to have a Seizure.

Children who have had a Febrile Seizure are at a risk for having another Seizure and this occurs in approximately 30 to 35 percent of cases. Recurrent Febrile Seizures do not necessarily occur every time a child has a Fever. Most recurrences occur within one year of the initial Seizure and almost all Seizures occur within two years.

Febrile Seizures generally do not require specific investigation tests if the diagnosis is conclusive and accurate. Electroencephalogram (EEG), a test used to find the problems related to electrical activity in the brain, or Brain Imaging is unhelpful in diagnosing a Simple Febrile Seizure.

Management

Most Febrile Seizures last only for a few minutes. If a Seizure continues to persist, treatment with intravenous medications like Lorazepam or Rectal Diazepam may become necessary. Another important step in the management Febrile Seizure is to preclude serious underlying causes, such as Meningitis.



Home Management

The parents of a child with Febrile Seizures should be advised to place the child on his side and administer Rectal Diazepam at a dose of 0.5 milligrams (mg) / kilogram (kg). Antipyretic Drugs like Paracetamol and Ibuprofen may also help pacify a child and avoid dehydration. Physical treatment methods like Tepid Sponging Bath (sponging or washing with lukewarm water), Fanning, or Cold Sponging may also be effective, but its effects are shorter than that of Antipyretic Drugs.

Prophylactic Management

The mainstay of the management of Febrile Seizures is education and reassurance for both the parents and children. A Simple Febrile Seizure does not need Prophylactic Treatment. The potential side effects of the medications for Febrile Seizures appear to outweigh the benefits. Prophylactic Treatment / Antiepileptic Medications may become necessary if there is the likelihood of Neurological Abnormalities or Frequent Recurrences.

Conclusion

Febrile seizures are a common disorder in children between 3 months and 6 years of age and are associated with an excellent treatment outcome. Counseling and reassurance remain the mainstay of the management of Febrile Seizures. ©



Toothbrush:

A Brief Overview

A Toothbrush is the most useful and habitually used oral hygiene aid to keep the oral cavity hygienic and healthy. According to the Council on Dental Therapeutics of the American Dental Association, a Toothbrush is primarily designed to promote cleanliness of the teeth and the oral cavity.

Objectives of Tooth brushing

- ☑ To clean the teeth and interdental areas
- ☑ To prevent plaque formation
- ☑ To stimulate and massage the gingival tissue
- ☑ To clean the tongue

Types of Toothbrushes

i) Manual Toothbrush

A Manual Toothbrush is a brushing tool that is not electrically powered, which helps clean the gums, teeth and interdental spaces. The handle of a Manual Toothbrush is usually made of plastic and the bristles of nylon. A Toothbrush is gently moved under the gum line using an up and down motion to remove plaque, food remnants, and debris.

ii) Electric Toothbrush

An Electric Toothbrush is a battery-operated brush and when the button is pressed, its head starts oscillating, rotating, or vibrating, which helps clean the teeth effortlessly. In an ordinary Electric Toothbrush, the frequency of oscillation may be around 40 Hertz (HZ).





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iii) Ultrasonic Toothbrush

An Ultrasonic Toothbrush is a Manual Toothbrush with a piezoelectric ultrasonic transducer (a device used to convert energy into an ultrasonic vibration) fixed to its head, which helps destroy bacteria, besides eliminating debris and stains from the teeth. It also helps remove stains beneath Dental Braces.

iv) Interdental Brush

An Interdental Brush helps clean the interproximal and furcation areas of the teeth. It can even reach under Dental Bridges and prosthetic units. Interdental Brushes are available in varying sizes and thicknesses. An Interdental Brush can also be used around the arch wires in a patient undergoing orthodontic treatment or those using space maintainers or periodontal splints.



A Kids Toothbrush should have soft round bristles to help clean a child's teeth efficiently



v) Kids Toothbrush

A Kids Toothbrush should have soft round bristles to help clean a child's teeth efficiently. Its head should be small enough to fit in the mouth of a child and clean all the areas in the oral cavity.

Recent Advances

i) Disposable Toothbrush

A Disposable Toothbrush is usually a small, inexpensive oral hygiene tool, most often used only once before its disposal. Usually, it comes with toothpaste on a Toothbrush in smaller quantities. A Disposable Toothbrush is ideal for use during short trips.

ii) Chewable Toothbrush

A Chewable Toothbrush is a miniature plastic molded Toothbrush, requiring no toothpaste or water. It is simply chewed and rolled around the mouth and is disposed of after use. A Chewable Toothbrush is composed of xylitol, flavoring aqua, and polydextrose.

A Toothbrush is an inevitable tool for the removal of debris and plaque from the surface of the teeth. The type of Toothbrush used and the method of brushing greatly affect the removal of plaque



iii) End–tuft Brush

An End-tufted Brush is best for cleaning hard to reach areas, such as between Dental Bridges, Crowns, or crowded teeth. It can also be used around Fixed Orthodontic Appliances.

iv) Eco-friendly Toothbrush

An Eco-friendly Toothbrush is an environment-friendly oral hygiene tool. The handle of an Eco-friendly Toothbrush is made from biodegradable objects like bamboo and the bristles are made of bamboo viscose or pig bristles.

Recommendations

- ☑ A soft to medium nylon bristle Toothbrush helps clean the teeth and gums efficiently. Besides, it will not traumatize the gums
- ☑ Brush the teeth twice a day with a Toothbrush and toothpaste
- ☑ Brush the teeth for 3 to 4 minutes

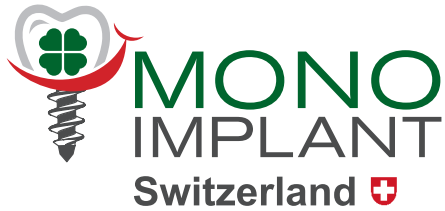
- ☑ A Toothbrush should be replaced every 3 to 4 months or sooner if the bristles are frayed

Maintenance of Toothbrush

- ☑ Do not store a Toothbrush in a closed container
- ☑ Store a Toothbrush upright in a dry place
- ☑ Rinse a Toothbrush with tap water after brushing to get rid of residual toothpaste and debris
- ☑ Rinsing with an Antibacterial Mouth Rinse after brushing may help reduce bacterial growth on a Toothbrush

Conclusion

A Toothbrush is an inevitable tool for the removal of debris and plaque from the surface of the teeth. The type of Toothbrush used and the method of brushing greatly affect the removal of plaque; hence it is important to select a suitable Toothbrush for keeping the oral cavity hygienic and healthy. ®



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Common Monsoon Diseases



**Keep yourself
clean and
hygienic to
stay away from
Monsoon-
related
diseases**

The sudden onset of Monsoon after an extended period of hot summer makes an average individual prone to a host of upsetting diseases. Monsoon is the time when germs and infections attack humans more and hence, people are more likely to get sick. Apart from people picking up bacterial and respiratory tract infections, the existing problems, such as Asthma might get aggravated during Monsoon.

A few common diseases spread through the bite of mosquitoes or droplet transmission are

Influenza or the Flu

Influenza, commonly known as the Flu, is an infectious disease of the lungs and airways caused by an Influenza Virus. The symptoms can be mild to severe. Influenza usually resolves on its own. But it can sometimes cause severe complications, including death.

The symptoms of Influenza include High Fever, Sneezing, Blocked / Runny Nose, Fever with Chills and Shivering, Cough, Muscle Pain, Body Ache, Fatigue, etc.

Dengue Fever

Dengue Fever is a Viral Fever transmitted through the bite of an infected Aedes Mosquito (Tiger Mosquito). It is caused by a Dengue Virus. The complications



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of this fever include Internal Bleeding, Low Platelet Count, Bleeding from the Nose or Mouth, Bleeding into the Skin, Kidney Failure, etc.

The symptoms of Dengue Fever include Body Ache, Headache, Joint Pain, High Fever, Skin Rashes, Pain behind the Eyes, and Loss of Appetite.

Chikungunya

Chikungunya is an infection caused by Chikungunya Virus. It is transmitted to humans by the bite of an infected Aedes Mosquito or Aedes albopictus Mosquito. If left untreated, it can cause even death, especially in children, the elderly, and patients with a weakened immune system.

The symptoms of Chikungunya include Fever, Joint pain, Headache, Skin Rashes, Swelling in the Joints, Fatigue, Nausea, etc. Joint Pain can last for weeks even after the patient recovers from this Fever.

Japanese Encephalitis

It is caused by a type of Arbovirus and is spread by the bite of a Culex Mosquito. It can cause permanent brain damage and is the leading cause of Viral Encephalitis in Asian population.

The symptoms of Japanese Encephalitis include High Fever, Headache, Vomiting, Pain, and Stiffness of the Neck, Loss of Memory, Weakness of the Limbs, Fits, Abnormal Behavior, and Loss of Consciousness.

Leptospirosis or Weil's Disease

This is caused by a bacterium, Leptospira interrogans.

People get Leptospirosis when they come into contact with wet soil or vegetation contaminated by the urine of infected animals, especially rodents. Both domestic and wild animals can carry Leptospirosis and may pass this bacterium in their urine. Leptospira can enter the body through broken skin, or mucous membranes or by swallowing or inhaling contaminated water or air.

The symptoms of Leptospirosis include High Fever with Chills, Headache, Eye / Muscle Pain, Cough with Spitting up of Blood, Difficulty in Breathing, Jaundice, Skin Rashes, Diarrhea, Vomiting, and Low Blood Pressure.

Malaria

This is caused by a parasite called Plasmodium and is spread through the bite of an infected Female Anopheles Mosquito. It is very common during the Rainy Season. There are different types of Malaria; some of them can even be fatal.

The symptoms of Malaria include Fever with Chills or Shivering, Body Ache, Muscle Pain, Headache, etc. A dangerous type of Malaria called Falciparum Malaria can lead to Fits, Coma and even death if left untreated.

Typhoid Fever

This is a life-threatening infection caused by a bacterium called Salmonella typhi. It is usually spread through contaminated food and water or through close contact with someone who is infected.

The symptoms of Typhoid include Headache, Vomiting, High and Prolonged Fever, and Severe Stomach ache. There can be complications like a Perforated Ulcer in the stomach.

Hepatitis

Hepatitis is an inflammation of the liver caused by a Hepatitis Virus. There are several types of Hepatitis including Types A, B, C, D, and E. Hepatitis A and E are transmitted by the fecal-oral route. Hepatitis can be a common cause of Jaundice. Hepatitis A, B, and E can cause Acute Liver Failure.



The symptoms of Dengue Fever include Body Ache, Headache, Joint Pain, High Fever, Skin Rashes, Pain behind the Eyes, and Loss of Appetite



The symptoms of Hepatitis include Yellowing of the Skin, Weakness, Vomiting, Nausea, Loss of Appetite, Stomach ache, Pain in the Joints, Dizziness, etc.

Waterborne Diseases

Waterborne Diseases are conditions caused by a variety of pathogenic microorganisms, biotoxins, and toxic contaminants, which can lead to devastating illnesses. Diarrhea and Vomiting are the most commonly reported symptoms of Waterborne Illness. Proper household water and sanitation practices, such as sanitary sewage disposal, safe water storage, etc., will help reduce the risk of developing Waterborne Diseases.

The symptoms of Waterborne Diseases include Severe Abdominal Pain, Vomiting, Diarrhea, Fever, Blood, and Mucus in Stool. The symptoms may vary according to the type of infection. A patient's condition may become serious when water and salts lost from the body are not replenished or when the liver and other organs are seriously affected.

A few steps to prevent and control of Monsoon Diseases

1. Drink boiled or filtered water only
2. Get vaccinated against diseases like Typhoid and Hepatitis
3. Use a Mosquito Net or Repellent to avoid mosquito bites
4. Avoid exposure to rainwater, especially when you have an open wound
5. Keep food items covered to keep them away from flies



Vitamin C
helps boost
the immune
system



A Word of Caution

1. Keep yourself protected from the rain. Always carry an umbrella or a waterproof hooded jacket and wear a pair of waterproof shoes when you go out
2. Vitamin C helps boost the immune system. So eat plenty of fruits, gooseberry, and lemon, as they are good a source of Vitamin C
3. During the first rain of Monsoon, the rainwater will carry organisms suspended in the air, which may cause an infection. So, it is better to take a shower when you come back drenched in rain
4. Cleanliness is important in the rainy season. Do not touch your nose, mouth, or eyes when your fingers are dirty. Wash your hands properly with soap and water before eating or preparing food or after using the toilet
5. Remove small containers like coconut shells, broken pieces of vessels, tins, etc. from the surroundings of your house to prevent water collection, as it can be a breeding place for mosquitoes

Conclusion

During Monsoon, you have to take necessary precautions by making specific changes in your lifestyle. Keep yourself clean and hygienic to stay away from Monsoon-related diseases. Enjoy a happy Monsoon with a healthy body. ®



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 It can be taken out easily to permit brushing and flossing; so good oral hygiene can be maintained

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ECO-FRIENDLY DENTISTRY: GREENING THE BLUE!!



Dr. Arpit Sikri
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Eco-friendly Dentistry, also known by different names, such as Green Dentistry, Holistic Dentistry, Natural Dentistry, Unconventional Dentistry, Progressive Dentistry, Biocompatible Dentistry, Environmentally Friendly Dentistry, Sustainable Dentistry, and more, is a new approach in Dentistry that implements sustainable practices by minimizing the consumption of natural resources and by safeguarding the external environment by way of reducing the accumulation of waste and promoting a healthy environment.

Green Dentistry is a newly evolving practice in Dentistry, helping a Dental Practice promote environmental conservation, which encompasses a simultaneous devotion to sustainability coupled with a minimally invasive patient-centred treatment philosophy. It is a high-tech approach that helps reduce the environmental impact of a Dental Practice and encompasses a service model for Dentistry that supports as well as maintains wellness. It also meets the needs of millions of patients who seek a wellness lifestyle, in addition to helping Dental Professionals promote environmental and community health.

Green Dentistry is a newly evolving practice in Dentistry, helping a Dental Practice promote environmental conservation, which encompasses a simultaneous devotion to sustainability coupled with a minimally invasive patient-centred treatment philosophy

Objectives of Eco-friendly Dentistry

1. To reduce waste and pollution
2. To save water and energy
3. To support a wellness lifestyle

Elements of Eco-friendly Dentistry

There is a large amount of scientific information regarding carbon footprint (the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community) of the dental industry.

To make a Dental Practice environmentally friendly, it is the duty of Dental Practitioners to incorporate the four **R's** – **Reduce, Reuse, Recycle, and Rethink**, into their practice.

1. Reduce

To save the Planet, everyone, including a Dental Practitioner should take measures

- ⇒ To minimize the consumption of natural resources
- ⇒ To reduce the amount of waste sent to landfills

2. Reuse

This can be achieved by employing

- ⇒ A re-usable Cotton Operating Room Towel in place of a Disposable Patient Bib
- ⇒ A re-usable Dental Suction Tip / Saliva Ejector
- ⇒ A re-usable Glass Irrigation Syringe instead of a Disposable Syringe
- ⇒ A Biodegradable Cup instead of a Regular Paper Cup

3. Recycle

- ⇒ A Dental Practice should use recyclable products to reduce the pollution / contamination of the environment
- ⇒ Use a Community Recycling Facility to recycle paper and plastic waste in a Dental Office
- ⇒ Use Biodegradable products, if it is not possible to use recyclable products



4. Rethink

According to the Eco-Dentistry Association, Eco-friendly Dentistry involves taking the initiative to build a dental environment by using sustainable materials and practices. It is important to create and implement educational programs to enlighten all Dental Practitioners to follow Green Dentistry.

Educating Dental Personnel and Patients

Dental Personnel and patients should be educated to make them reduce the use of products sent to landfills and conserve natural resources.

Conclusion

Sustainable Dentistry is beneficial not only to Dental practitioners, patients, and the community but also to global health and wellbeing. Therefore, let us take the pledge to practice Dentistry in an eco-friendly manner to reduce the menace caused by environmental pollution. ©

A young boy with short brown hair, wearing a teal t-shirt and a blue backpack, is smiling broadly. A young girl with brown hair in pigtails, wearing a red top, is hugging him from the side. They are in a classroom setting with a world map visible in the background.

Back to School

Back
To
School



Dr. Neena Shilen
Consultant in Developmental Paediatrics
Kochi, Kerala, India

The Back to School phase is always a big transition. Children often have a tough time coping with it.

Growing academic demands, a new school environment / teacher, and a changing social circle are often filled with apprehension and excitement. The many activities that make up the busy schedule of a new school year can be tough for both parents and their kids, often causing stress and anxiety.

Here are some tips to help lessen the stress and help prepare your child get Back to School.

Sleep Routine

During vacations, a child may have ample time to sleep for a long time and will wake up late in the morning. Hence, gradually adjust your child's sleep schedule in tune with the school timing, at least one week before school opens.

Uniforms

Get your kid's school uniforms stitched one week before to have time to check for a good fit. At least four pairs of regular and two pairs of sports uniforms should be planned for the rainy season.

Textbooks and Notebooks

Get your child's textbooks and notebooks wrapped and labeled with his / her name, class, and subject.

School Bag or Backpack

A backpack is used to carry items to and from school. The width of a backpack should be relatively proportionate to the size of your child. For instance, a small child should not opt for an adult backpack. Choose one having broad straps with padding for the shoulders, as it offers more comfort and helps protect the shoulders from excessive pressure.

Water Bottle

It should be made of food grade plastic or steel. It should have at least a minimum capacity of 250 to 500 milliliters (ml), depending on the age of your child.



Lunch Box

Preferably, it should be a steel box with a leak-proof lid. If you buy a plastic box, it should be made of food grade plastic. A lunch box should be user-friendly.

Umbrella and Raincoat

An umbrella should be user-friendly and should be large enough to protect your child well from the rain. A good quality raincoat with a hood that helps protect your child well from the rain should be chosen.

Shoes

During the rainy months, use a pair of rain boots or plastic / rubber sandals. Otherwise, buy a pair of waterproof shoes.





Pencils and other Stationeries

Pencils, pens, erasers, sharpeners, and a pair of scissors should be of good quality and non-toxic, as a child tends to put them in the mouth.

School Transport

If your child is traveling by bus, make arrangements to get him / her on the bus and pick him / her up in the evening.

Medical Issues

The details like the list of Allergies and other medical conditions, if any, including emergency contact numbers of parents / guardian should be made available to the school teacher on the first day of school itself.

Dealing with school anxiety when a child goes to school for the first time or joins a new school

Visit the school or classroom before the first day to help reduce a kid's anxiety of separation. It will help

the kids, especially when they are first-timers to Kindergarten, First Grade, or a new school, feel more comfortable with the new place, and get a better idea of the school premises.

Help your kid find a classmate who lives in the vicinity or is known to you previously. Talk to the parents of the other children in your kid's class and find out whom your child will be sharing the class, ahead of time and if possible, get familiarized with them.

If your child is a first-timer to Kindergarten or First Grade, it might help him / her find out a playmate, a week before school starts. Also, it will help him / her feel more comfortable and get more excited about seeing his / her friends again in school. If you are new to the area or do not know anyone, try checking out the school's social media pages to find other parents and kids in the area.

Wishing all school kids an exciting and stress-free experience of going back to school!!! 



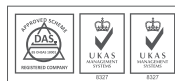
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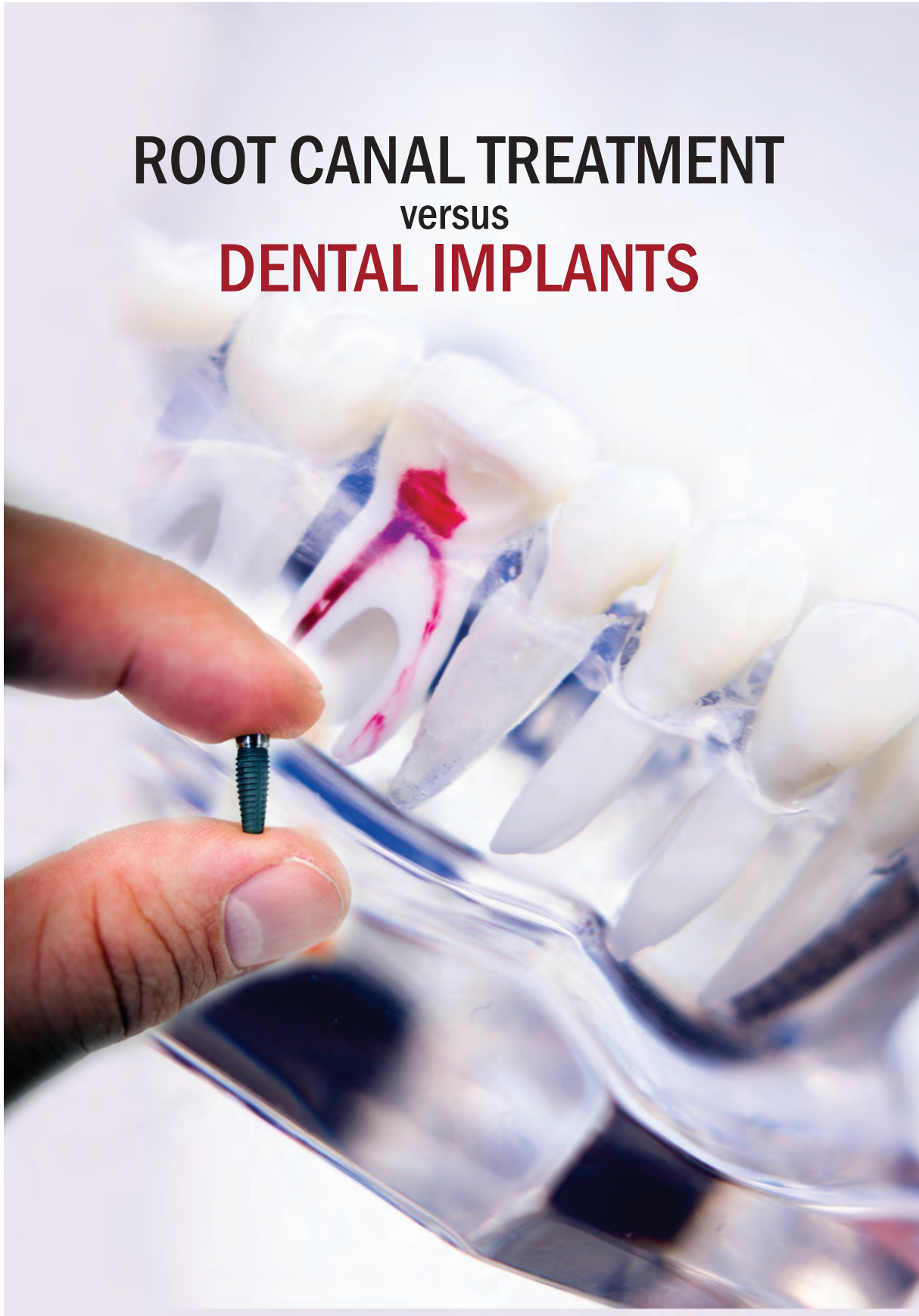
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ROOT CANAL TREATMENT versus **DENTAL IMPLANTS**





Dr. Deepti Rao Melkote
Consultant in Endodontics and
Conservative Dentistry
Al Farwaniyah, Kuwait

Root Canal Treatment (RCT) is considered as a popular and predictable way to save a tooth that is badly decayed or infected. During this procedure, the infected pulp from the root canal system of the tooth is completely removed; the inside of the tooth is cleaned and sealed.

Similarly, a tooth, which has to be extracted nevertheless, has a new replacement option that mimics your natural tooth morphology through the Dental Implant.

Root Canal Treatment may become necessary approximately in 60% cases with Dental Caries, 19% with Damaged Fillings, 13% with Apical Periodontitis arising post treatment, and 6% with Dental Trauma.



A few reasons warranting the extraction of a compromised tooth and replacement with a Dental Implant include

- ⦿ Fractured Dental Crown
- ⦿ Badly decayed teeth which cannot be restored
- ⦿ Root fracture with a large endodontic post, or root resorption
- ⦿ Compromised periodontal status of a tooth

Root Canal Treatment

With the rapid progress in digital dentistry, the prognosis of Root Canal Treatment has now become more predictable. Endodontic microscopes, Loupes and newer bioinductive materials can provide a better prognosis of Endodontic surgical procedures or Root Canal Treatment.

Earlier, achieving total disinfection of the root canal system was a challenge. Now, a Clinician can easily achieve complete disinfection of the root canal system with Lasers and Ultrasonic Irrigation Protocols.

RCT has now become less time-consuming and tension-free for both Dentists and patients. But both Non-surgical and Surgical Endodontic Retreatment Procedures have the possibility of a negative outcome, due to the presence of Apical Periodontitis and hence, the possibility of an unfavourable outcome should be discussed with the patient.

Dental Implant

A Dental Implant is a root replacement anchored to the jawbone. A Dental Implant actually fuses or integrates with the bone and this process is referred to as Osseointegration. In most cases, it takes 2 – 6 months for a Dental Implant to osseointegrate with the bone.

The healing time depends upon the density of the bone; if the bone is denser, the integration will be quicker. After successful integration, a Dental Crown which simulates the patient's normal tooth, is fabricated and placed.

Implant Treatment carries the risk of ongoing periodontal and occlusal complications, particularly in the anterior teeth, which may compromise smile aesthetics. It has an 'all or nothing' outcome; that is, if an Implant fails, the attached Crown will also fail.

RCT versus Dental Implants

Time and cost are the two vital factors influencing a patient's decision to choose a Root Canal Treatment. The other influencing factors include patient expectations, dental and medical health status, regional anatomy, bone characteristics, prognosis, and risk associated with the treatment.

If a Clinician is not competent in Implantology, he / she may refer a patient to a Specialist to make

an informed choice about the ideal replacement option for the patient.

A simplified cost-benefit analysis of an Endodontic Treatment and a single Tooth Implant Procedure concludes that a Root Canal Treatment, when it can be successfully done, is less expensive and entails fewer dental visits than for a Dental Implant Therapy. A comparison of the prognosis of both Implant Therapy and Endodontic Treatment is very difficult, due to the differences in the treatment procedures, possible outcomes, and complications.

When evaluating the success rates of both Endodontic Treatment and Implant Therapy, it is apparent that an Endodontic Treatment is more promising and less invasive with fewer complications.

Conclusion

A Root Canal Treatment is less time-consuming and a more promising treatment modality. For the successful placement of a Dental Implant, adequate density of the bone is very vital.

Irrespective of the popularity and many benefits of a Dental Implant, the choice of replacing a tooth with a Dental Implant should be considered second to preserving a natural tooth with a Root Canal Therapy. In general practice, the outcome of an Endodontic Treatment is similar to that of Implant Therapy. ®

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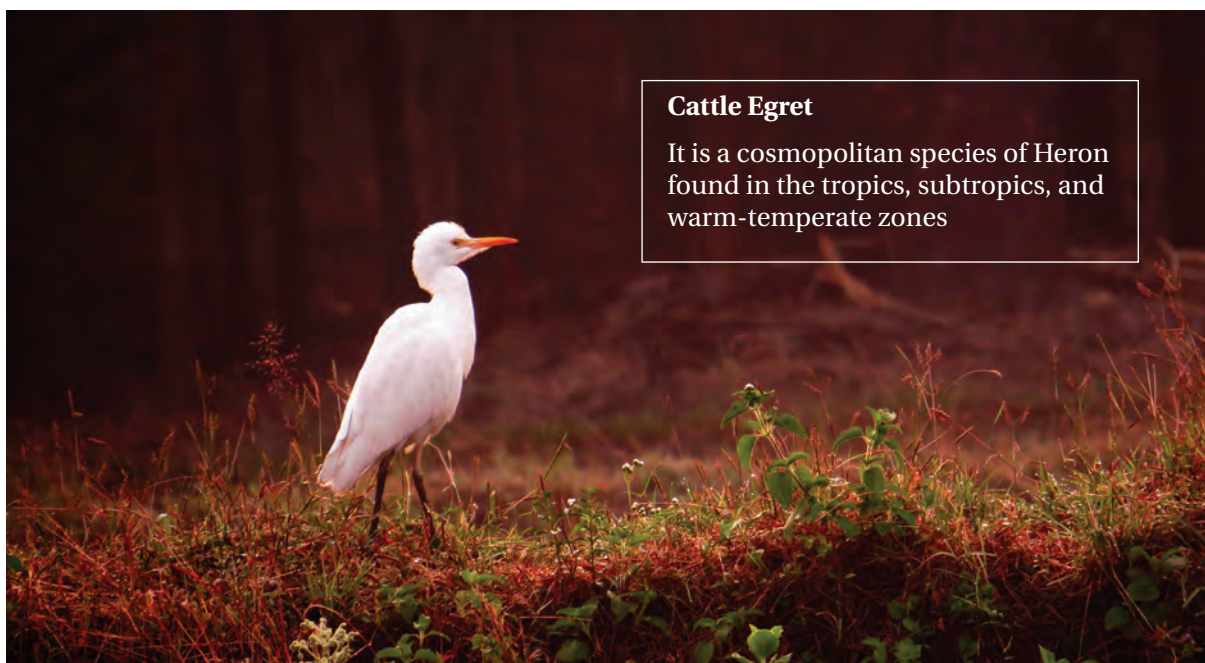
A BIRD'S EYE VIEW

Dr. **Ashok Raj V. M.** is a Dental Practitioner by profession. He is also a passionate Wildlife Photographer, zealous in capturing photographs of birds and animals in their natural habitat and regularly participates in Bird Survey Programs, especially in the Malabar regions of Kerala, India.



Photography Gear: Canon PowerShot SX50 Camera

Location: Malappuram District, Kerala, India



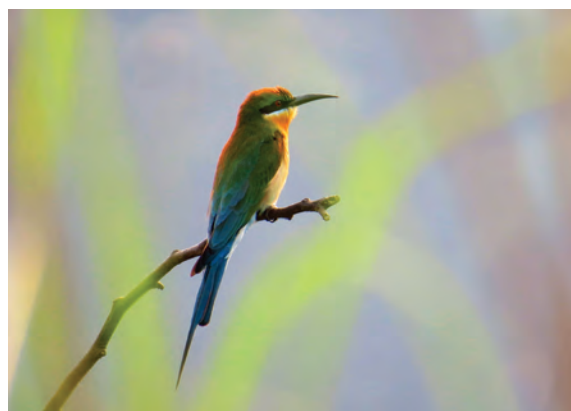
Cattle Egret

It is a cosmopolitan species of Heron found in the tropics, subtropics, and warm-temperate zones



The Indian Scops Owl

It is a resident species of Owl found in the southern regions of Asia



The Blue-tailed Bee-eater

It is often seen in South-eastern Asia, across the forest edges, wooded areas or near water and open country sides



Robotic Surgery in Medicine



Dr. Kishore T. A.
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Aster Medcity
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The dawn of the Computer Age has stimulated Modern Medicine to evolve at a rapid pace than ever before. The advent of Endoscopic and Video-assisted Surgical Techniques has revolutionized Surgical Practice by minimizing the size of an incision and reducing recovery time after a Surgery.

A Robot was first introduced in Surgery about 25 years ago; for a Neurosurgery Biopsy and since then, it has captivated the imagination of Clinicians as a handy tool for various Surgical Procedures. A number of Surgical Robots have been developed to address a plethora of issues across the entire gamut of Clinical Specialties.

In Surgical Robotics, a Computer will provide a Digital Interface between a Surgeon's hands and the surgical instruments, helping improve a Surgeon's dexterity beyond his natural physical limitations. This allows a Surgeon to perform more intricate Endoscopic Surgical Procedures at ease and with less error.

The Da Vinci Surgical System

It is a Robotic Surgical System that facilitates complex Surgical Procedures using a Minimally Invasive Approach. There are 4 major components in a Surgical Robotic System: a Surgical Interface Device, a Computer Controller, Robotic Arms / Instruments, and a Visualization System.

A Surgeon controls the handles of an instrument from an Interface Device and his movements are subsequently relayed to and digitized by a Computer Controller. This information is then passed on to the Robotic Arms that are positioned on or near the Operating Table.

The Robotic Arms of the Da Vinci Surgical System can be moved with multiple degrees of freedom, simulating the movements of a Surgeon's hands. The third and fourth Robotic Arms are capable of manipulating an Endoscope and the retraction of the organs in the body. Since a Surgeon has direct control over the Robotic Arms, it helps eliminate the need for a Surgical Assistant. A Robotic Camera Arm is shown to be more precise than a Surgical Assistant.

Compared to a Traditional Surgical Loupe, an Endoscope allows for much greater magnification, enhancing a Surgeon's visualization of the anatomic details of even small structures in the body. A Traditional Surgical Loupe cannot provide depth perception / endoscopic visualization as it is provided only with a 2-dimensional Video Monitor whereas

**A Robot was first introduced
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the Da Vinci Surgical System offers endoscopic visualization, as it is fitted with a High-resolution 3-dimensional Monitor.

The most important specialty of a Robotic Surgical System is that it is provided with a Computer Interface, which helps digitize the movements of a Surgeon's hand. The two salient features of digitization are tremor filtering and motion scaling (the conversion of Surgeon's large hand movements into smaller movements of the surgical instrument in the operative field). A Surgeon's hand movements from the hand control of a Surgical Interface Device are converted into a digital format. Once the data are in the digital format, they are manipulated to enhance the dexterity of a Surgeon's hands.

A Robotic Surgery allows a Surgeon to perform all kinds of complex procedures with more flexibility, precision, and control than what is typically possible with a Traditional Surgical Technique. Besides, it is minimally invasive and uses special equipment, including a small Video Camera that helps provide enlarged 3D images of the surgical field through a keyhole incision. A Robotic Surgery allows fewer complications, lower levels of blood loss and transfusion rate, minimal scarring, reduced pain and discomfort, and more.

Conclusion

With better visualization, improved dexterity, and reduced fatigue, a Robotic Surgical System has the potential to allow for a level of precision superior to that with the Conventional Endoscopic and Open Surgical Techniques. It also helps reduce the amount of human error that can occur during a surgical procedure and thus enhances clinical outcomes. A Robotic Surgery entails faster recovery time and fewer complications, allowing a patient to resume his day-to-day activities within a short period of time after a Surgery. ©

India's Waterman Speaks His Mind

Dr. Rajendra Singh also called “**Waterman of India**” is a well-known Water Conservationist and Environmentalist of India. He is the Founder and Chairman of ‘Tarun Bharat Sangh’ (TBS), a Non-Governmental Organization (NGO). He is also heading a national network of organizations working on water issues and for the restoration of the rivers and water bodies in the country.

Dr. Rajendra Singh is a true humanitarian and a firm believer in the empowerment of rural communities. After studying Ayurvedic Medicine and Surgery, he went to the countryside in Rajasthan in the mid-1980s to set up a health clinic.

Instead, he was told by the villagers that the greatest need was not health care, but water. As wells dried up; crops wilted; rivers ran dry, and forests disappeared, many villagers left for cities in search of work. Women, children and the elderly were left to fend for themselves.

Considering the hardships of the villagers, **Dr. Rajendra Singh** left the idea of setting up



a health clinic and with the help of local people, he set out to build Johads or traditional earthen dams. Starting from a single village in 1985, over the years, TBS has helped build over 8600 Johads and other water conservation structures across many States in North India.

Considering the selfless contribution to community development, **Dr. Singh** was honored with the **Ramon Magsaysay Award, in 2001**. For promoting Gandhian values, community service, and social development, he was bestowed with **Jammalal Bajaj Award**, the most prestigious award of India, in 2005. He is also the winner of **Stockholm Water Prize, the Nobel Prize for Water, in 2015**.

In an exclusive chat with 'The DentCare', the celebrated 'Water Revolutionary' speaks up his mind.

1 *How severe is the water crisis in India and what are the factors that have contributed to this scarcity?*

The reasons for the water crisis in India are many. Since most of these reasons are man-made, they are preventable. India has ample water resources right from surface water resources like lakes, rivers, wetlands, groundwater to rainwater. Mismanagement of water and pollution are the main causes of water shortage in the country. The situation can be improved by harvesting rainwater and rejuvenating water bodies and the rivers.


2 *What can an individual do to save water at home?*

Water is used in many of our daily chores. The first step to conserve water is to minimize its usage; i.e., to use as little water as possible for bathing, cooking and other domestic activities.

Secondly, people must be educated to adopt water saving techniques. Besides, Greywater (household wastewater that can be reused for some purposes without purification) should be recycled or filtered through a natural process. If you possess a piece of land, install a rainwater harvesting system.

3 *From a man who has learnt to treat the diseases of the body, you have grown to the extent of treating the sickness of the country. How do you feel when you look back?*

If I had continued to serve as an Ayurvedic Doctor, I would have treated and cured a few persons with medicine. But now I am repairing the souls of people; that is, I am trying to broaden



the minds and hearts of the people around me by creating an insight into the importance of conserving water. This has fetched good results, as people, especially farmers have shifted to more sustainable techniques to conserve water.

4 *What are your future plans?*

For the last four years, I have been spearheading water literacy programs by conducting nationwide campaigns with an objective to ensure water security by protecting ponds, lakes, and rivers through community participation.

Again I am planning to set up a Global Water School for raising awareness; galvanizing people, and implementing necessary measures to protect and rejuvenate water resources. It is vital to educate people about the importance of protecting the environment and connecting people with matters related to water conservation.

The ignorance of people about the importance of conserving water has ultimately resulted in the water crisis in India. The effect of drought and climate variability has been increasing day by day. Environmental education will help equip people with the knowledge, skills, and motivation to address the complex issues connected with the water crisis in the country, including environmental challenges.

5 *On this World Environment Day, what message would you like to give the people?*

The celebration of World Environment Day gives us an opportunity to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises, and communities in preserving and enhancing the environment. Everyone should love, respect and protect the Earth by understanding the life-giving and nurturing aspects of Nature and how intimately and unequivocally human beings depend on Nature for their survival. As humans, everyone is committed to leading a lifestyle that is environmentally friendly to conserve and protect natural resources, including water. ©

For The **DentCare**
Interviewed by **Ms. Nisha Philip Xavier**



Laparoscopy for Hernia

Hernia' means a split or rupture. A Hernia occurs when an abdominal organ protrudes through a defect or weakness in the abdominal wall musculature. It is commonly seen in the inguinal area (groin) in men and in the umbilicus (navel) area in women.

Precipitating factors

- ⊙ Obesity, especially Truncal Obesity (excessive Fat around the stomach and abdomen)
- ⊙ Increased intra-abdominal pressure due to Chronic Cough, Constipation, Urinary Tract Obstruction Presenting with Ascites (abnormal buildup of fluid in the abdomen), or Pregnancy
- ⊙ Previous Abdominal Surgery
- ⊙ Smoking, as it may reduce the strength of the muscles and can cause a Cough
- ⊙ Congenital (existing from birth) defects

Different types of Hernia

1) Inguinal Hernia

It is a small bulge appearing in the groin.

2) Ventral Hernia

It is a bulge at the umbilicus and anterior aspect of the abdomen.

3) Lumbar Hernia

It is seen on the lateral aspect of the abdomen.

4) Femoral Hernia

It occurs in the upper part of the inner thigh region.

5) Diaphragmatic Hernia

A Diaphragmatic Hernia is due to a defect in the muscle (Diaphragm) causing abnormal opening in the diaphragm.

6) Hiatal Hernia

A Hiatal Hernia is an abnormality where a part of the stomach slides up into the chest cavity, past the diaphragm.



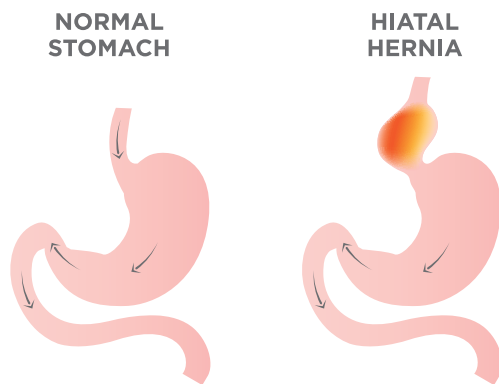
Dr. R. Padmakumar
Senior Consultant Laparoscopic and Metabolic Surgeon
Head, Department of General and Laproscopic Surgery
VPS Lakeshore Hospital and Keyhole Clinic
Kochi, Kerala, India

Symptoms

- ⦿ A bulge (swelling) in the affected area, which becomes more prominent on standing, especially when a person coughs or strains
- ⦿ Pain or discomfort in the groin, especially when bending over, coughing, or lifting heavy loads

Diagnosis

An Inguinal or Incisional Hernia is usually diagnosed through a physical examination. The Doctor may feel for a bulge in your abdomen or groin that gets larger when you stand, cough, or strain. An Endoscopic Investigation is done to detect Hiatus Hernia. Ultrasonography may help detect the presence of a Hernia, in the abdominal area and helps diagnose other problems like Gall Bladder Stones, Ovarian Cysts, etc.



Management

A Hernia will not heal on its own and cannot be treated with medications. Besides, devices like a Hernia Truss (a supportive undergarment to keep the protruding organ in place and relieve discomfort) can give only a temporary relief, as it does not help treat a Hernia. A Surgery may be the only way to repair a Hernia.

Open Surgery

It requires a large incision (cut) to push back the bulged organ into its correct place. A mesh or stitch is placed on the muscles to strengthen the abdominal area.

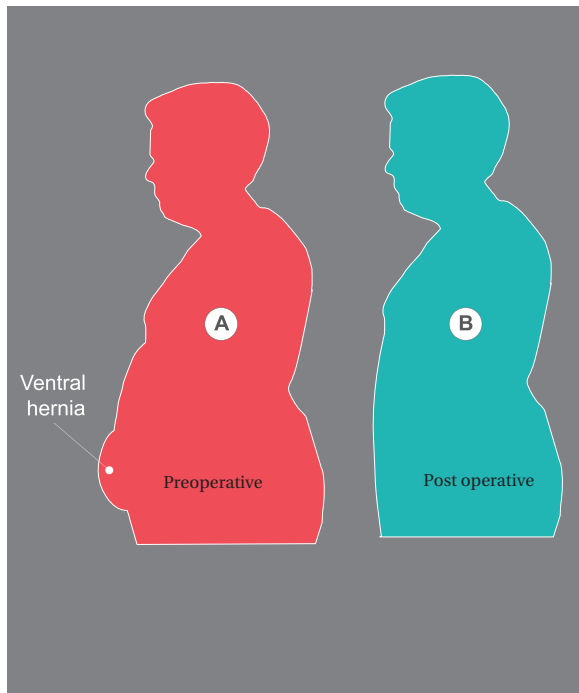
Laparoscopic (Keyhole) Surgery

Through this Minimally Invasive Technique, a Surgeon tackles all types of Hernias with an excellent outcome. A Laparoscopic Hernia Repair has got many advantages over an Open Hernia Surgery.

Advantages of Keyhole Surgery

- The wounds are very small and are away from the weaker area of a Hernia. Hence, there is no further weakening of the defect.
- Reduced postoperative pain.
- Reduced recovery time and hence, the patient can resume his day-to-day activities in a week.
- The mesh placed to support the weak muscles is much larger than that used in an Open Hernia Surgery and is placed in the innermost layer as against the outside of the muscles in an Open Surgery.
- It has a cosmetic advantage, as it leaves only minute scars after a Surgery.
- Multiple Hernias and associated conditions can be tackled through the same cuts that range from 5 to 10 millimeters (mm). In the case of an Open Hernia Surgery, the length of cuts ranges from 10 to 15 centimeters (cm) and as a result, there may be resultant problems like Infection, Abdominal Adhesions (bands of tissue that form between abdominal tissues and organs, causing them to stick together), Pain, and Hematomas (a swelling of clotted blood within the tissues).
- Though Laparoscopic procedures appear to be more expensive initially, the prolonged hospital stay and long absence from work make an Open Surgery more financially draining to a patient in the long run.

A Hernia occurs when an abdominal organ protrudes through a defect or weakness in the abdominal wall musculature



Tummy Tuck Surgery (Abdominoplasty)

Tummy Tuck Surgery / Abdominoplasty is a procedure to remove excess Fat and skin from the middle and

lower abdomen. Tightening the muscles and fascia of the abdominal wall will also be performed.

In a Tummy Tuck Surgery, a cut is made in the skin at the lowermost aspect of the abdominal wall to remove the excess skin and Fat. After that, mesh placement / stitching is done to strengthen the weak muscles. This procedure will give an excellent cosmetic outcome with improved abdominal tone and better posture.

Hernia Repair Surgery

Hernia Repair Surgery is commonly done under General Anesthesia. The mesh or threads used will easily interlace with the human tissue and do not cause reaction or rejection in 99.9% of cases. If done properly in an ideal setting, the chance of recurrence of a Hernia is very negligible, especially when performed by a Minimally Invasive Technique. Blood loss and the resultant need for blood transfusion are very rare as the most advanced equipments are used in these procedures.

Conclusion

A Laparoscopic Hernia Surgery is safe and very comfortable and entails less postoperative discomfort and pain, besides reducing recovery time that allows a patient to resume his full activity one week after the Surgery.®



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Platelet-Rich Fibrin:

Applications in Dentistry



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Shree K. J. Maheta T. B. Hospital Trust and College
of Dental Science
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Dr. Chandni Adalja Shah
Consultant Periodontist
Bhavnagar, Gujarat, India

Understanding the healing process of Platelet-rich Fibrin (PRF) is a bit complex. The growth factors (naturally occurring substances capable of stimulating cellular growth, proliferation, healing, and cellular differentiation) and cytokines contained in platelets play a key role in regulating inflammation as well as accelerating wound healing. Hence, it is considered as a natural and satisfactory alternative with favorable results and low risks. PRF, when used alone or in combination with other biomaterials, seems to have several advantages and indications both for medicine and dentistry.

Platelet Rich Fibrin (PRF)

It is a natural fibrin-based biomaterial prepared from autologous blood and is clinically used to deliver growth factors in high concentration to the site requiring augmentation or having a bone defect.

PRF, introduced by Dr. Choukroun and his colleagues in 2000, is a second generation platelet concentrate that contains platelets as well as growth factors, prepared from the patient's own blood, free of any anticoagulant (a chemical substance that helps prevent or reduce coagulation of blood) or other artificial biochemical modifications.

Preparation of PRF

10 milliliters (ml) of human blood is taken in a test tube without any anticoagulant and is centrifuged in a tabletop centrifuge machine for 12 minutes at 2500 Revolutions per minute (RPM) or 10 minutes at 3000 RPM.

After centrifugation, the three components in the blood are localized in the test tube: Red Blood Cells at the bottom, a Fibrin Clot (which represents PRF) in the middle, and the Cellular plasma (Platelet-Poor Plasma [PPP]) at the top. The Fibrin Clot is extracted from the test tube with a pair of sterile forceps and PRF is obtained by removing the red clot from its lower end.



Uses

Treatment of Intraony defects and Furcation involvement

- ⊙ Soft tissue augmentation with Coronally Advanced Flap (CAF) or Free Gingival Graft (FGG) and Connective Tissue Graft (CTG)
- ⊙ Pre-prosthetic Surgery
- ⊙ Sinus Lift Surgery

Advantages

Obtained from autologous blood

- ⊙ Minimal blood manipulation
- ⊙ Does not require the addition of external thrombin
- ⊙ Preparation technique is simple and efficient
- ⊙ Accelerates healing process
- ⊙ Economical
- ⊙ Contains growth factor

Disadvantages

- ⊙ Being autologous in nature, the final amount of PRF obtained is less

- ⊙ Requires the use of a glass-coated tube to achieve clot polymerization

Contraindications

Patients with

- ⊙ Metastatic Disease
- ⊙ Poor prognosis
- ⊙ Platelet Disorders
- ⊙ Wound Infection and Sepsis

Conclusion

Platelet-rich Fibrin shows promising outcome both in medical as well as dental fields with several advantages and many indications. It helps improve the healing of both soft and hard tissues. Also, the healing period of the post-extraction sites is shorter when PRF is used.

Apart from its application in various disciplines of dentistry, PRF is being used all over the world in various medical fields, including Orthopedics and Plastic Surgery. In short, Platelet-rich Fibrin seems to be an accepted and minimally invasive technique that entails satisfactory clinical results. ©



EPILEPSY:

How to Win Over It

Epilepsy is the fourth most common Neurological Disorder that affects people of all ages. It affects more than 5 out of 1000 people in the world. In India alone, there might be more than 5 million people suffering from Epilepsy. It is more common in children and young adults, particularly in rural areas.

Epilepsy is a chronic medical condition marked by Recurrent Epileptic Seizures or an altered brain function caused by abnormal or excessive electrical discharges from the brain cells. It occurs when the normal electrical activity in the brain rapidly increases and spreads to the surrounding areas. When the electrical activity involves a small area of the brain, it produces a Partial Seizure and when it involves a large area, it results in a Generalized Seizure.

Public misunderstanding of Epilepsy often poses a challenge that may be worse than the disease itself. Many children with Epilepsy are deprived of schooling, as parents are afraid of sending them to school. Grown-up youths and adults with Epilepsy find it hard to get a job or married, as they may have a spontaneous Seizure at any moment. With proper management, a person with Epilepsy can lead a normal life similar to that of a healthy individual; but lack of awareness and self-confidence most often serves as a big hurdle.



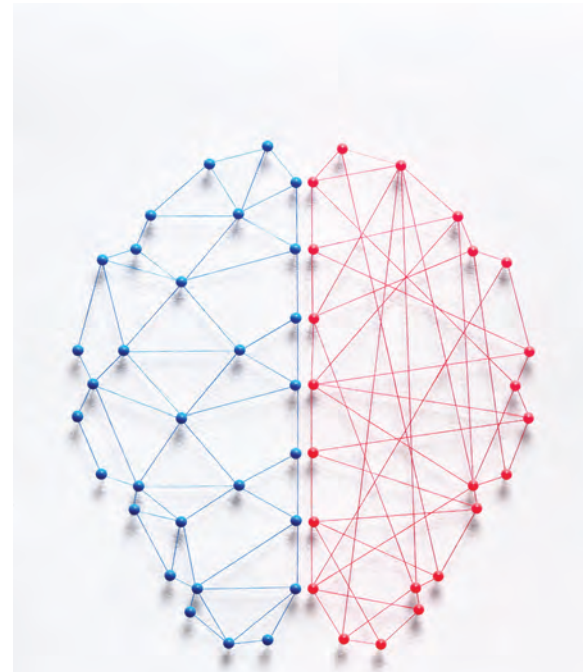
Dr. Atma Ram Bansal
Senior Consultant Neurologist
Gurugram, Haryana, India

Many people with Epilepsy, especially in the villages still do not get proper diagnosis and treatment. There are special issues with a woman having Epilepsy. It might be noticed that a woman often has more Seizures around the time of her menstrual cycle. A woman with Epilepsy has a good chance of leading a successful married life and having kids. It is always better to consult a doctor before she gets married and plans for conception. With proper follow-up treatment and taking medications as prescribed by a Physician, the delivery of a woman with Epilepsy can be as normal as that of a healthy woman.

People who are susceptible to Epilepsy include Babies with Developmental Delay, Abnormal Brain Structures, Infection / Brain Infection, Serious Head Trauma, Stroke, and Brain Tumors. But Epilepsy can occur without any obvious reasons as well.

With advanced treatment modalities, Epilepsy can be treated and cured in almost 80 percent cases. With the discovery of newer medications for Epilepsy, it is relatively safe to use them even for a long period of time. Most patients require a single medication though some may require more than one. The type of medication a patient needs to take depends on the type of Epilepsy that afflicts him.

The duration of treatment may usually range from three to five years. However, some may get relief within six months to one year. In the case of Juvenile Myoclonic Epilepsy, the treatment may have to be continued all through a patients' life.



Epilepsy is a chronic medical condition marked by Recurrent Epileptic Seizures or an altered brain function caused by abnormal or excessive electrical discharges from the brain cells

There are about 20 to 30 percent of people with a history of poorly controlled Epilepsy despite the availability of a number of effective medications. When Epilepsy cannot be controlled with medications, Epilepsy Surgery is indicated. Epilepsy Surgery is performed to either remove the brain area where a Seizure begins or stop the spread of electrical activity in the brain that can cause a Seizure.

Conclusion

Epilepsy is a neurological condition often requiring lifelong treatment. The management of patients with Epilepsy demands long-term commitment from both the patients and Medical Practitioners. Early diagnosis and proper treatment are inevitable to bring the disease under control. ©

Tackling Air Pollution



Dr. Salom Gnana Thanga Vincent
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Department of Environmental Sciences
University of Kerala
Kariavattom, Kerala, India

The United Nations Environment Program (UNEP) is an agency of the United Nations that coordinates the Organization's environmental activities and assists developing countries in implementing environmentally sound policies and practices. It provides leadership and encourages partners caring for the environment by inspiring, informing, and enabling nations and people to improve the quality of life without compromising that of the future generation.

UNEP annually organizes events on World Environment Day to encourage worldwide awareness and action for the protection of the environment. The Day is celebrated on 5 June in more than 100 countries. Since its establishment in 1972, it has grown to become the single largest celebration highlighting the importance of preserving the natural environment.

World Environment Day 2019 is hosted by China with a theme – **'Air Pollution'**. The Day is celebrated to urge

governments, industrialists, communities, and individuals to come together to explore the possibilities of using Renewable Energy and green technologies so as to improve air quality, especially in the cities across the world.

Source and Types of Air Pollution

Air pollution occurs when harmful or excessive quantities of substances, including gases, particles, and biological molecules are introduced into the Earth's atmosphere. It may cause diseases, allergies and even death to humans, besides causing harm to other living organisms, such as animals and food crops, and damaging the environment.

Sources of Air Pollution are both natural and anthropogenic (caused by humans and their activities). The eruption of Volcanoes, Earthquakes, Dust, Storms, and Meteorites smashing into the Earth's crust are a few natural phenomena that can cause both Air Pollution and Climate Change. Adding to these potential threats, human beings have also been contributing to Air Pollution and global warming through their resource-intensive lifestyles.

Some common Air Pollutants include Ground-level Ozone, Sulfur Oxide, Lead, Smoke, Pollen, Methane, and Carbon Dioxide. Air Pollutants can cause serious health effects; nearly one-third of deaths from Stroke, Lung Cancer, and Heart Disease are due to Air Pollution. It also increases the risk of Acute Respiratory Infections and exacerbates Asthma.

Heat waves, extreme climatic conditions, and other effects related to increased greenhouse gases (the gases that can contribute to Greenhouse Effects or a natural process that increases the temperature of the Earth by trapping heat in the atmosphere) can cause a negative impact on human health.

Conclusion

The most basic solution for Air Pollution is to switch over from fossil fuels to renewable sources like solar, wind, and geothermal energies. It is one of the important solutions to reduce Air Pollution and Climate Change. Although they may seem to be two very different issues, both Climate Change and Air Pollution are closely linked. Therefore, if adequate measures are taken to reduce Air Pollution, it will help tackle the problem of Climate Change as well. ©

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PRE TREATMENT



POST TREATMENT



- DentCare Zirconia Platinum Plus
- DentCare Zirconia Premium Plus
- DentCare Zirconia Classic
- DentCare Zirconia Superlucent
- DentCare Zirconia Basic

- DentCare BruxCare
- DentCare Zirconia Ultra
- DentCare Zirconia Ultra Plus
- DentCare Zirconia Solid Plus



Manufactured using German Material and Technology

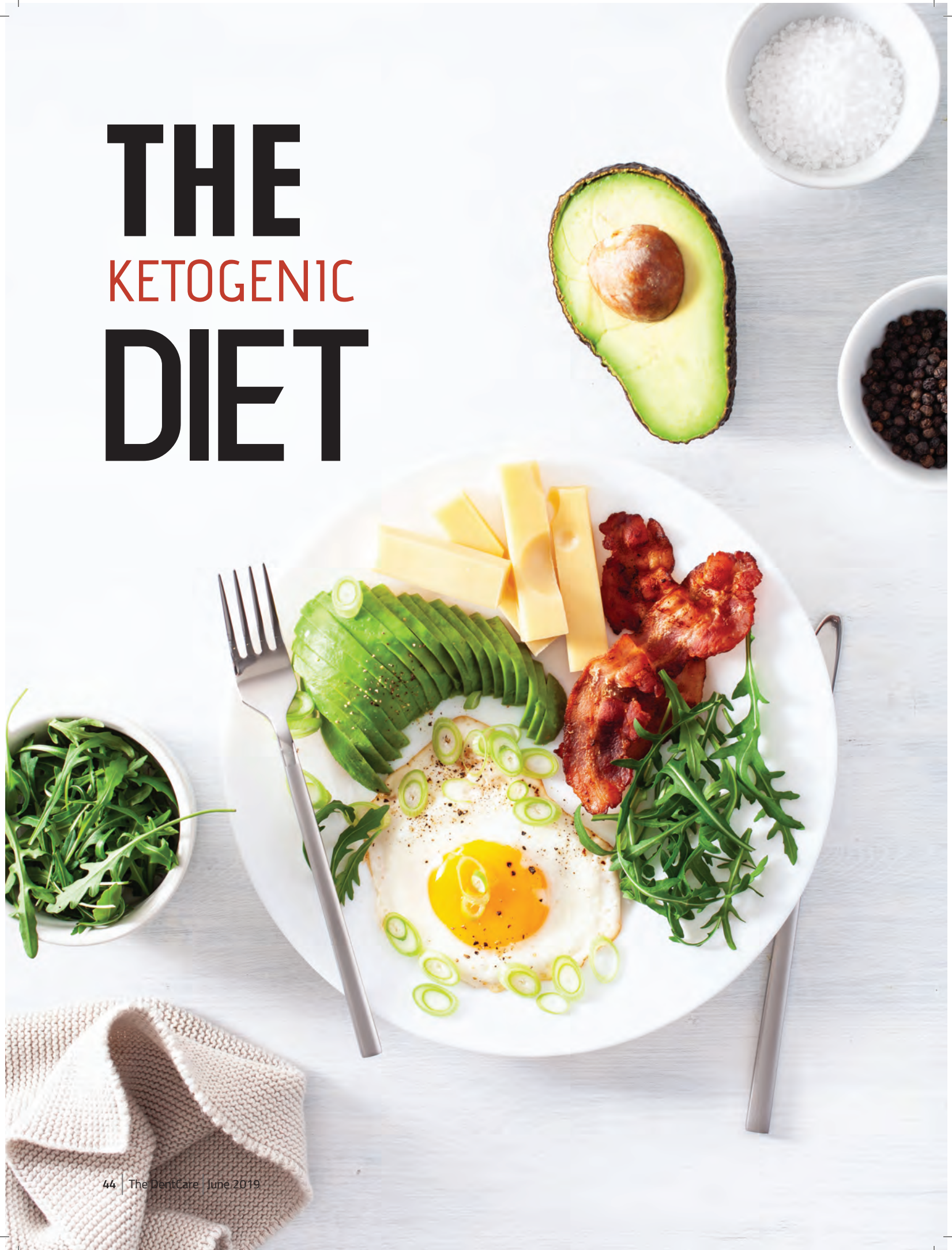


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THE KETOGENIC DIET





Dr. Danish Salim
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A Ketogenic Diet is a diet that causes the body to release Ketones (a chemical made in the liver when the body begins using Fat instead of Carbohydrates for energy) into the bloodstream. It is a High-fat, Moderate-protein, and Low-carbohydrate diet that offers many health benefits.

When the body does not have enough Glucose for energy, it burns stored Fat; this results in the build-up of Ketones in the blood, leading to Ketosis (a metabolic state in which your body uses Fat rather than Glucose as fuel).

Before understanding more about the Ketogenic Diet, it is important to know what are Gluconeogenesis and Ketogenesis. The key to getting into a Ketogenic Diet is to avoid Gluconeogenesis and facilitate Ketogenesis.

Gluconeogenesis

Gluconeogenesis is a metabolic process of synthesizing glucose in the body from a Non-carbohydrate source in the absence of Carbohydrates; that is, the body converts Protein / Amino Acids into Glucose.

Ketogenesis

Ketogenesis is a biochemical process through which an organism produces Ketone bodies through the breakdown of Fatty Acids and Ketogenic Amino Acids.

A Ketogenic Diet is a very Low Carbohydrate diet containing less than 20 grams of Carbohydrates (Carbs) a day. If you consume a lot of protein on a Keto Diet Plan, Gluconeogenesis may prevent Ketogenesis from occurring. That is, your body will use protein to create Glucose instead of using Fat as fuel.

A Ketogenic Diet is a very Low Carbohydrate diet containing less than 20 grams of Carbohydrates a day



How to avoid Gluconeogenesis?

A few methods to avoid Gluconeogenesis include

- ✓ Eat the right amount of protein at the right time
- ✓ Use Collagen Protein / Medium-chain Triglyceride (MCT) instead of Whey Protein when you are on a workout
- ✓ Monitor the Ketone levels in the blood, as it will help you know whether you are in Ketosis or not

Adverse Effects

The most common and relatively minor short-term side effects of a Ketogenic Diet include Nausea, Vomiting, Headache, Fatigue, Dizziness, Insomnia, Exercise Intolerance, and Constipation. These symptoms usually resolve in a few days / weeks. Ensuring adequate fluid and electrolyte intake will help counter some of these side effects.

The Keto Flu, a collection of symptoms that are experienced by some people when they start on a Ketogenic Diet, include Fatigue, Headache, Weakness, Irritability, Constipation, Nausea, and Vomiting.

Long-term adverse effects include Hepatic Steatosis (accumulation of Fat in the liver), Hypoproteinemia (a low level of protein in the blood), Kidney Stone, and Vitamin and Mineral Deficiencies.

Conclusion

To get the most out of a Ketogenic Diet, you must consume High-fat foods and limit the intake of Carbohydrate. If you stick to it, the benefits of a Ketogenic Diet are extremely impressive, especially for weight loss. ©

Microgreens:

All You Need to Know



Health-conscious individuals are nowadays more drawn towards consuming Microgreens (seedlings of edible vegetables and herbs). They are also known by other names like Aromatic Greens, Micro Herbs, or Vegetable Confetti. Despite the small size, these tiny plants contain more amount of nutrients than their mature counterparts.

Microgreens vary in taste, which ranges from neutral, slightly sour, bitter, peppery, or sweet to spicy, depending on the variety. In general, the flavor of most Microgreens is strong and concentrated.

What are Microgreens?

Microgreens are young vegetable greens that are harvested typically 5 to 20 days after germination; when they are only a few centimeters tall. Microgreens are baby plants, which fall between a sprout and baby green. They have an aromatic flavor and are a concentrated source of nutrients and come in a variety of colors and textures.

A Microgreen has a single central stem which is cut just above the soil line during harvesting. It has fully developed cotyledon leaves (the first leaves to emerge when a plant germinates) and usually has one pair of very small, partially developed true leaves.



Ms. Soly James
Consultant Nutritionist
Kochi, Kerala, India

Different types of Microgreens

Microgreens can be grown from different types of seeds. The most popular varieties produced using seeds are cauliflower, broccoli, cabbage, watercress, radish, lettuce, endive, chicory, radicchio, dill, carrot, fennel, celery, garlic, onion, leek, amaranth, beet, spinach, melon, cucumber, and squash. Cereals, such as rice, oats, wheat, corn, and barley, as well as legumes like chickpeas, beans, and lentils are also grown as Microgreens.

Microgreens are easy and convenient to grow, as they do not require much equipment or time. They can be grown year-round, both indoors and outdoors and even on the windowsill, irrespective of seasons. As they are harvested in 5 to 20 days, they do not need much space as well. There is no need for any designer pots; old tins, vessels, etc. can be used to grow them. An important thing is that you should put holes under these containers so as to drain excess water.



How to grow Micronutrients ?

To grow Micronutrients, it is necessary to have good-quality seeds, proper lighting and a good growing medium, such as a container filled with potting soil or homemade compost. Scatter the seeds over an inch of potting soil or homemade compost in a planter dish or tray. Cover it with another thin layer of soil, but make sure that you do not over compress it.



Microgreens are baby plants, which fall between a sprout and baby green

Health benefits of Microgreens

Studies indicate that the nutrients contained in Microgreens are 4 – 40 times higher than those found in the 'mature greens'. It is rich in Vitamins, Minerals, Trace Elements like Potassium, Iron, Zinc, Magnesium, and Copper, and Antioxidants (Polyphenols).

Due to high Antioxidant Content, Microgreens are considered as functional food; that is a food that promotes health or helps prevent disease. All Microgreens are packed with nutrients and contain polyphenols which help improve heart health and reduce the risk of many chronic diseases. Besides, Microgreens help reduce Bad Cholesterol; fight Cancer, improve Vision, and help ward off Digestive Diseases.

How to include Microgreens in your diet?

Microgreens are generally eaten raw. Zero Pesticides and the ability to provide maximum nutrients without



any process of cooking can make Microgreens a favorite choice for people of all ages. Microgreens can be incorporated into a variety of dishes, including sandwiches, wraps and salads, health drinks, etc. Another option is to use them as garnishes on pizzas, soups, omelets, curries, and other warm dishes.



Conclusion

Microgreens are very nutritious and should be incorporated into your diet. Since Microgreens can be easily grown at home, they serve as a cost-effective way to boost your nutrient intake. Consume ample amount of Microgreens and enjoy the myriads of health benefits of these tiny plants. ®

Monsoon Munchies



Cheese Corn Samosa

Ingredients

For the Covering

Plain flour	2 cups
Ghee, Pure	¼ cup
Water as required	
Salt to taste	

For the Stuffing

Corn, Boiled, Fresh	1 cup
Oil	2 tablespoons
Cumin seeds	1 teaspoons
Cheddar cheese, Grated	50 grams
Green Chili, Chopped	2 – 3 tablespoons
Fennel seeds	2 tablespoons
Coriander leaves, Chopped	½ bunch
Salt to taste	

Preparation

For the Covering

Blend Plain flour and Salt in a pan. Heat Ghee in another pan. Pour Ghee over Plain flour; then add enough water and knead well till it becomes a firm dough. Allow it to rest for 15 – 20 minutes.

For the Stuffing

Heat Oil and add Cumin seeds, Green Chili, Fennel seeds, Corn and Coriander leaves and blend the mix well; when it gets cool, add Cheddar cheese and mix lightly. Add Salt to taste.

How to Proceed

Make lemon sized balls of the covering dough and roll the balls into Rotis. Cut Rotis into a rectangular shape; wet the edges, and fold the triangles by overlapping the other end to form a cone. Press the overlapping portion, and fill the cone with the Samosa Stuffing and seal the edges together. Add Samosa to preheated Oil. Fry until it becomes golden brown. Serve hot.

Spring Onion Pakoda

Ingredients

Spring onion, Chopped	1 bunch
Basil leaves, Chopped	3 – 4 tablespoons
Besan (Chick Pea) flour	½ cup
Rice Flour	½ cup
Ajwain	1 tablespoon
Baking soda	¼ tablespoon
Green Chili, Chopped	1 tablespoon
Coriander leaves	½ bunch
Ginger, Minced	2 tablespoons
Red Chili Powder	2 teaspoons
Water	1 cup
Oil	3 – 4 tablespoons
Salt to taste	



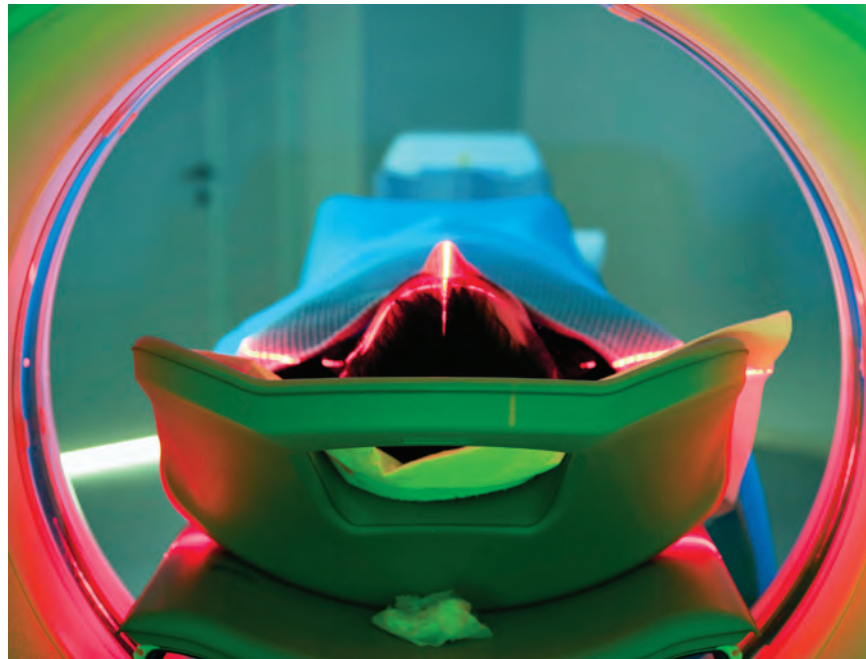
Preparation

Take Besan flour in a bowl. Add Chopped Spring Onion, Rice Flour, Salt, Ajwain, Ginger, Red Chili Powder, Baking soda, Green Chili, Coriander, Basil leaves, and enough water to it. Knead the mix together until it becomes a thick batter. Preheat Oil in a pan and pour some batter into it. Fry till it turns crisp and golden brown. Serve hot with Tomato Ketchup. ©



Celebrity Chef Vivek Tamhane
Member, Canadian Culinary Federation
Author, Culinary Consultant and Entrepreneur
Mumbai, Maharashtra, India

Role of Imaging in the Diagnosis of Oral Neoplasms



There has been a rise in the early detection of Tumors of the oral cavity due to growing awareness among the general public and advancements in imaging techniques, which in turn has increased the chances of a successful treatment outcome.

There are many risk factors for Oral Tumors like Smoking or Tobacco use, Consumption of Alcohol, Human Papilloma Virus (HPV) Infection, Poor Oral Hygiene, Malnutrition, Immunodeficiency, etc. The areas of involvement can be the floor of the mouth, tongue, gingiva, buccal mucosa, the retromolar triangle, or palate.

The most common Diagnostic Imaging techniques include

- ⇒ Dental Radiographs
- ⇒ Magnetic Resonance Imaging (MRI) with Diffusion-weighted Imaging (DWI)
- ⇒ Computed Tomography (CT)
- ⇒ Cone Beam Computed Tomography (CBCT)
- ⇒ Single-photon Emission Computed Tomography (SPECT)
- ⇒ Hybrid Imaging by Positron Emission Tomography (PET) / CT, PET / MRI, or SPECT / CT / Ultrasound

Choosing the right type of Imaging Modality

In Panoramic Radiographs, the involvement of the facial bones cannot be assessed and the assessment of the soft tissue can be difficult. Ultrasonography can be used to evaluate Superficial lesions and lymph nodes, besides helping ensure the accurate



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Jawaharlal Nehru Medical College
Belagavi, Karnataka, India

placement of a needle within the nodule in a Fine Needle Aspiration (FNA) biopsy.

Though a CT scan is a commonly used tool for the identification of Oral Tumors, it cannot reliably differentiate Recurrent Tumors, Surgical Scars, or the changes after radiotherapy. An MRI scan helps to get information about the tumor location and possible spread to regional lymph nodes. A T1-weighted Contrast-enhanced MRI helps assess Marrow Invasion, Perineural Spread, Soft Tissue Tumor Extension, and / or Tumor Thickness.

Gadolinium Compounds, which are used as an MRI Contrast Agent (a substance used to improve the visibility of the internal structures of the body in Magnetic Resonance Imaging), are associated with a much lower incidence of Anaphylaxis (a life-threatening allergic reaction) and are less nephrotoxic (damaging to the kidneys) than the Iodinated Contrast Agent used in Computed Tomography.

Conclusion

Each Imaging Modality has its own advantages and limitations. In certain cases, a combination of Imaging Techniques may become necessary for the proper identification, characterization, and the staging of a Lesion. ©

LETTERS TO THE DENTCARE

I am not a subscriber of 'The DentCare' and have never seen it before. I appreciate the holistic attitude of the Editorial board to publish articles on various subjects and systems of Medicine, divergent from the trend of the majority of periodicals that encourage articles of their own Specialties.

The DentCare is outstanding in every aspect, including its front cover, paper texture, print, and contents.

I wish the Magazine all success. ☺



Dr. K. P. Poullose
Principal Consultant in Internal Medicine
and Diabetology
Sree Uthradom Thirunal Hospital
Thiruvananthapuram, Kerala, India

The monthly magazine, The DentCare, gives a holistic overview of various health-related topics which will definitely help sharpen the health awareness of the common man. The language and presentation of Medical facts are easy to comprehend for anyone who has an interest in reading.

Topics are carefully selected and the mix of both Dental and Medical related information is also praiseworthy. A quick view of the latest innovations and newer research ideas give its readers an insight into the symptoms and complications of various diseases. This will surely pave the way for improving health awareness and will contribute to creating a healthy society. ☺



Dr. Abin Abraham Itty
Head
Department of Dermatology and Cosmetology
VPS Lakeshore Hospital
Kochi, Kerala, India

A Day with DentCare



Doctors from Indian Dental Association, Thiruvalla Branch (Kerala, India) exploring the 'high-end technology driven production facilities' @ DentCare Dental Lab Pvt. Ltd.



Dr. Mayakha Mariam

DENTAL PRACTITIONER

I am really fortunate to have visited DentCare Dental Lab. I could literally see there a host of world-class machines and armamentarium, colossal infrastructure, and a large number of Dental Technicians who worked with diligence and conscientiousness. The exemplary discipline maintained; humbleness and courtesy of the staff; the tranquility of the lab environment and high-end facilities gave the lab a Western feel.

The lab uses a wide range of materials from Germany to fabricate prostheses that undoubtedly cater to the expectations of all classes of customers and Dental Practitioners.

Many of my venerable Teachers and colleagues give their work to DentCare. If you are a dentist, especially a youngster, you should definitely visit the lab. The experience of visiting DentCare is the most precious and memorable one in my life.

Rendering my heartfelt thanks to Indian Dental Association (IDA) Thiruvalla Branch (Kerala, India), especially to Dr. Akhilesh, Branch President; Dr. Thomas, Secretary; Dr. Lanu, Treasurer; and Dr. Samuel K. Ninan for taking initiative for the lab tour.

It was an impeccably great and exhilarating experience!



Dr. Nisha Thomas

DENTAL PRACTITIONER

Thanks so much to the IDA Thiruvalla Branch for arranging this amazing trip. Seeing all the latest technologies at DentCare, I felt like I was in the United States. The amazing infrastructure, courteous staff, succulent food, cleanliness of the place, and the well-organized environment make the lab stand tall.

Special thanks to Dr. Samuel, Dr. Akhilesh, Dr. Lanu, Dr. Thomas and others who took the initiative and made the event a success. It was truly an unforgettable experience and once in a lifetime opportunity. Thanks a lot!



Dr. Seema Joseph

DENTAL PRACTITIONER

Congratulations to the IDA team, Thiruvalla Branch for the wonderfully coordinated Day with DentCare. It definitely surpassed all our expectations. Though the training session was short, it was informative. The friendly atmosphere, excellent ambiance, world-class machines, and the staff in all departments doing their job like clockwork precision literally blew our minds!!

I cannot help but mention the warm hospitality at DentCare we were provided with.

All in all, it was a well-organized tour and one of the best programs initiated by IDA Thiruvalla.

Thanks to Dr. Reji, Dr. Samuel and Dr. Rinosh for the trip.





DENTCARE: WELL-EQUIPPED WITH VERSATILE PRODUCTS

DentCare Dental Lab has embedded itself with an objective to bring together the world's preeminent branded materials of proven quality and high-end technologies. Most recognized brands like Ivoclar Vivadent, Shofu, EOS, and 3Shape sourced from Germany, Switzerland, Europe and the United States of America are used for manufacturing its extensive range of dental prostheses.

Over the past 31 years, we have dedicated ourselves to contributing to healthy, confident smiles for over 40 million satisfied patients and to the delight of more than 40 thousand dentists around the globe.

DentCare Zirconia – “One Product for Diverse Options”

The paradigm shift in dentistry for lifelike restorations that mimic natural tooth structure based on perceived

and actual aesthetic and functional patient demands has led DentCare Dental Lab to offer DentCare Zirconia – a revolution in Metal-Free Prostheses.

DentCare Zirconia is biomedical grade Zirconia made in Germany. Available in diverse options, DentCare Zirconia range of products assure natural feel and functionality, unmatched aesthetics and unlimited characterization and are made available in more than 40 natural and lifelike shades.

It is manufactured using an innovative Computer Aided Design / Computer Aided Manufacturing (CAD / CAM) technology offering perfect fit and marginal adaptation to the final product. This unique material provides full scope for cement-retained crowns and bridges on natural teeth (up to 16 units as a single restoration) as well as cement and screw-retained solutions for implants (single and multiple-unit).

DentCare Zirconia Variants

- » DentCare Zirconia Platinum Plus
- » DentCare Zirconia Premium Plus
- » DentCare BruxCare
- » DentCare Zirconia Classic
- » DentCare Zirconia Superlucent
- » DentCare Zirconia Basic
- » DentCare Zirconia Ultra
- » DentCare Zirconia Ultra Plus
- » DentCare Zirconia Solid
- » DentCare Zirconia Solid Plus



Why Medical Grade DentCare Zirconia?

- » Natural feel and functionality
- » Unmatched aesthetics
- » High strength
- » Highly biocompatible
- » Unlimited characterization made available through more than 40 natural and lifelike shades
- » The tooth-colored translucent substructure helps ensure that the natural tooth shade comes right from the internal framework level, unlike Porcelain Fused to Metal (PFM) or other normal Zirconia systems with opaque frames
- » Designing and manufacturing using CAD / CAM helps ensure outstanding marginal fit



DentCare Clear Aligners

Dental Braces are now entering a brave new world of comfort and ease with DentCare Clear Aligners – a series of transparent aligners to realign teeth. Each DentCare Clear Aligner is unique as it is customized for the patient's teeth. They can be easily changed every two weeks, sparing users the tedious task of heavy maintenance.

There is absolutely no need to spend long hours at the clinic negotiating conventional brackets and wire adjustments. Patients and dental clinicians stand to gain numerous valuable hours. Consequently, the dental clinician also gets to spend quality, value-added time with each patient.

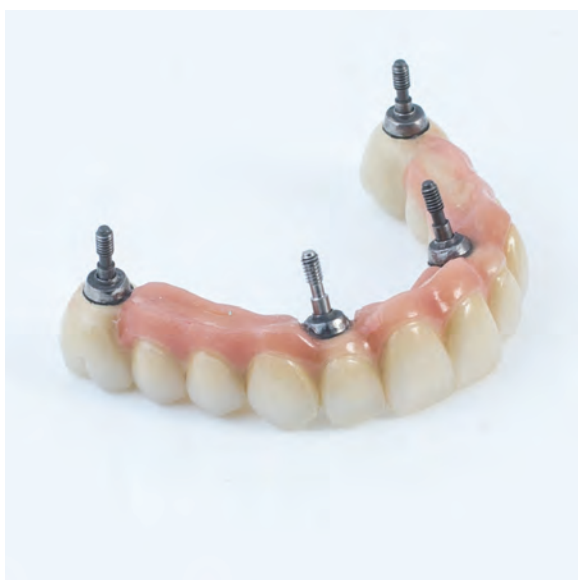
Dental Implant Prostheses

Dental Implants are popular and effective to replace missing teeth and are designed to blend in with other existing teeth. They are an excellent long-term option for restoring smiles with uncompromised functionality.

Different variants of Implant Prostheses are offered by DentCare and may be made available as screw retained or cement retained crowns / bridges.

» Screw-Retained Hybrid Dentures

'Hybrid denture' is referred to as hybrid because it combines the advantages of a fixed replacement with those of a removable denture. With this, patients regain self-esteem, confidence and can enjoy a wider variety of foods.



» **Implant-supported Overdentures**

They are available as Bar Attachment / Ball Attachment Overdentures.

Removable Prostheses

DentCare has incomparable Removable dental prosthetic solutions with impeccable precision to recapture your oral function, aesthetics and liveliness. We have a number of removable dentures that are durable and akin to your natural teeth.

The range of removable prostheses available include

» **DentCare Flex**

DentCare Flex is an aesthetically superior semi-flexible removable denture which blends perfectly with the natural gum tissue; providing better looks, function and comfort. It can be used in both complete and partial denture cases.



» **Cast Partial Denture (CPD)**

Cast Partial Denture (CPD) is used in cases with multiple missing teeth. It can be removed and placed back by patients themselves. It is ideal for patients for whom fixed prostheses or dental implants are not indicated. CPDs can be fabricated using Titanium and Cobalt – Chromium Alloy.



» **Bio-Functional Prosthetic System (BPS Dentures)**

DentCare offers BPS Dentures from Ivoclar Vivadent that is a long-lasting and high-quality option for dentures meant to reproduce the functions of natural teeth. The biofunctional set-up philosophy along with the Model Associated Positioning (MAP) of the artificial teeth in combination with the pressure injection molding procedure is the cornerstone of this system. BPS can be used in partial or completely edentulous cases.



» Acrylic Removable Complete and Partial Dentures

DentCare fabricates extremely natural looking Complete and Partial Dentures using acrylic and denture – teeth of the highest quality, imported from Germany and Italy.

The main advantage of these dentures is that they are cost-effective, yet uncompromising in terms of quality. Additional teeth and denture base can easily be added to an existing Acrylic Denture.

It is also the product of choice for Immediate Dentures and for Temporary Dentures in Implant patients.

» Valplast

The strong, flexible nature of Valplast is perfectly suited to a variety of natural conditions in the mouth, simplifying design and enabling the flexible nylon resin to act as a built-in stress breaker, in order to provide superior function and stress distribution in Removable Partial Denture cases.

It is good for replacing missing teeth in small edentulous cases and should not be opted for in situations where teeth need to be replaced extensively.

» Bio Dentaplast

It is a high strength, injection molded, and biocompatible denture material.



Dental Precision Attachments

Dental Precision Attachments offer a connecting link between fixed and removable partial dentures, as it incorporates features common to both types of prostheses. Dental Precision Attachments help connect removable partial dentures to fixed bridgework under a male / female locking mechanism.

The 'male' part is fixed to the crown or bridgework, whereas the 'female' part is included within the removable partial denture and engages the 'male'

part. The male part of Dental Precision Attachments is often a high strength precious alloy whereas the female part consists of a more elastic alloy.



DentCare strongly believes that technology, hand in hand with art, fused with latest know-how, results in dental restorations of greater precision, aesthetics and functionality

Conclusion

DentCare strongly believes that technology hand in hand with art results in dental prostheses of greater precision and quality.

World-class products are the outcome of our incessant passion for improving the standards of dental care. And this helps to keep us at the forefront of innovation. Our dental prostheses experts are incessantly passionate about exploring new ways to address challenges in enhancing smiles. All the materials we use in production have proven scientific quality and excellence.

Smile confidently, go for DentCare Prostheses. ©

Experience DentCare

Meeting Expectations



Dr. Bhavana Kalla
2nd Year Post Graduate Student
Department of Conservative Dentistry
and Endodontics
Gitam Dental College and Hospital
Visakhapatnam, Andhra Pradesh, India

It was a nice experience for me to visit DentCare, helping me enjoy and learn a lot. My visit to the lab was in connection with the pilot study of my thesis. The personnel there received me cordially and helped me learn all that was needed for my pilot study. It was for the first time that I visited such a good lab with all sorts of sophisticated and expensive infrastructure facilities.

I really appreciate the effort of the team there in rendering seamless service. Hope you will continue to encourage student doctors like me in their research work as well. @

Journey to Excellence



Dr. Ajith Subhash
Dental Practitioner
Thiruvananthapuram, Kerala, India

It was a really mind-blowing experience for me to visit DentCare. The staff took great pains to make me feel comfortable. The high-end machines requiring a huge investment demonstrate their untiring commitment to the pursuit of perfection.

I was amazed to see a host of technicians doing their work with immense dedication. In the midst of this, they explained to me the series of procedures they follow to complete a work.

I am greatly satisfied with the lab. My Kudos to DentCare! @



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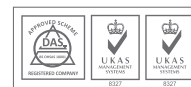
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