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THE DENTCARE

Your Monthly Health Care Magazine

Brightening smile the world over

In person with

Padmashri Dr. Philip Augustine

Botulinum Toxin in Dentistry

Basics of Antibiotics

A Note on **Mother's Day**



30

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of excellence

DentCare makes your Smiles
more beautiful...

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Dear Reader,

Dentcare is widely recognized today as the profound reason for brightening smiles the world over. The quest for excellence is inherent in the unsurpassed passion of this Thirty year old.

However, there seems adequate cause for me to withhold that serious thought for a moment as I believe that this edition should focus on the lifelong celebration of a timeless institution that continues to elude competition.

Dentcare need not worry. Neither should you.

Why? Because this answer rests in the hearts of our loving mothers whose selfless lives continue to enrich our parched souls.

Mothers are an immense source of succour in the arduous toil of our mundane existence.

Please reserve your profuse warmth in reciprocation. They deserve nothing less for being the real ones who persist in keeping our smiles, truly beautiful.

This apart, Belly fat needs urgent attention. It could be dentally ominous!!

We urge you to stay healthy by consuming safe food and to use adequate wisdom when you are in need of an antibiotic...even though there may be grounds for an inevitable impaction.

Do find time to unearth the ANSWER to Trauma herein. It could be life saving. Synonymous is saying a resounding No to Drugs.

We remain assured that you will continue to espouse our sincere thoughts in the coming days.

Yours truly,

Prof. (Dr.) George P. John

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Mother: An Epitome of Unconditional Love and Sacrifice

Mr. John Kuriakose
Managing Director, DentCare Dental Lab Pvt. Ltd.

Life is a battle. You may have to confront a host of challenges, trials and tribulations, at one time or another, in life. It will be a highly healthy approach, if you can count every experience in life, including unhealthy ones, optimistically.

Those who are not mature or seasoned to tackle adversities may shatter and collapse in life. It is indisputably a boon, if there is someone like your mother or father to help you through, when tragedies happen in rapid succession.

The anecdote of a hapless and helpless kid – Thomas Alva Edison, who would otherwise have fallen into the chasm of fiasco, had he not been made to scale the summit of success with the courageousness and prescience of his mother, Nancy Eliot, is encouraging and inspiring.

Thomas Alva Edison was a dim-witted child. His teachers belittled him as addled. One day, little Edison came home from Grammar School and gave a paper to his mother and said, “My teacher gave this paper and told me to give it only to my mother”. Reading the letter, tears started to trickle down her cheeks. “What is the matter?” the boy urged anxiously. With composure and foresightedness, his mother fabricated a lie and read the letter out loud to her child as: “Your son is a genius. This school is too small for him and does not have enough good teachers for training him. Please teach him yourself”.

Edison had only three months of formal schooling. He was substantially homeschooled by his mother. When he learnt to read, he became very inquisitive and got a voracious appetite for reading books on a wide range of subjects, doing experiments and closely observing things.

As time passed by, he developed into a homespun genius. With more than 1093 inventions, including the Electric bulb to his credit, Edison became an out of the box and acclaimed scientist and inventor. Years passed by, Edison's mother had succumbed to fate.


Once, while raking through old family things in the cupboard, Edison ran across the folded letter that his old teacher had written to his mother years ago. He opened it. The message written on the letter was, “Your son is mentally deficient. We cannot let him attend our school anymore. He is expelled.”

He was overpowered with emotion and shed tears for hours. Later in life, he wrote about his mother in his diary: “My mother was the making of me. She was so true, so sure of me and I felt I had something to live for, someone I must not disappoint.”

The energizing and motivational words of his mother changed him and made him very confident. Had she told the truth, the pride in her son would have been wounded and he would have fallen into the mire of despondency. Being an accomplished school teacher, she could perceive his latent capabilities beforehand and took steps to boost his confidence. The heroic act of the mother made Edison a folk hero.

At this juncture, I cannot help but scribbling a few lines about my mother. She is a true synonym of humility, endurance and sacrifice. Whenever I was on the verge of despondency and exhaustion, she was there to console me and make me get through hazardous situations, which helped me mount the summit of success. When there were circumstances which would have made me overconfident and arrogant, she mended me and made me inscribe in the heart that pride and arrogance keep us from being close to God. I learnt the rudiments of modesty, virtue and love from my mother.

The selfless love, humility and sacrifice of mothers should be there in our hearts not only on Mother's Day but on all the 365 days of our lives.

Let us emulate the lessons of love, sacrifice and compassion taught by our mothers and stretch out a helping hand to the poor and the needy by relying altogether on God. 

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के. जे. अल्फोंस
K. J. ALPHONS



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भारत सरकार, नई दिल्ली
MINISTER OF STATE (IC) FOR TOURISM
GOVERNMENT OF INDIA, NEW DELHI

MESSAGE



I am extremely happy to learn that 'The DentCare', published from DentCare Dental lab, is commemorating the Mother's Day. Mothers around the world are the pillars of strength. Prime Minister of India, Shri Narendra Modiji has always extolled empowering women and especially mothers as they are the key to transforming India.

Every mother is the epitome of true love. Our culture endorses parents as visible Gods, especially mothers. On this occasion I join all of you and offer my Pranams to the Mothers across the world.

I wish the magazine well for taking up causes that enlighten the public about the significance of the general health care and well-being.


(K.J.ALPHONS)
April, 2018

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Will Your Belly Fat Cause Tooth Loss?

Overweight individuals, especially those who are young, usually have unhealthy dietary patterns and ingest foods containing excessive amount of sugar and fat. These habits may increase the risk for developing periodontal disease





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Obesity is one of the leading causes of preventable death in the world, with increasing rates in adults and children. It is now considered as the sixth biggest crucial risk factor contributing to morbidity, which in turn, gradually contributes to reduction in life expectancy.

It is a low-grade systemic inflammation that leads to the evolution of a number of chronic diseases including diabetes, cardiovascular diseases and cancer. This impact can possibly have the same outcome as that of 20 years of aging and may even exceed that of smoking or alcohol abuse.

The harmful effects of obesity are not limited only to systemic diseases but also to oral ones.

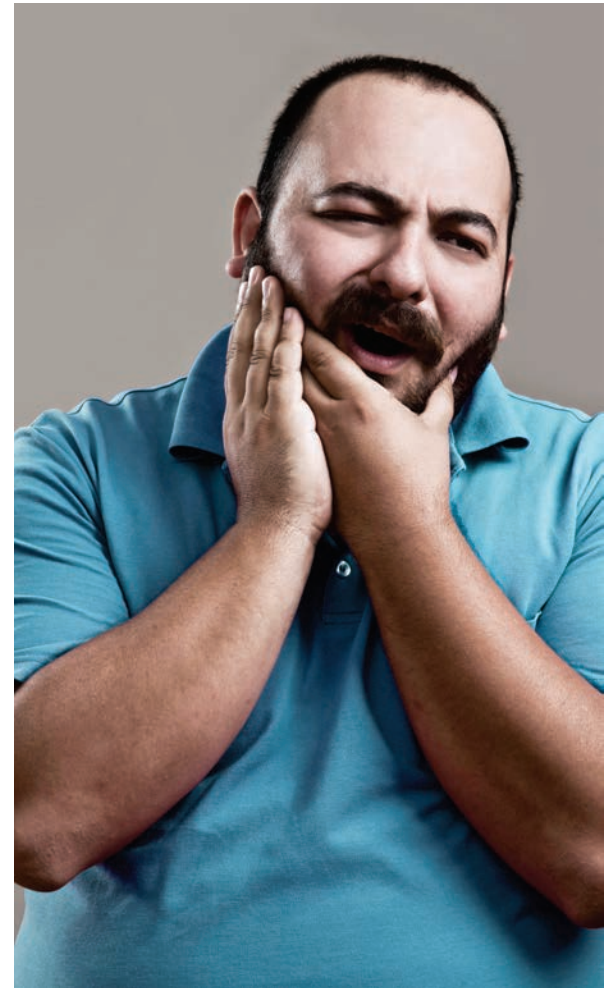
Oral and periodontal infections are the other issues of concern. Periodontitis, commonly called Pyorrhea, is an inflammatory infection that alters the tooth-supporting structures, leading to accelerated alveolar bone loss. If the condition is not treated properly, it can eventually lead to tooth loss. Abstract periodontal disease is considered as the tenth biggest prevalent chronic infection.

Numerous systemic or local risk factors play a major role in the development of the clinical sequence of Periodontitis, such as aging, smoking, poor oral hygiene, socioeconomic status, genetics, race, gender and psychosocial stress. All these things signify that Periodontitis occurs as a result of plaque and tartar deposition or due to various host factors.

Signs and Symptoms of Periodontal Disease

- Easily bleeding gums
- Red, swollen, tender gums
- Persistent bad breath or bad taste in the mouth
- Ill-fitting dentures
- Loose teeth

Lately, a number of studies have revealed that there is a positive link between oral disease and obesity. A recent study showed that overweight individuals had twofold increase in the incidence of Periodontitis while obese individuals had threefold increase. There may be a number of factors that could



have association with this relationship.

Overweight individuals, especially those who are young, usually have unhealthy dietary patterns and ingest foods containing excessive amount of sugar and fat. These habits may increase the risk for developing periodontal disease.

Excess fat in children and youngsters is often associated with increased stress levels, which may play a role in promoting periodontal disease.

Over the last 30 years, the prevalence of childhood obesity and dental caries has dramatically increased. 'One' out of every six children is



obese and 'one' out of every three is overweight. The impact of a child being overweight as well as childhood obesity is both immediate and long-term.

A relationship between obesity and dental caries has also been reported. It has been observed that a high prevalence of dental caries in both primary and permanent dentitions exists, which could have a relationship with the increased prevalence of obesity. This may be connected with unhealthy lifestyle and eating habits.

It is also found that the higher the level of education, the more likely it is to adopt a healthier

lifestyle, resulting in a healthier Body Mass Index (BMI). A high socioeconomic status is also expected to translate to a better education and healthier lifestyle.

The possible causal relationship between obesity and Periodontitis and potential underlying biological mechanisms is yet to be established; however, the adipose tissue actively secretes a variety of cytokines and hormones which are involved in inflammatory processes, pointing towards similar pathways involved in the pathophysiology of obesity, Periodontitis and related inflammatory diseases. This may culminate in decreased immune status which may increase the vulnerability to periodontal disease. The inflammation may

also decrease blood flow to the gums, leading to its progression.

As the maxim goes, '**Prevention is better than cure**', steps should be taken to eradicate this menace from the population. The rapid rise in the prevalence of obesity, which has been observed over the past two decades in genetically stable populations, strongly confirms the need to tackle the factors which contribute to obesity.

Many children, who are severely overweight, are affected by obesity early in adolescence. But the preventive techniques to address childhood obesity are complex. The measures to tackle obesity are:

- By advising lifestyle changes and prescribing balanced diet to control body weight.
- Participating in regular physical activity and weight

It has been observed that a high prevalence of dental caries in both primary and permanent dentitions exists, which could have a relationship with the increased prevalence of obesity. This may be connected with unhealthy lifestyle and eating habits

management, as this may help avoid early onset of obesity or increased risk of morbidity.

- ⇒ Screening each individual in adolescence to review the family history of obesity. If there is a positive family history, the individual can be counseled by the health care team on prevention techniques, including strengthening and resistance exercises.
- ⇒ Eating nutritious foods

which are essential for normal growth and development. Energy restriction techniques are necessary in obese children, who when on well-controlled and supervised weight reduction diets, have led to reduction in peak height velocity (PHV) i.e. the time when children grow the fastest during adolescence.

The “**right choice**” of treatment for weight loss should be tailored to meet the individual needs. Medications may be

used alone or in conjunction with other interventions to induce weight loss. Exercise is helpful in reducing body fat / weight. When exercise is coupled with diet, greater weight loss can occur.

For many obese patients, meaningful weight loss is difficult as lifestyle changes are unappealing and long-term adherence is typically low. Bariatric surgery can elicit massive weight loss when post-surgical instructions are followed.



Importance of Oral Health

Certain simple and basic steps should always be taken to decrease dental caries and periodontal disease like:

- ⇒ Brushing and flossing the teeth thoroughly, twice a day
- ⇒ Using a tongue cleaner
- ⇒ Replacing the toothbrush once in every one to three months
- ⇒ Eating a low-fat, low-sodium balanced diet
- ⇒ Limiting snacks between meals and sugar caloric drinks
- ⇒ Rinsing the mouth with a mouthwash
- ⇒ Avoiding the use of tobacco products
- ⇒ Visiting the dentist every six months

Takeaway

Both obesity and periodontal disease significantly impact an individual's overall health. Understanding the relationship between obesity and the risk factors for periodontal disease is very important. With the increased rates of childhood and adolescent obesity, the prevalence of periodontal disease will be higher.

Periodontal disease can be prevented through proper oral hygiene and a balanced diet, along with routine dental visits. 

Healthy Eating Tips

for Fussy Eaters

Fussy eating habits are commonly seen among children, which are typically experienced by almost every parent. It is the child's way of exploring the environment and asserting their independence. Besides, it is also because of the changes in their appetite.

Fussy eating habits are very common in toddlers. But if the habits are not tackled properly, they may go beyond toddlerhood. Most of the time, fussy eating is not about food, it is often about children wanting to be independent.

Tips to tackle Fussy Eaters

Try different Vegetables

Kids are not critical about new foods. If they do not like the sight of certain vegetables, they may avoid eating them. But, by offering new veggies that they may not have seen or heard of, they may tend to like them.

Dip and Eat is funny

Kids love the fun of dipping foods in sauce or chutney. So, provide them new foods and vegetables with dips.

Smaller Portion Size

Kids are small, so the plates will look bigger in their eyes. A big heap of veggies can be frightening to a little kid. A smaller portion size is easier for them to eat. So, try to keep their portion size smaller.

Include Iron-rich Foods

Some children may have iron deficiency which may affect their appetite. Hence, it is important to give iron-rich foods when the 'little ones' start weaning. Pulses, green leafy vegetables, different types of spinach, dry fruits and finely chopped / powdered nuts are better.





Dr. Prachi Mehta
Dental Practitioner and Nutritionist
Kachchh, Gujarat, India

Some Nutrient-dense Foods for Children

Avocado



Avocado is rich in healthy fats which are essential for growing kids. It also contains fiber that boosts digestion.

Broccoli



Broccoli is full of nutrients that are essential for children's growth. Being a good source of Vitamin C, it helps strengthen the immune system. It is also a good source of antioxidants

that can help protect your body from free radicals.

Sweet Potatoes

Sweet potatoes are a naturally sweet fruit with rich nutrients and fiber. They are also an excellent immune booster, as they are rich in antioxidants, Beta-carotene, Vitamin C and B, along with Iron and Phosphorous.

Greek Yogurt

It is one of the best foods for the tooth. It is rich in proteins and consists of living organisms called Probiotics that help balance gastrointestinal flora.

Steps to handle Fussy Eaters

Make Mealtime pleasant

Children will be fond of taking food, if the eating environment is pleasant and stress-free. So,

make their mealtime pleasant as far as possible.

Some Tips to make Mealtime pleasant

Make mealtime pleasant with regular social occasions for kids. Never scold them, if they spill drinks or food on the floor.

Keep a Positive Attitude

Always keep a positive attitude and ask your child to taste a piece of new food and help him try it a mouthful over time. Besides, praise him for any small effort to try a new food.

Never force your child to try a new food. Instead, make different opportunities for children to try new ones.

If your child is fussy about food, ignore it as much as you can. Paying too much attention to such behavior will do more harm than good.

Make healthy Foods fun

You can make healthy foods exciting in different ways. You can cut sandwiches into interesting shapes, make frankie rolls or help your child prepare a salad and garnish it with vegetables.



Conclusion

With repeated exposure to new foods in a non-coercive manner and making an environment that is both funny and rewarding, you can help your kids overcome fussy eating habits. 

Botulinum Toxin in Dentistry

Clostridium botulinum is a bacterium that produces a potent and lethal neurotoxin called Botulinum Toxin (BTX) which is commonly known as Botox.

Botulinum Toxin, though more commonly used for perioral and facial cosmetic interventions, is also used for the management of cross-eyes (strabismus), uncontrolled blinking (blepharospasm), muscular stiffness, spasms, increased sweating (hyperhidrosis), overactive bladder, chronic migraine and movement disorders (like dystonia).

How does BTX work?

Muscle function requires neural synaptic release of the neurotransmitter, Acetyl Choline into the synaptic space. These neurotransmitters are contained in the vesicles in the synaptic endings in the neuron. Once the vesicles attach to the receptors on the neural membrane, the contained Acetyl Choline is released into the synaptic cleft outside the neuron which binds to receptors on the subsequent synaptic nerve ending with the help of SNARE proteins (they are a large protein super family consisting of at least 24 members in yeast and more than 60 members in mammalian cells), causing its consequential activation.

BTX has endopeptidases which are enzymes that degrade SNARE proteins and impede the docking and block the subsequent neural transmission of stimuli. This effectively weakens the muscle for a short period of time, usually for three to four months.





Dr. Eric Mario Shailander A.
Consultant Periodontist
Bengaluru, Karnataka, India

Hyperactive muscles undergo hypertrophy over a period of time. By decreasing their activity, they will return to their normal morphology. For this, administration of BTX once in every three to four months may be required. This duration shortens over time, as the hyperactivity of the muscle gradually decrease.

There are seven types of Botulinum Toxin like A, B, C, D, E, F and G. Only types A and B are used clinically, with the former being more popular.

Dental uses of BTX

1. Treatment of Bruxism,

Pathologic clenching, Masseteric Hypertrophy, Temporomandibular Joint (TMJ) disorders and Dental Implants

Bruxism is a parafunctional habit involving excessive grinding or clenching of teeth. It may occur while asleep (nocturnal bruxism) or while awake (diurnal bruxism).

Bruxism or grinding of teeth causes excessive wear and tear of the tooth. This can also cause discomfort in the temporomandibular joint and masticatory muscles, along with headache.

Injection of BTX into the muscles of mastication, namely the Masseter and the Temporalis, can significantly alleviate the involved symptoms.

Chronic bruxism causes hypertrophy of the Masseter muscles. This can also alter the facial appearance, giving it a swollen look. Injecting BTX into the Masseter can reduce the swelling.

This type of management is a more preferred option to

Chronic bruxism causes hypertrophy of the Masseter muscles. This can also alter the facial appearance, giving it a swollen look. Injecting BTX into the Masseter can reduce the swelling

'resection of the muscle'. This can also help manage TMJ disorders caused by a myogenic component.

It takes three to four months for a Dental Implant to completely osseointegrate with the bone. If the implant is loaded immediately, it can hamper the integration process, due to the force of mastication.

Injecting BTX into the Masseter and Temporal muscles can help ease the load of mastication and enable the implant to heal efficiently.

2. Gummy Smile

This condition refers to a smile that displays more of the gingiva. It is very subjective and the perception of a gummy smile can vary from patient to patient. The excessive



contraction of the upper lip while smiling makes the gums more visible.

Though cosmetic surgical procedures are available to resect muscle fibers, the use of BTX is a simpler and a less invasive procedure which produces satisfactory outcomes.

Injecting BTX bilaterally into the muscles of the upper lip, (like Levator Labii Superioris (LLS), Levator Labii Superioris Alaeque Nasi (LLSAN) and Zygomaticus minor muscles (ZMi)) can help reduce their activity. This results in lesser contraction of the upper lip which in turn, results in lesser exposure of the gums while smiling.

3. Aesthetics in the Dentofacial Regions

Lines and folds on the skin can either be dynamic or static. Dynamic lines result from hyperactive muscles due to habitual excessive use, while static lines are residual ones which occurs consequent to dynamic lines.

At first, the dynamic lines are addressed with BTX administration and then, the static lines and folds are corrected with fillers. In combination with fillers, BTX can address nasolabial folds, marionette lines, mental creases, vertical lip lines and drooping lips in the perioral area. Fillers can also increase the prominences of the mental region, the lips and the zygomatic processes.

4. Mandibular Muscle Spasms

This occurs when the muscles that helps close the mouth remain in a semi-contracted state, leading to a limited opening of the mouth. This leads to inefficient hygiene maintenance, causing debilitating long-term effects. Muscle relaxation will help

Completely edentulous patients, who have been without dentures for long time with reduced vertical dimensions, can be treated with BTX to help the muscular component adapt more to physiologic vertical dimensions, which are formed with complete dentures

restore the mouth opening significantly. This can also produce better outcomes with masticatory and speaking functions.

5. Sialorrhea

Sialorrhea is also commonly called as hypersalivation. BTX has the ability to block the release of Acetyl Choline at synaptic terminals of the autonomic nervous system. This also blocks the cholinergic secretomotor fibers of the salivary gland. The use of BTX can significantly reduce hypersalivation.

6. Frey's Syndrome

Frey's Syndrome, also known by other names like Baillarger's Syndrome, Dupuy's syndrome and Auriculotemporal syndrome, is a type of hyperhidrosis or excessive sweating and redness on the cheek and the areas adjacent to the ear, which is increasingly observed during salivary secretion from the parotid gland, especially while eating, thinking or talking about food. This is usually due to an injury to or areas near the parotid



gland. This may also occur due to the damage to the Auriculotemporal nerve. BTX can help address this type of focal hyperhidrosis by blocking cholinergic secretomotor fibers.

7. Trigeminal Neuralgia

It is a painful neurological disorder affecting orofacial muscles. BTX can help alleviate the pain by acting on the nerve endings.

8. Orthodontic Rehabilitation

BTX can be incorporated as a part of the retentive phase of orthodontic treatment by reducing the muscular intensity and helping muscles adapt to a newer and more physiological function.

9. Complete Denture Rehabilitation

Completely edentulous patients, who have been without dentures for long time with reduced vertical dimensions, can be treated with BTX to help the muscular component adapt more to physiologic vertical dimensions, which are formed with complete dentures.

10. Healing of Fractures

Pharmaceutical splinting with BTX can help limit muscle contraction during the healing phase of facial bone fractures.



Side effects of BTX

- ✦ Temporary soreness of the muscle subjected to injection.
- ✦ Temporary / Partial weakening of the muscle subjected to injection.
- ✦ Reversible muscle atrophy with prolonged use.

Contraindications


- ✦ Patients with unrealistic expectations, who do not understand the limitations of

the use of BTX.

- ✦ Actors and media personalities who always want to keep intact facial expressions.
- ✦ People allergic to BTX and its serotypes.
- ✦ Those who take concomitant interactive medication.
- ✦ Pregnant and lactating women.
- ✦ Those with neuromuscular disorders.



Conclusion

Though the uses of BTX in dentistry are significant and diverse, a thorough knowledge of the mechanism of action, its uses and limitations are crucial for efficacious practice. It is generally a safe, minimally invasive and reversible technique for cosmetic corrections and functional interventions. It will serve as a vital adjuvant in the dentist's arsenal. 

Tulsi (scientific name: *Ocimum sanctum*) also known as Holy Basil is a common name in most Indian households for its manifold benefits.

Tulsi, which is widely found in the Indian subcontinent, is considered as a sacred plant in Hinduism. The plant also finds a place in the ancient medicine system of Ayurveda.

Tulsi is commonly found in two varieties; the green colored Lakshmi Tulsi and purple hued Krishna Tulsi. Apart from the Indian subcontinent, it can also be found in the tropical regions of most of the Southeast Asian countries.

This humble, inexpensive herb comes loaded with a lot of benefits. Just a few leaves of Tulsi, when used regularly, can help resolve a host of lifestyle related health issues.

TULSI:

The Queen of Herbs

Health Benefits of Tulsi

In Ayurveda, Tulsi has been well-documented for its therapeutic potential and described as Dashemani Shwasaharni (Antiasthmatic) and Anti-kaphic drugs (Kaphaghna).

The traditional medical practitioners in India have been widely using this medicinal plant for the management of various diseases for centuries.

In the last few decades, several studies have been carried out by Indian scientists and

researchers, which highlight the highly therapeutic potential of essential oils and eugenol of *Ocimum sanctum*.

Anti-ulcerogenic Properties

Several studies have revealed that Tulsi leaves are very effective against mouth and gastric ulcers. Some common triggering factors of ulcer are stress, ingestion of acidic and spicy foods, poor dental hygiene and aggressive cleaning of the teeth and gums.

Tulsi leaves act as an adaptogen which helps cure ulcers. An adaptogen is a substance that helps stabilize physiological processes.

The anti-bacterial properties in Tulsi make it an effective oral disinfectant that can destroy up to 99% of the bacteria and germs in the mouth and relieve the symptoms of ulcers.





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Aqueous extract of Tulsi leaves is found to be effective in relieving gastric and hepatic disorders.

Cures Fever

The miraculous healing properties of Holy Basil come mainly from its essential oils and phytonutrient contents. Holy basil is an excellent antibiotic, germicidal, fungicidal and disinfectant agent.

Fever is mainly caused due to infections from protozoa (malaria), bacteria (typhoid), viruses (flu), allergic substances and fungi. Fever is not an ailment in itself. It is usually a symptom of an underlying condition.

Curtails Respiratory Disorders

Due to the presence of components like Camphene, Eugenol and Cineole in the essential oils of Tulsi, it is very effective in curing respiratory disorders including bronchitis, both chronic and acute.

Tulsi is very effective in the treatment of asthma, since it helps relieve congestion and facilitates smooth breathing. The phytonutrients, essential oils and other minerals in it are found to be useful in curing some of the underlying

causes of asthma as well.

Prevents Heart Disease

Tulsi contains vitamin C and other antioxidants, such as eugenol which help protect the heart from the harmful effects of free radicals. Additionally, eugenol is very beneficial in reducing cholesterol levels in the blood.

Reduces Stress

Vitamin C and other antioxidants in Tulsi, apart from repairing damage done by free radicals, also minimize the stress caused due to oxidation. They soothe the nerves, lower blood pressure, reduce inflammation and thus reduce stress.

The anti-bacterial properties in Tulsi make it an effective oral disinfectant that can destroy up to 99% of the bacteria and germs in the mouth and relieve the symptoms of ulcers





Effective against-Kidney Stones

Being a detoxifier and a mild diuretic, Tulsi helps reduce uric acid levels in the body, which is the main culprit behind kidney stones. Acetic acid and certain components in the essential oil of Tulsi help dissolve the stones.

Aids in Skin Care

Taking a bath daily with a decoction of Holy Basil mixed with bathwater, washing face with it, or applying the paste of its leaves on the body help remove skin diseases. You can just consume Tulsi leaves and still manage to keep your skin free from all infections.

Rubbing Holy Basil leaves or smearing its extracted oils on the body keeps mosquitoes and other insects away.

Relieves Headache

Headaches caused due to migraines, sinus pressure, cough, cold, or high blood pressure can be effectively controlled by the use of Tulsi.

Camphene, Eugenol, Cineol, Carvacrol, and Methyl-Chavicol

in Tulsi have excellent analgesic, sedative, anti-congestive and disinfectant properties.

Anti-aging Properties

Vitamin C and A, phytonutrients and the essential oils in Holy

Basil are excellent antioxidants that help protect the body from almost all damage caused by free radicals in the body that are hazardous by-products of cellular metabolism, which are responsible for a wide swath of diseases, including cancer.

Just a few leaves of Tulsi, when used regularly, can help resolve a host of lifestyle related health issues

In the ancient Indian medicine system of Ayurveda, it is considered as a tonic to retain youthful vigor and avoid premature aging.

Boosts Immunity

Tulsi is a very good immune booster. It helps protect against nearly all infections from viruses, bacteria, fungi and

protozoa. Recent studies show that it is also helpful in inhibiting the growth of Human Immunodeficiency Virus (HIV) and carcinogenic cells.

Contributes to Eye Care

If you daily wash your eyes with water soaked with a few leaves of basil, it helps cure conjunctivitis, boils and many other problems

of the eyes. It also soothes eye inflammation and reduces stress. Regular consumption can protect your eyes from the damage caused by cataracts, macular degeneration, glaucoma, vision defects and ophthalmia.



Other Benefits


Herbal preparations with Tulsi have been found to be effective in speeding up the healing process of patients suffering from viral hepatitis.

Tulsi leaves also help prevent bad breath, plaque, tartar formation and dental cavities.

It can protect your body from radiation poisoning and also heal and damage caused by the condition.

Being an expectorant, Tulsi is effective in curing coughs and colds. Furthermore, its dried leaves can be mixed with food grains to be used as an insect repellent.

Leaf extract of Tulsi along with Triphala (three fruits used in Ayurveda) is used in Ayurveda for the preparation of eye drops to treat glaucoma, cataract, chronic conjunctivitis and other painful eye diseases.

Therefore, the use of Tulsi in day-to-day life is very useful in staying away from a host of ailments and health problems. 



Dr. Aparna Babu
Consultant Periodontist and
Implantologist
Mumbai, Maharashtra, India

Smile

your Way to Glory



Improving Your Smile

With selfies and instant photo sharing becoming a craze, a camera-ready smile is a great achievement. You need not be a celebrity to know how to flash a glowing smile. There is no doubt that a little more attention to your smile and oral hygiene can pay off.

If you diligently follow these steps, you will get a camera-ready face, which in turn, will help you acquire fascinating photos which can be shared with your friends.

Bad Breath

The culprits behind bad breath are:

- ↪ Poor oral health habits
- ↪ Infections of the tooth or nose
- ↪ Gum disease
- ↪ Smoking
- ↪ Dry mouth

The best ways to combat bad breath are staying hydrated and flossing and brushing your teeth twice a day. Do not forget to clean your tongue, too! If you wear dentures or oral appliances, clean them daily. If you have dry mouth, use an alcohol-free mouthwash or artificial saliva spray / gel.

If your breath suddenly produces an unpleasant or unusual odor, it may be the sign of an underlying disorder like diabetes or a bowel obstruction. If this occurs, you should seek immediate medical attention.



Healthy Gums

For getting a camera-ready smile, you sometimes require a little 'behind-the-scenes' preparation. Proper brushing and flossing will help you keep the gums and teeth healthy.

Periodontal or gum disease and the infection of the tissues surrounding and supporting your teeth may hinder you from getting a camera-friendly smile.

Gum disease is often painless, but it will make the gums inflamed and irritated, leading to gingival recession. In fact, gum disease is a major cause of tooth loss in adults.

But here is the good news; gum disease is almost always preventable. Regular dental check-ups combined with a good oral hygiene routine will help keep plaque at bay.

Tooth Whitening

If your teeth have become yellow with age, try a whitening product or visit your dentist.

Many over-the-counter (OTC) toothpastes, mouth rinses and chewing gums have a whitening effect. You can also speak to your dentist about suitable whitening toothpastes or in-office treatments.

Proper Dental Hygiene

You may not get a perfect smile overnight. The easiest thing to get a beautiful smile is by maintaining proper dental hygiene.

You may be interested in trying whitening toothpastes. Whitening toothpastes that contain mild abrasives can be helpful in removing stains. However, whitening toothpastes cannot change the color of your teeth because they can remove only the stains which are present on the tooth surfaces.

Bleaching Agents

Dentin is the calcified tissue that forms the bulk of the tooth under the enamel. The thickness of the enamel layer changes throughout our lives and gets thinner as we age. The thinner the enamel is, the more yellowish your teeth will appear to be, as the dentin layer dominates the final shade.

If your dentin has a yellowish tint, you may use hydrogen peroxide, a natural bleaching agent which will help whiten the teeth.

Some bleaching agents available over-the-counter are 'paint-on' teeth whiteners or whitening strips. They are relatively cheap and effective. Make sure to use a whitening agent that contains at least 6 % bleaching agent.

The use of OTC medicines may not be effective if you have:

- ↪ Isolated stains, such as a single discolored tooth
- ↪ Dark stains
- ↪ Crowns
- ↪ Dental implants or other restorations

Dentists can prescribe a bleaching agent for home use, or they can bleach your teeth in the office. The procedure typically involves applying a bleaching agent onto your teeth and using a special light or laser to enhance the effect of the whitening agent.

Long-term use of bleaches or abrasive toothpaste can increase sensitivity or gum irritation. If your teeth are sensitive to hot or cold, you should avoid using whitening agents. You should consult a dentist to discuss your options.



Teeth Straightening


Straightening of crooked teeth can also have an effect on your smile. Clear Aligners are an orthodontic option that will help straighten your teeth efficiently.

If you have bite problems or more complex orthodontic issues, you may need traditional braces. Brackets made of tooth-colored ceramic or polycarbonate are less noticeable than stainless steel brackets.

Fixing Imperfections

A missing, chipped or stained tooth can be replaced with a crown or dental implant. Porcelain veneers are pricey, but they can transform your smile with a few dental visits.

Speak to Your Dentist

If you are interested in improving your smile, speak to your dentist. They will recommend an ideal treatment option that will help make your teeth and smile more beautiful. 

GRAND OPENING



Moments from the inauguration of DentCare Dental Lab Export Unit at Cochin Special Economic Zone (CSEZ), Kakkanad, Kerala, India by **Dr. M. K. Shanmuga Sundaram IAS**, Development Commissioner, CSEZ, in the presence of **Mr. Saju K. Surendran IES**, Deputy Development Commissioner, CSEZ, **Mr. Baby Kuriakose** and **Ms. Bindu Bijoy** (Board of Directors, DentCare Dental Lab)



A Note on Mother's Day

13th May

Mother's Day is celebrated to honor the contribution of mothers to families and societies. The origin of the day varies from country to country. In some countries, it is associated with the cultural, religious or historical traditions of the land, while in others, it is influenced by the efforts of Mother's Day International Association, which has sought to promote meaningful observance, without allowing it to slip into the clutches of commercialism.

Motherhood has been traditionally understood as the state of being a mother. Being a mother is much more than the physical act of giving birth to a child. It is the duty of a mother to nurture the child, she has given birth to.

In India, a woman has the choice to decide whether to bring a child into this world. Mothers even have the option to ensure a safe home for their child, if they become pregnant through rape or due to circumstances beyond their control, by handing the infant directly for adoption or, as in





Ms. Shobha Koshy
Former Chairperson
Kerala State Commission for Protection of Child Rights
Thiruvananthapuram, Kerala, India

Kerala, through **Ammathottil** (Child Cradle), an initiative launched by the State of Kerala, India, under the Kerala State Council for Child Welfare, which provides care and services for abandoned babies till they are adopted or rehabilitated.

Motherhood is perhaps one of the toughest, enduring and unacknowledged tasks in the world. A mother plays the most critical role in raising a child, such as providing the food that nurtures the child in the womb and during the early years of his / her life, instilling right values, identifying child's hidden capabilities, encouraging his / her dreams and mentoring him / her to achieve them.

Mothers are the chief protectors of children from all dangers that may waylay them at any moment. Be it in school or at any other place, if something untoward happens to a child, it is always the mother who is readily available to address the problem.

In brief, it is the mother who plays a very critical role in shaping the future of a child. Motherhood is not a task that can be discarded on a whim once it is assumed.

A mother is the pivot on which a family revolves. Therefore, it is not surprising that a day has been earmarked to celebrate the importance of motherhood and its influence in society.


Mother's Day is also an occasion for society to introspect about

the extent to which they have been able to discharge their traditional responsibilities, in a fast changing world where their roles are getting transformed.

Today, mothers are too busy to balance their traditional responsibilities within the home with their external professional commitments. Therefore, they face many challenges. An example is the breastfeeding of babies. Parents are compelled to place children from a very young age in crèches where facilities are either limited or not available for breastfeeding their children conveniently.

With the emergence of nuclear families, working mothers also find it a challenge to ensure the safety of their children while they are away at work. Time available for mothers to spend with their children is also very scarce, as they have to discharge myriads of responsibilities both at home and at work.

As more and more mothers step outside their homes for work, they need support from their spouses, those around them and the policy makers to help them discharge their responsibilities.

Therefore, on this Mother's Day, while lauding the contributions of mothers, let us work together to create convenient facilities and environments which will help a mother perform her responsibilities more effectively, without compromising her rights as a human being. 



Motherhood is perhaps one of the toughest, enduring and unacknowledged tasks in the world. A mother plays the most critical role in raising a child, such as providing the food that nurtures the child in the womb and during the early years of his / her life, instilling right values, identifying child's hidden capabilities, encouraging his / her dreams and mentoring him / her to achieve them.

Facial Pain





Dr. Joe Jacob
Consultant Neurologist
Thrissur, Kerala, India

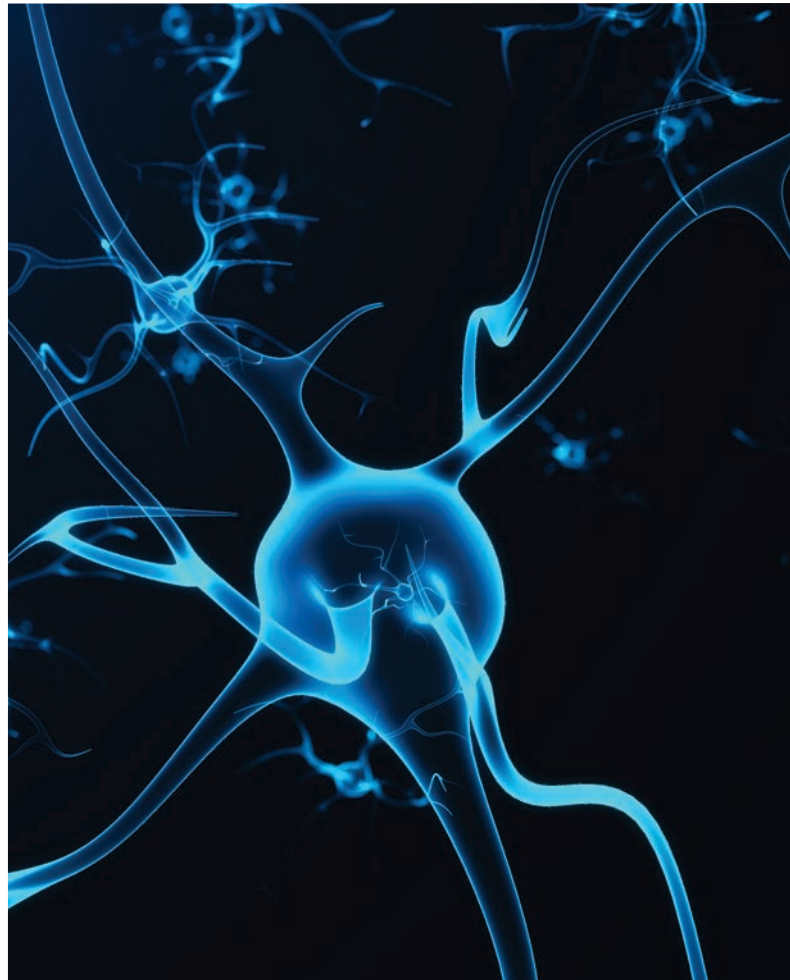
Facial pain, although not common, is a nagging condition where the severe pain distracts you from the activities of daily life. In such a situation, it would be very difficult for a person, even to cry, as this may worsen the condition.

Facial pain is of different types. One of them has symptoms with a sudden onset with 'pins and needles' or an electric shock like sensation. Patients often describe it as a sudden bolt of pain. The pain may start at any time, often without any definite provocation. In some cases, the pain can be felt by touching the affected areas of the face. These kinds of pains are often termed as Neuralgic pains.

These pains often occur on the sides of the face and may be associated with previous injuries or diseases of sensory nerves of the face. The nerve receiving sensation from face and forwarding it to the brain is called Trigeminal nerve. The neuralgic pain that affects this region is called Trigeminal neuralgia.

Sometimes, neuralgic pains mimic toothache and cause difficult situations in the patient. The real cause of the pain may be due to certain illness, injury or compression of the Trigeminal nerve.

Compression is often due to abnormal positions of some normal blood vessels which pass near the Trigeminal nerve. As the name suggests, Trigeminal nerve




has three parts which cover the upper, middle and lower parts of each side of the face.

Neuralgia can involve one or more of the contiguous territories of the face. It is common for this pain to be present as toothache, as this kind of pain is virtually impossible to be differentiated from real dental pain.

Neuralgic pains can be controlled with medications

which help reduce the sensitivity of the nerve to the pain. Some medications can also help modulate the pain transmission from the affected site to the brain.

Patients may have to continue taking medications for a long duration. Radiological investigation of the head will help detect the structures that compress the nerve branches. Surgical procedures can also be a good treatment option. 



SAFE FOOD FOR A HEALTHY LIVING

Safe food is defined as food free of contamination. Contamination / cross-contamination occurs on different occasions like while growing crops; preparing, processing, storing, selling or serving foods.

Food can be considered safe to eat, when all the safety practices and hygienic measures are followed properly in the entire process of food preparation.

Food-borne Diseases in India

Food-borne illnesses are caused by the consumption of contaminated foods or beverages. Foods are contaminated by different types of disease-causing microbes and the ingestion of these foods leads to different kinds of food-borne illnesses.

Pathogens need suitable conditions to multiply and grow, like warmth, moisture etc. In ideal conditions, these pathogens can multiply in every 10 to 20 minutes and the number may hike to more than a million in a few hours.

The climate of our country, which is either hot or cold for months, is favorable for these organisms to

Food is highly susceptible to cross-contamination which occurs due to improper/unhygienic storage, preparation, cooking or serving. This can occur from hands to food, food to food, equipment to food etc.



Mr. G. Gopakumar
Research Officer and Technical Assistant
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grow very rapidly. Moreover, the atmosphere is excessively polluted and dusty, which makes microorganisms grow rapidly.

Food-borne illnesses predominantly occur in rainy and summer seasons, due to suitable growing conditions for the microorganisms.

Causes of Contamination

Food is highly susceptible to cross-contamination which occurs due to improper / unhygienic storage, preparation, cooking or serving. This can occur from hands to food, food to food, equipment to food etc.

The Main Causes of Cross-contamination

- Improper food temperature control
- Inadequate attention to cleanliness / hygiene
- Poor sanitization or storage conditions

How to avoid or lessen Contamination?

Contamination can be reduced by implementing correct food handling and storage practices. This helps prevent bacteria from multiplying in foods.

The following measures would help prevent or lessen contamination of foods:

- Use only good quality raw materials or ingredients
- Protect food from cross-contamination in the food chain



- Use good practices in food processing
- Sterilization of food products
- Food Safety Programs (a written document indicating how a food business will control the food safety hazards associated with food handling activities) should be implemented in hotels and restaurants

The raw materials used for the preparation of foods have to be of good quality and the entire process of the manufacture of food products, including their handling should be governed by good practices. If good practices are followed during the process and preparation of food products, the shelf life of such food items will be longer.

Chemical contamination is the result of unwanted or harmful chemicals finding their way into foods. The most common sources of this type of contamination are from the use of pesticides on crops, antibiotics for storage, antimicrobials for cleaning raw materials etc.



Right Food for a healthy Living

Food is consumed to obtain nutrition and energy for growth and physical activities. In this stressful world with the fast paced life, it is increasingly important that we ingest the right kind of balanced food free from contamination, to lead a healthy life.

It is very essential for food manufacturers to ensure good quality, as it is the right of consumers to expect the same. The Food Safety and Standards Act of India envisages that the manufacturer declare the nutritional facts on food labels.


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It is difficult for the common man to ascertain the presence of any harmful substances in food products, as for this, sophisticated equipment and skills are required

Conclusion

To ensure the safety of food products, tolerance / maximum residue limits are established, which ascertain that the amount of pesticide residue in treated commodities is within the allowable limits. In establishing tolerance, toxicity of each pesticide and the amount of pesticide residues remains 'in or on food' are considered. If good food safety practices are followed, it can be ensured that the residues remaining in food products are within permissible limits and that such food is free from health hazards.

It is difficult for the common man to ascertain the presence of any harmful substances in food products, as for this, sophisticated equipment and skills are required. There are several laboratories in big cities, which help evaluate the quality of foods.

Food safety institutes / colleges should take initiatives to conduct social awareness programs to make people understand the criticality of the issues and parameters that need to be verified to ascertain the safety of foods. 



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ROLE OF THE DENTIST IN PALLIATIVE CARE



What is Palliative Care?

Palliative Care is care given to improve the quality of life of patients who have a serious or life-threatening disease, such as Cancer. The goal of Palliative Care is to prevent or treat, as early as possible, the symptoms and side effects of the disease and its treatment, in addition to the related psychological, social and spiritual problems.



Dr. Sourav Malhotra
Consultant in Oral Medicine
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Certified Palliative Care Dentist
Jammu
Jammu and Kashmir, India

Since no two patients are alike, Palliative Care treatments are tailored to meet the requirements of each patient, including their psychological and spiritual needs. Palliative Care can be started with diagnosis and continued through treatment, till the end of life.

Palliative Care focuses on adding life to days rather than days to life.

The goals of Palliative Care include:

- Treating symptoms, including pain, nausea, breathlessness, insomnia and other physical issues caused by terminal diseases or their treatment.
- Managing emotional and social needs, including anxiety, depression and similar issues.
- Addressing spiritual needs / concerns.
- Addressing practical needs, such as transportation and financial issues.
- Providing support for family, friends and caregivers.



Who gives Palliative Care?

Often, Palliative Care specialists work as part of a multidisciplinary team to coordinate care. The team may consist of doctors, nurses, registered dietitians, pharmacists and social workers. Psychologists or a hospital chaplain may also be added to the team. Other than the normal duties, they may make recommendations to primary care physicians about the management of pain and other symptoms.

The Role of Dentist in Palliative Care Team

The Palliative Care team consists of specialists in various fields of medicine who provide care and treatment to terminally ill patients. A Dentist can help improve the quality of life of the patient. Mouth is the most important organ of the body, which is most often affected in the later stages of diseases.

Oral cavity is the home for a great number of microorganisms which can aggravate the terminal conditions of the patient. The patients may need the help of a dentist to alleviate their discomfort, especially in

the oral cavity as this may help them live a better life. He can help the patients, right from the initial diagnosis of the condition up to the relief of pain in the terminal stages of the disease.

Oral Care in Palliative Care

The basic principle of 'Oral Care in Palliative Care (OCPC)' is focused primarily on the principle that good oral hygiene is fundamental for oral integrity. Early clinical diagnosis of oral lesions or conditions of the patients should be done and appropriate actions should be taken to minimize pain and suffering by giving symptomatic relief medications.

The causes of oral lesions may be fungal, viral, bacterial, ulcerative, immunosuppressive, radiation-induced or due to lack of oral hygiene. The common oral problems in these patients include xerostomia (dry mouth), sore mouth, thrush, swallowing problems, sore lips, odor, secretion of heavy mucous, difficulty in speaking and pain associated with these problems.

Comprehensive Palliative Care

For comprehensive Palliative Care, the following things should



be taken into account:

Physical

The common physical symptoms include pain, fatigue, loss of appetite, nausea, vomiting, shortness of breath and insomnia. Many of these can be relieved with medications or by using other methods, such as nutrition and physical therapy, or deep breathing techniques.

Emotional

Palliative Care specialists can provide resources to help patients and families deal with the emotional trauma linked to cancer and its treatment. Depression, anxiety and fear are only a few of the concerns that can be addressed through Palliative Care.

Practical

Cancer patients may have financial and legal worries, insurance questions, employment problems and concerns about completing advance directives. For many

Palliative Care team may direct patients and families to experts who can help with financial counseling, understanding medical forms or legal advice, or identifying local and national resources

patients and families, the technical language and specific details of laws and forms are hard to understand. To ease their burden, Palliative Care team can assist in coordinating various services.

Palliative Care team may direct patients and families to experts who can help with financial counseling, understanding medical forms or legal advice, or identifying local and national resources.

Spiritual

With a Cancer diagnosis, patients and families often look more deeply for the meaning of

their lives. We can find that in some people, the disease brings in more faith whereas in some, faith becomes a big question as they struggle in vain to understand why Cancer has happened to them.

An expert in Palliative Care can help people explore their beliefs and values, so that they can find a sense of peace or reach a point of acceptance that is appropriate for their situation.


Who pays for Palliative Care?

Palliative Care is often covered by Individual Health Insurance Plans. If the patients do not have health insurance or are unsure about their coverage, they should check with a social worker or their hospital financial counselor.

If you have been referred to a Palliative Care specialist, he will help you and your caregivers understand your diagnosis and treatment plans, including prognosis. These conditions may change throughout the course of your illness, so continue to have honest discussions with both your oncologist and Palliative Care team.

Dental professionals are the important members of an 'extended Palliative Care team' and they have a number of key roles like:

- a) Training of Palliative Care professionals
- b) Management of complex oral problems
- c) Management of specific oral problems

Increased awareness made by Health Care Professionals and the Palliative Care team, including the Oral Care Specialist would go a long way in providing relief, comfort and consolation to terminally ill patients and their families. 



GRILLED AUBERGINES



Romy Gill is one of the leading female Indian Chefs in the United Kingdom (UK). She is the Owner and Head Chef at Romy's Kitchen Restaurant in Thornbury, Bristol, England.

Romy was awarded with **Member of the Most Excellent Order of the British Empire (MBE)** for her meritorious service to the hospitality industry. She regularly demonstrates her culinary expertise at various festivals, both in the UK and abroad.

Ingredients (Serves 4)

- 3 teaspoons of Sunflower Oil
- 1 teaspoon of Cumin Seeds
- 50 grams of Paneer, coarsely grated
- 20 grams of Ginger, peeled and grated
- 1 small Red Onion, chopped
- 2 Green Chilies, finely chopped
- 1 large Tomato, finely chopped
- 1 teaspoon of ground Turmeric
- 1 teaspoon of ground Coriander
- 1 teaspoon of Salt
- 2 tablespoons of Coriander, chopped
- 2 large Aubergines (cut into halves, flesh removed and roughly chopped and outer skin reserved)
- Seeds of ½ Pomegranate to garnish

Preparation

Preheat the grill. While the grill is heating up, heat the oil in a non-stick frying pan over medium heat. Add Cumin seeds and Ginger and cook for 2-3 minutes, until the Ginger is light brown. Add Onion and cook for 2-3 minutes. Add all the remaining ingredients, except Pomegranate seeds, to the pan and season with a pinch of Salt to taste. Stir and cook for 4 minutes or until the Aubergine is tender. Remove from the heat.

Place the hollow Aubergine shells onto a baking tray and place under the preheated grill for about 5 minutes (take care not to burn them). Fill the empty shells with the cooked Aubergine mixture and put it again under the grill for a further 2 minutes.

Sprinkle with Pomegranate seeds and serve hot.



Basics of Antibiotics

Most bacteria in our body are harmless; some are helpful while others are pathogens, causing diseases. Bacteria can infect any area / organ of the body.

Antibiotics are effective medications that help treat bacterial infections and are given till the body's immune system boosts up.

Sometimes, Antibiotics are given to prevent an infection rather than treat it, especially prior to surgery, which are called 'Prophylactic Antibiotics'.

Antibiotics cannot treat Everything

Majority of common respiratory infections caused by viruses like most colds, flu, coughs, bronchitis, sinusitis, ear infections and sore throats cannot be treated with Antibiotics, as they cannot fight infections caused by viruses.

Who should avoid taking Antibiotics?

- Those who have decrease in liver or kidney function
- Those women who are pregnant / breastfeeding

Antibiotics are not One-size-fits for all

The Antibiotics that are used for a urinary tract infection are not the same as that of the ones used for strep throat. Antibiotics that are used to fight hospital-acquired infections are not the same as that of the ones used to treat bacterial ear infections, as hospital-acquired infections have to be treated more aggressively. If you take the wrong Antibiotics, they may cause Antibiotic resistance.



Dr. Kalyani Nerakar
Dental Practitioner
Pune, Maharashtra, India

How to take Antibiotics?

Antibiotics are taken orally, administered by injection or applied directly on to the affected parts of the body. Antibiotics usually 'start working' within a few hours. Some Antibiotics should not be consumed with certain foods and drinks; some are taken on an empty stomach, while others are taken after meals.

It is crucial to follow the instructions correctly for making Antibiotics effective and avoiding unwanted and avoidable side effects. It is not at all good to take Antibiotics from a previous prescription, as you may risk side effects and drug resistance.

What does Antibiotic Resistance mean?

Patients often do not finish their course of Antibiotics once the symptoms disappear. It is important to complete the whole course of medication exactly as prescribed, to prevent the recurrence of infection and ensure the elimination of bacteria.

If you leave taking Antibiotics before the completion of the course, it will be harmful, as the remaining bacteria in the body will become more resistant. The next generation bacteria will be more resistant to Antibiotics than their parents.

In rare cases, this may lead to deadly drug-resistant bacterial infections. Once bacteria become resistant to an Antibiotic, it might take decades before it can be effectively used again.

Among people who have developed Antibiotic resistance, it is easy for an infection to spread unchecked as well as rapidly. The biggest problem is due to bacterial evolution and adaptation. Drug-resistant infections are a perfect example of evolution. Since bacteria reproduce so quickly, their evolution happens very fast.


Total Resistance to Antibiotics

If 'total resistance to all Antibiotics' would become a reality, it may result in debilitating consequences like:

- ↳ The end of most cancer treatments like Chemotherapy and Radiotherapy.
- ↳ The end of life-saving transplant surgeries.
- ↳ A huge jump in maternal deaths after childbirth, especially after caesarean section.
- ↳ It could make routine surgery too dangerous to carry out.

Takeaway

None of this information should scare you away from taking Antibiotics as prescribed when you truly need them, since they will help fight off an infection, which your immune system is too weak to defend.

Doctors should prescribe them with caution and patients should follow the prescription absolutely and never start / alter / stop medications voluntarily. 

It is crucial to follow the instructions correctly for making Antibiotics effective and avoiding unwanted and avoidable side effects



An Iconic and Exemplary Medical Practitioner



Padmashri Dr. Philip Augustine is one of the best known Gastroenterologists of India and a successful Healthcare Administrator. He is a leading expert in Pancreatic diseases. He is also a pioneer in therapeutic endoscopy and one of the first to establish Therapeutic Pancreatobiliary endoscopy in the country.

He graduated in medicine from Government Medical College, Kottayam (Kerala, India) in 1971. He passed Doctor of Medicine (MD) in Internal Medicine with Gold Medal from the All India Institute of Medical Sciences (AIIMS), New Delhi, in 1975. In 1983, he completed Doctor of Medicine (DM) in Gastroenterology from the Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India with distinction.

He established one of the best known 'medico-surgical gastroenterology units' in the country, which has done pioneering work in Tropical Pancreatitis and Pancreatic Cancer. He is currently the Chairman of Philip Augustine Associates Pvt. Ltd., a healthcare consultancy firm and the Director of Gastroenterology at the Cochin Gastroenterology Group operating at the Ernakulam Medical Centre (Kochi, Kerala, India). As an eminent healthcare administrator, he was involved in the setting up of many prestigious medical

Padmashri Dr. Philip Augustine established one of the best known 'medico-surgical gastroenterology units' in the country, which has done pioneering work in Tropical Pancreatitis and Pancreatic Cancer. He is currently the Chairman of Philip Augustine Associates Pvt. Ltd., a healthcare consultancy firm and the Director of Gastroenterology at the Cochin Gastroenterology Group operating at the Ernakulam Medical Centre (Kochi, Kerala, India)

institutions in Kerala and was the brain behind the creation of Lakeshore Hospital, Kochi, Kerala.

He is a member of the Indian Council of Medical Research (ICMR) Panel of Experts on Pancreatology and was the President of the Indian Pancreas Club. He is the first person to report the presence of both Crohn's Diseases in India in 1995 and Recurrent Pyogenic Cholangitis (RPC) (also known as Oriental Cholangiopathy), a rare form of liver disease, in 1987.

In 2010, he was conferred the Padma Shri Award for his contribution to the healthcare sector in India.



Would you disclose the contributing factors that helped you achieve the inimitable success in your professional and personal life?

I could join for medicine only because the Government Medical College started functioning at Kottayam, Kerala, India, which was near my mother's house where I stayed and attended college, as medical education was considered beyond the reach of a rustic boy at that time. Other than that, I was interested in studying human behavior, observing society and was attentive in current affairs, which, in my opinion, offers the perfect recipe for a successful medical practice.

After my postgraduation from AIIMS, I had the option to join as faculty of that prestigious institution and pursue academic medicine or join the private sector for clinical practice. I opted for the latter and started practicing at Devamatha Hospital,

Koothatukulam, Kerala, India, a new 'Mission hospital' in a rural area, which was the perfect setting for a young clinician to start his practice independently. This decision was also influenced by Prof. C. M. Francis, who was the Principal of Government Medical College, Kottayam, while I was doing Bachelor of Medicine and Bachelor of Surgery (MBBS), and who later became the Dean of St. John's Medical College, Bengaluru, Karnataka, India.

The untiring zeal and dedication finally helped me see the expansion of the 75-bed Devamatha Hospital to a 350-bed facility with all basic amenities needed to cater to the medical needs of 50,000 people of that area. The hospital soon became a referral center for major medical problems.

My stint as a physician there gave me an insight into the magnitude of gastrointestinal diseases in Kerala, which led me to go in for specialization in Gastroenterology, a rather new Specialty being propelled by technological advancement in the 1970's.

After specialization in Gastroenterology at PGIMER, Chandigarh, the Mecca of Gastrointestinal (GI) training in the country at that time, I returned to Devamatha Hospital to develop the first private sector Gastroenterology unit there. In 1992, I moved to Kochi and established PVS Hospital where my Gastroenterology (GE) training and research progressed steadily. In 2003, Lakeshore Hospital was commissioned, which later marked its presence in the world map of Gastroenterology with our seminal clinical and academic work.



You are a doctor and health care administrator. How do you handle workload stress and emergency situations efficaciously?

There is something new to look forward to every day in the practice. The Medical profession, unlike other professions, is a big challenge. No two patients are identical. Each patient is a challenge and you have to be careful in taking patient history and designing investigations for diagnosis and doing necessary treatment and follow-ups. It is important to communicate with the patients and their relatives for better understanding. The most important factor in medical practice is the unfailing patient follow-ups.

Medical science is advancing day by day. Nothing is 100 percent correct in medical science; but it is a dynamic one and that is the beauty of it. It keeps changing; so we have to be observant about what is happening around the globe, otherwise we will be pushed to the back. We have to be on our toes, so there is no question of getting bored; there is always something interesting to look forward to.

Work stress and emergency situations are handled as a team. It is the confidence of those who are with me that helped build and manage the team. Human resource management is an art which requires only common sense.



What are the common Gastrointestinal Diseases and their Causes?

Gastroenterology is a vast area, which does not pertain to one organ and this consists of the pancreas, liver, stomach, small and large intestines and so on. At the same time, it is like a 'Pandora's box'. In the past, nobody knew what was inside the gastrointestinal tract until it was opened up. But that has changed with the marvelous technological advancements in medicine.

Now we need not have to open up the tract to see what is there, as we have Ultrasound, Endoscopy, Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). Great discoveries have helped us cure a host of common maladies.

Ulcers used to be very common in developing countries. Now we know that ulcers are mostly caused by *Helicobacter pylori* (H. pylori) bacteria. I have seen the evolution of the treatment of Peptic Ulcer.

When I was a medical student at the Medical College at Kottayam, at least 10 to 12 operations were performed each day for ulcers, as it was very rampant. There were no effective medicines for this. Almost all such patients presented with severe pain or stomach obstruction and internal bleeding. Only remedy prevailing at the time was surgery.

Then, Antacids came, which helped neutralize the acid and relieved the symptoms. Subsequently, Endoscopy came to the scene and this helped us detect the healing of stomach ulcers. But Antacids could heal ulcers only temporarily.

Later, H2-receptor blocker group of drugs (Ranitidine etc.) were discovered. However, Ranitidine group of drugs and Proton Pump Inhibitors (PPI) e.g. Omeprazole, which was subsequently discovered, could only provide temporary healing for ulcers.

In 1983, ***Helicobacter pylori*** (H. pylori), which tunneled the wall of the mucosa (of the stomach) and thrived in the stomach, was discovered. Later, it was found that the bacteria could be killed with three drugs or triple-drug therapy, i.e., at least two antibiotics and one acid reducer; and still the ulcers remained unhealed. The bacteria entered the body through food and about 40% of people in developing countries have H. pylori. All patients with H. pylori may not have ulcers, but many have resistance power. Hence, we have to treat for H. pylori, if they were found to have ulcers. For the discovery of H. pylori, Nobel Prize was awarded in 2005.

*Medical science is
advancing day by day.
Nothing is 100 percent
correct in medical science;
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that is the beauty of it*

In Kerala, many people suffered from Pancreatic stone disease (Tropical Pancreatitis) which is the forerunner of Pancreatic cancer and severe Diabetes.

Liver disease from viral Hepatitis to alcoholic Cirrhosis and liver cancer are also quite prevalent in Kerala. Another rare condition is Oriental Cholangiopathy which produces stone inside the liver ducts.

Q *What is Crohn's Disease? What are the contributing factors that made you detect and report the Disease in India?*

Crohn's disease (ulcer in the digestive tract that has no established cause for its origin) produces ulcers mostly in the large and small intestines; sometimes in the mouth and stomach as well. The presence of as many as 26 cases of Crohn's disease was reported for the first time in India in 1995, at the National Conference of the Indian Society of Gastroenterology. Since the cause of the disease was not known, it was named after the person who discovered the disease.

A good pathologist can distinguish Crohn's disease that simulates tuberculosis. We have very meticulously followed-up such cases. Even after one year of treatment and follow-up for tuberculosis, ulcers remained unhealed. Hence, we had to go beyond tuberculosis and later, it was found that the condition was due to Crohn's disease.

Q *How do you respond to the controversies related to the publication of 'Philip Augustine Associates Study' pointing out that Ayurvedic Herbal Drugs are damaging the Liver?*


Working on many aspects of liver diseases, it was found that certain herbal medicines cause liver damage. We are not at all worried about the controversies related to the publication. We have scientific evidence about what we are saying. Rather than making controversies, this would, in fact, help traditional medicine to incorporate scientific principles in their practice.

Dr. Cyriac Abby Philips (son of Dr. Philip Augustine), a Specialist in Hepatology and Liver Transplant Medicine and principal researcher of the 'Philip Augustine Associates Study' who was with Dr. Philip commented : "On analyzing certain Ayurvedic and herbal medicines, it was found that 70% of the samples contained heavy metals and hepatotoxic volatile organic compounds."

A host of Ayurvedic products were analyzed and documented in the best of the laboratories like Sophisticated Testing and Instrumentation Center (STIC), an institution sponsored jointly by Kerala State Council for Science and Technology and Environment (KSCSTE) and Cochin University of Science and Technology (CUSAT). The laboratory is accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL). It was found that they all contained unacceptable levels of heavy metals.

The practitioners of alternative system of Medicine should rectify the defects rather than making controversies. The study has been conducted not to malign Ayurveda and herbal medicines, but to help the patients who seek treatment for liver diseases. This should be an eye-opener for everyone.

If we had not got the scientific proof, we would not have published it. We respect all systems of Medicine, but the fact is that there should be "scientific basis for practices".

Modern Medicine has made wonderful contributions in alleviating miseries of mankind. We could eradicate almost all communicable diseases. Vaccines have been developed for diseases like Hepatitis B viruses. Recently, cure for Hepatitis C has been discovered. All these have been made possible only because of scientific research and experiments. Without proper research and scientific evidence, no medicine can survive the test of time. 

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

COMBATting HEALTH CARE SUPERSTITIONS

Superstitious beliefs are epidemically present all over the world. In a country like India, where there exists many religious, cultural and linguistic groups, it is a herculean task to efface the ill-effects of superstitions, as their roots are widespread and deeply planted.

Healthcare superstitions are propagated by fake healers, quacks and self-proclaimed God-men who exploit innocent people for money or personal gains.

Many people still believe that certain rare diseases occur as a result of curses and evil spirits, which can be properly addressed by God-men.

I run a private practice in an old city in Tamil Nadu, a place with a rich historical and cultural heritage, surrounded by numerous small villages, from where people travel to the city, for advanced medical and dental care.

I regularly encounter patients who are mutilated by these spiritual healers, ending up with us in the advanced stages of their illness, making management more challenging for us and more debilitating to the patient.

I would like to relate a case report of a 19-year-old female patient, who is a typical example of this phenomenon.

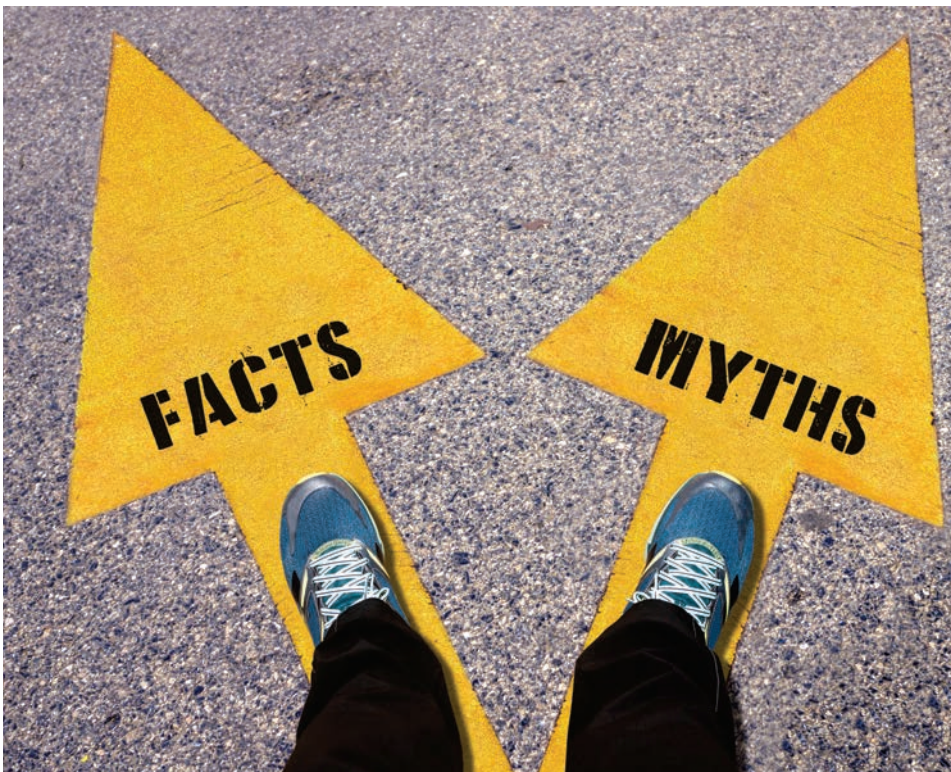
A female patient came to my office with the complaint of having progressive forward movement and spacing of the left side front teeth. She wanted an orthodontic correction for the same.

Clinical examination revealed that there was a huge swelling (bicortical enlargement) of the left maxilla from the incisor to the second premolar region, which is hard in consistency, without any surface ulceration or alteration in mucosal color and texture.

A computed tomography (CT) of the affected part revealed that a well circumscribed mixed radiopaque-radiolucent solid lesion was extending from the central incisor to the second premolar, measuring 2.5 centimeter in diameter, displacing maxillary sinus close to the orbital floor.

An incisional biopsy was done and it was diagnosed as Cemento-ossifying fibroma, a benign tumor, which can be treated by surgical excision.

The patient and her mother were educated about the treatment, its outcomes and rehabilitation options. But the patient was reluctant to go for surgery due to fear and financial constraints. So she discontinued the treatment.





Dr. K. Nisharudeen
Consultant Oral and Maxillofacial Surgeon
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After a lapse of two years, one day, she turned up again with additional complaints, such as gross facial asymmetry, exophthalmos, continuous headache, deviated nose, blocked left nostril and altered vision in the left eye.

From the conversation, I came to know that she was promised of magical cure by a God-man. Hence, she refrained from treatment for two years, under his instructions. A CT scan revealed that the tumor had grown in size, which obliterated the entire left maxilla, eroded into the orbital floor and displaced the nose to right side and her eyeball bulged outward and extended to the zygomatic bone.

She had now realized the seriousness of the disease and wanted a surgery, but she was too poor to afford a custom-made maxillary implant or Vascularized bone flap to reconstruct the surgical defect, since the entire left maxilla had to be removed now. Various treatment options were discussed and the treatment plan was finalized.

Under general anesthesia, the entire left maxilla containing the tumor was removed 'in toto' through Weber-Ferguson approach. The areas around the eyes were reconstructed with the

muscles harvested from the lateral region of the skull, to help support the eyeball.

Two weeks after the surgery, a temporary Acrylic partial denture obturator was fabricated and placed. For complete wound healing, the patient waited for 4 months. After this duration, the patient was reviewed and fabrication of a definitive prosthesis was planned. Tooth preparations were done and a **Cast partial (obturator) denture**, fabricated by **DentCare Dental lab**, was placed into the patient's mouth.

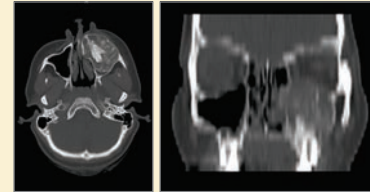
The patient was really happy with the treatment outcome, as her face was reconstructed perfectly and she could now masticate properly.

Had she turned up for surgery two years earlier, the extensive surgery and facial scar could have been averted and she could have been given a fixed replacement for the tooth, which is not possible now.

To ward off such consequences, proper community health awareness programs are necessary to educate people about the importance of general and oral health. At the same time, stringent measures should be taken against those who propagate such social evils.



Pre-operative



CT pictures



Resected tumor



Immediate post-operative



Dental rehabilitation with
Cast partial (obturator) denture



Pre-operative

Post-operative

Diabetes and Homeopathy

The incidence of Diabetes has been increasing in alarming proportions when compared to other diseases, during the past two decades. Very soon, India will become the Diabetic capital of the world.

Every 8 seconds, one patient dies of Diabetes across the globe. It is estimated that there are more than 285 million Diabetes patients in the world. This amount is supposed to double by 2030. As per the statistical reports, the highest prevalence of Diabetes is in the populations of Asian and African countries.

There are two types of Diabetes: Type 1 and Type 2. Type 1 Diabetes is mostly prevalent among children, while Type 2 generally in adults.

As per statistical reports, 62 million people in India are suffering from Type 2 Diabetes. Sedentary lifestyle, lack of exercise, continuous intake of high-calorie foods, obesity / overweight, use of certain medications and genetic factors are some of the major contributing factors for Type 2 Diabetes.

Diabetes: Treatment

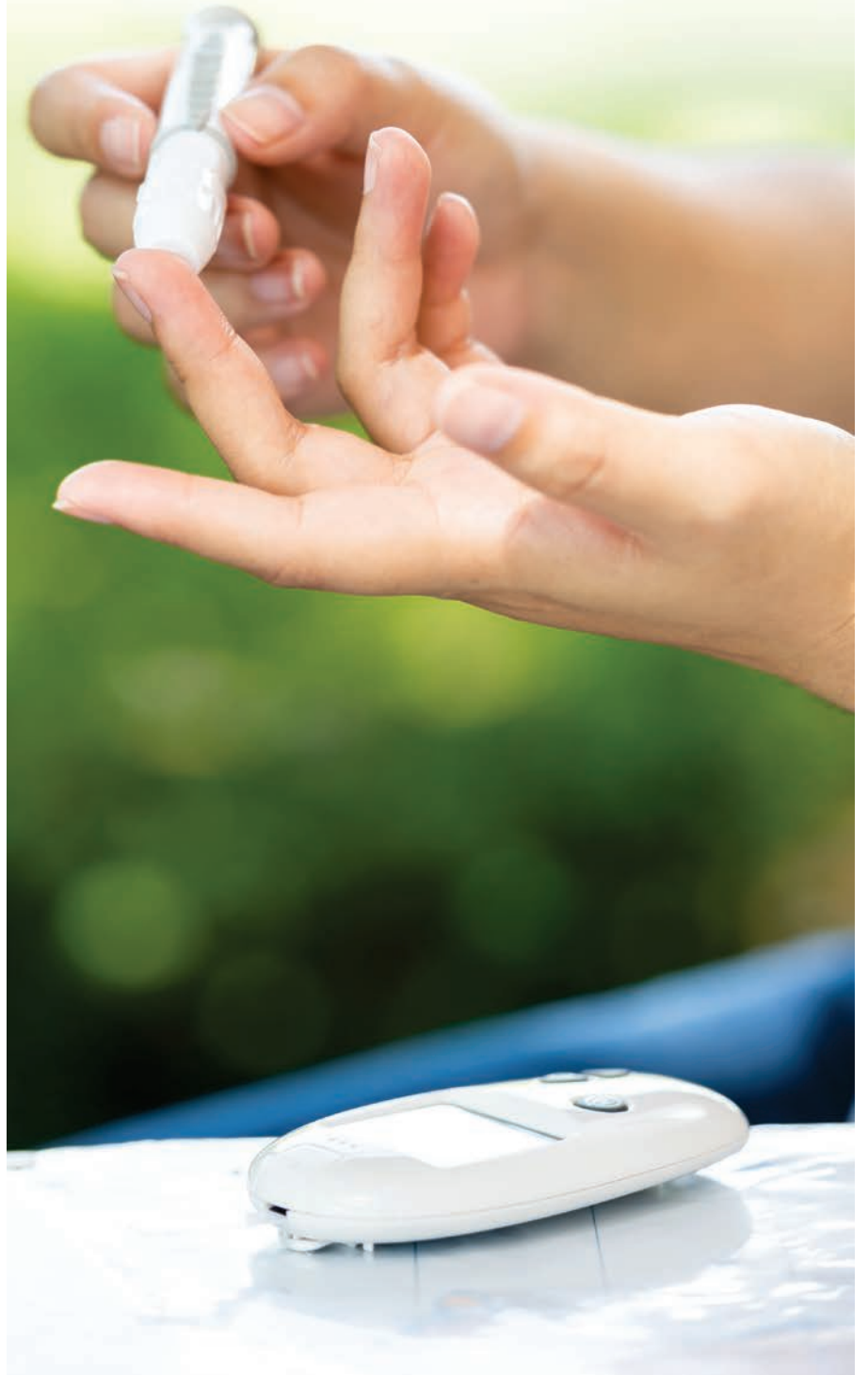
Mainly, there are three types of treatments available for Diabetes in Homeopathy. They are:

- ✦ Controlling the disease
- ✦ Disease recovery
- ✦ Disease prevention

Tests and Diagnosis

Commonly, there are four types of lab tests available to diagnose Diabetes. They are:

- ✦ Random Blood Sugar (RBS)
- ✦ Fasting Blood Sugar (FBS)
- ✦ Glycohemoglobin (HbA1c, A1c)
- ✦ C-Peptide





Dr. Suneef Haneefa
Doctor in Homeopathy
Muvattupuzha, Kerala, India

There are also other types of tests for Diabetes like Anti Insulin Antibody (AIA), Islet Cell Antibody (ICA) etc. Among these, C-Peptide test helps understand the function of the Pancreas gland.

In Type 1 Diabetes, it is very important to know about C-Peptide level. HbA1c test will help decide the type of treatment to be given to a patient. The test will help the doctor decide, whether to give medications to reduce the blood sugar level of a patient.

If Diabetes is caused by antibodies like AIA or ICA, the treatment options in Homeopathy will be the same as those are for autoimmune diseases. As the treatment for Diabetes is completely based on 'treatment protocols' in Homeopathy, credible lab results of patients are inevitable.



Controlling the Disease

The measures for controlling the disease are determined based on the severity and depth of the condition. Medications are prescribed only after completely understanding and analyzing the various issues caused by the disease, along with mental and physical health of the patient, through a procedure called Repertorisation.

Diabetes is a symptomatic disease. So, in certain cases Homeopathic Doctors will suggest special treatment, for a short period, to reduce the symptoms of Diabetes. Patients should never quit taking medications, as soon as the symptoms subside. It is at this juncture, patients should switch over to curative treatment.

Disease Recovery


As per the basic principles of Homeopathy, a complete recovery from diseases like Diabetes will be possible only through anti-miasmatic treatments, considering the disease-causing miasma. A complete recovery from the disease will be assessed, based on the functions of the Pancreas gland.

The treatment will yield good results, within a short span of time, in patients with early stages of Diabetes and even in later stages, if there is enough C-Peptide to bring back their metabolism.

Preventive Measures

In Homeopathy, preventive treatment is not intended for all patients. Preventive treatment is usually provided to those patients who have a family history of Diabetes mellitus and those who lead a lifestyle that precipitates Diabetes.

Anti-miasmatic medications are prescribed only after analyzing the various elements like risk factors; the patient's mental, physical and health status; family medical history etc. for speedy recovery. Along with this treatment, the patient should give importance to proper exercise, nutritional foods and mental health.

Proper Homeopathic treatment coupled with a change in lifestyle can do wonders in reducing the incidence of Diabetes mellitus. People should check their C-Peptide to know whether the disease is curable. The patients with curable Diabetes should opt for Homeopathic treatment whereas those with incurable condition should opt for treatment in other systems of medicine. 



All About Impacted Wisdom Teeth

Wisdom Teeth are the third and final set of molars that most people get in their late teens or twenties. These teeth are a valuable asset to the mouth when they are healthy and properly aligned, but more often, they are misaligned and may require removal.

What is an Impacted Tooth?

An Impacted Tooth refers to the one that has failed to erupt or emerge into its expected position. Impacted Wisdom Teeth can be classified by the direction and depth of their impaction, the amount of space available for tooth eruption and the amount of soft tissue and / or bone that covers them.

Reasons for Impaction

- ↳ Lack of space in the jaw to accommodate the tooth.
- ↳ Eruption path of the tooth is obstructed by another tooth.
- ↳ If the angulations of the tooth are improper.

- ↳ High density of the overlying bone.

How do I know if I have Wisdom Teeth?

Ask your dentist about the position of your Wisdom Teeth. This can be identified by taking an X-ray of the tooth. After proper evaluation, the dentist may recommend your Wisdom Tooth to be extracted or not.

Signs and Symptoms of Impacted Teeth

- ↳ Red or swollen gums.
- ↳ Tender or bleeding gums.
- ↳ Jaw pain.
- ↳ Swelling around the jaws.
- ↳ Bad breath.
- ↳ Altered taste.
- ↳ Difficulty in opening the mouth.
- ↳ Root resorption of the adjacent tooth.
- ↳ Radiating pain to the ear.



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Complications associated with Wisdom Teeth

1) Damage to the adjacent tooth

If the Wisdom Tooth pushes against the second molar, it may damage the adjacent tooth.

2) Cysts

When the Wisdom Tooth is enclosed within a sac in the jaw bone, the fluid filled sac or cyst may damage the jaw bone.

3) Decay

Partially erupted teeth are at a high risk of developing decay, due to food lodgment between the gums and the tooth.



4) Gum Disease

Difficulty in cleaning partially erupted teeth may cause Pericoronitis, a painful inflammation of the gum.

Should all Wisdom Teeth be extracted?

Just like other teeth, Wisdom Teeth are a valuable part of a person's dentition. Therefore, the extraction of a Wisdom Tooth is not justifiable, if there is a possibility for its proper eruption.

How are Wisdom Teeth removed?

Your dentist will give you an idea of what to expect during your pre-extraction examination. The Wisdom Tooth that is underneath the gums or embedded in the jaw bone will require an incision in to the gum, before removing the portion of the bone that lies over the tooth. The tooth will be extracted in smaller portions rather than in one piece, to minimize the amount of bone removal. The Wisdom Tooth that is fully erupted through the gum can be extracted like any other tooth.

Postoperative Complications in the first 24 Hours

1) Bleeding can occur for several Hours after Extraction

This can be controlled by placing cotton gauze over the empty socket and firmly biting down for about 45 minutes. Avoid rinsing, spitting or sucking, as it may induce bleeding.

2) Facial Swelling


To minimize facial swelling, place an ice pack on the affected area of the face in '10 minutes on and 20 minutes off' rotations.

3) Pain

To control pain, take medications, as prescribed by your Dental surgeon.

Care after Surgical Removal of Wisdom Tooth

- ✦ Applying Ice Pack.
- ✦ Avoiding spitting or gargling.
- ✦ Restricting to a soft diet.
- ✦ Avoiding alcohol consumption and cigarette smoking.
- ✦ Avoiding brushing vigorously in the area of extraction, during the first 24 hours.
- ✦ Rinsing the mouth with warm salt water, after meals and before bedtime.

Since no two mouths are alike, the Wisdom Tooth of each person is unique. Instead of accepting well intended advice from those around you, discuss your problem only with your Dentist. 



MULTIPLE MYELOMA: A DEBILITATING CONDITION

Multiple Myeloma is the second most common blood cancer in adults after non-Hodgkin's lymphoma (NHL). It accounts for approximately 1% of all cancers and 15% of all hematological cancers. Myeloma is slightly more common in men than in women.

What is Multiple Myeloma?

Myeloma, also known as Multiple Myeloma, is a cancer that forms in a type of white blood cells called plasma cells. Plasma cells are an important part of human immune system and are normally found in the bone marrow. They produce immunoglobulin

molecules / antibodies which help fight infection.

Multiple Myeloma causes cancer cells to accumulate in the bone marrow, where they crowd out normal / healthy blood cells that help fight infections. Rather than producing beneficial antibodies, the cancer cells produce abnormal proteins that can cause complications.

Causes and Risk Factors

The underlying causes of Multiple Myeloma have not yet been fully established. What has been identified so far is that the disease begins with a change in the genetic material within the plasma cells.

Signs and Symptoms

Although some patients with Multiple Myeloma have no symptoms at all, the following are the most common symptoms of this disease.

1. Bone Problems

- ✧ Bone Pain
- ✧ Osteoporosis / weak bone
- ✧ Broken bones / fractures

2. Anemia

Anemia produces weakness, reduced ability to exercise, shortness of breath and dizziness.

3. Kidney Problems

Myeloma protein can damage the kidneys. As the kidneys start to fail, they lose the ability to get rid of excess salt, fluid and body wastes. This can lead to symptoms like:

- ✧ Weakness
- ✧ Shortness of breath
- ✧ Itching
- ✧ Swelling of the leg

4. Hypercalcemia / High Calcium Levels in Blood

The signs and symptoms of Hypercalcemia are:

- ✧ Polydipsia / Extreme thirst
- ✧ Frequent urination
- ✧ Dehydration
- ✧ Kidney problems / failure
- ✧ Severe constipation
- ✧ Abdominal pain
- ✧ Loss of appetite
- ✧ Weakness
- ✧ Drowsiness

5. Infections

Patients with Myeloma have a higher risk for infections. They are usually slow to respond to treatment.

6. Symptoms in the Nervous System

If Myeloma weakens the bones in the spine, the bones may collapse and press on the spinal nerves. This is called spinal cord compression and can cause sudden severe back pain, numbness and muscle weakness. This is a medical emergency, requiring urgent attention.



Mr. Mathew Varghese V.
Nursing Officer
All India Institute of
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Treatment

Myeloma is a highly treatable disease, but it is rarely curable. The aim of the treatment is to control the underlying causes of Myeloma, relieve symptoms to maximize the quality of life and prolong survival.

Diet for Patients with Multiple Myeloma

a. Iron-rich food

Anemia, a condition in which red blood cell count is less than normal, is a common complication in people with Multiple Myeloma. Low levels of iron in blood can also cause anemia.

Good sources of iron include green leafy vegetables, dried fruits, especially raisins, dried vegetables, bean sprouts, sweet potatoes, shell fish, broccoli, mango, papaya, pineapple and guava.

b. Kidney-friendly Diet

Depending on the function of the kidneys, you may need to adjust your diet to protect your kidneys. You may need to cut back on the intake of salt, alcohol, protein, potassium and water / fluids, if your kidneys are severely damaged.

If you suffer from kidney disease, ask your doctor / dietitian about making changes in your diet.

c. Neutropenic Diet

You have a higher risk for infection, while you are undergoing treatment for Multiple Myeloma. This is because your immune system is compromised by both cancer and chemotherapy treatment. Washing your hands often and staying away from people who are sick can help keep you from catching infections.

Reduce your risk for infection by avoiding raw foods. Undercooked meat and raw eggs can carry bacteria that may make you ill. When your immune system is weak, even fruits and veggies, which have not been peeled, can pose a risk to your health. It is advised to eat only cooked food.

d. High-fiber Diet


Since certain chemotherapy drugs can cause constipation, intake of fiber-rich foods and plenty of water are helpful.

Foods that are high in fiber are:

- ✧ Whole grains like oatmeal and brown rice
- ✧ Dried fruits, such as raisins, figs and apricots
- ✧ Apples, pears and oranges
- ✧ Berries
- ✧ Nuts and beans
- ✧ Broccoli and carrots



Conclusion

Multiple Myeloma is a challenging disease for anyone. A healthy diet can help you keep healthy for long. Your body needs nutritious fuel to make you stay strong, even when you have complications, such as anemia or kidney disease. 

Say "NO" to Drugs..Value your LIFE!! Anti-Drug Awareness class conducted by Mr. Rishiraj Singh IPS, Excise Commissioner, Government of Kerala @ DentCare



16th April 2018
@ DentCare Auditorium

SAY "NO" TO DRUGS..





making work easy



Wann fühlt sich arbeiten gut an?

making work easy



Suche

Produktfinder starten

Anwendungen >

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WORKFLOW GUARANTEE

3 year guarantee
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Activity guarantee

mehr dazu →

Faster, leaner and more user-friendly: Renfert has a convincing re-designed website

24/7 support just a click away!

More contents, more service and more clarity – this is how Renfert's graphically and textually revised website is presented. The new website from the traditional company based at Lake Constance has an impressive improved user interface in addition to the fresh design in the company colors of red and gray, as well as expanded functionality and a comprehensive range of services and information. Whether on a computer, smartphone or tablet: dental technicians, dentists and practice staff can now find more than 900 products for labs and practices including practical user tips even easier and quicker at the web address www.renfert.com, true to the company motto of "making work easy"!

Fresher, easier to navigate, more diverse and better structured: these were the requirements for Renfert's website relaunch. Thus the new website, which has recently gone online, not only makes searching for relevant information and current

services easier for users, it also has a more modern and contemporary navigation structure and search functionality – in terms of visual appearance, technical setup and content!

Searched for – and found: product finder and Solr search

Whoever has questions about products or procedures can easily find their bearings at www.renfert.com. The product finder facilitates the search for exactly the right equipment, instrument or material from the comprehensive product range by filtering according to relevant criteria, as people are used to from many websites in the end-customer sector. The search guarantees users convenient search options thanks to sorted search results (products, support pages, news, events and downloads). Once products or spare parts have been found, they can then be put on a shopping list. The overview of the selected goods including ordering details can also be downloaded as a PDF or emailed directly to the specialist dealer or even to colleagues as a recommendation.

Whether you are a user, dealer or new customer, the new product section offers all interested parties



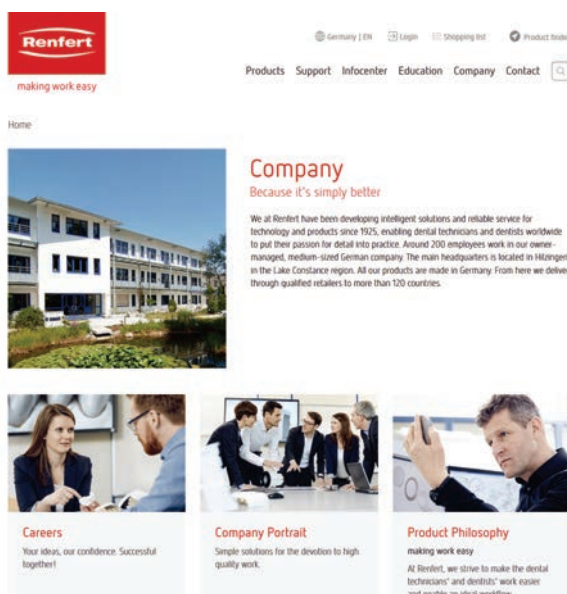
plenty of added value: in addition to the general product and ordering information with technical data and accessory lists there is also a comprehensive customer support area. Here you can find spare parts, watch service videos and

have your questions answered, as well as download or print out a variety of instruction manuals, conformity declarations and quick start guides – everything is available in one place.

Online added value: international, informative and interactive

Those who have a specific question or are looking for a particular Renfert contact person, have the option of immediately finding and getting in touch with the service partner responsible for their issue via a drop down menu in the contact section. As for those who don't want to just inform themselves online or share on Renfert's social media networks, but would prefer to learn directly from opinion leaders and international consultants, they can find the current course program for the recently opened training center at the company's headquarters in Hilzingen on Lake Constance in the new Education section.

All in all: the improved, 7-language information and service offerings make **www.renfert.com** one of the most indispensable websites for all those interested in high-quality dental products as well as user-friendly content, additional service functionality and sustainable solutions.



A FEW DENTCARE Products at a Glance

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, 3Shape, 3M ESPE from Germany, Switzerland, United States, and Europe are selected for manufacturing its extensive range of dental prostheses.

Over the past 30 years, we have dedicated ourselves in contributing to healthy, confident smiles for over 30 million patients and to the delight of more than 30 thousand dentists around the globe.

The range of services DentCare has to offer is unique and comprehensive; its product portfolio comprises individual Dental Crowns and Bridges, Implant restorations and Partial / Full denture prostheses. The company strongly believes that technology, hand in hand with art, fused with latest know-how, results in dental restorations with greater precision, aesthetics and functionality.

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, the DentCare Zirconia range of products assure natural feel and functionality, unmatched aesthetics and unlimited characterization made available through 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 are:

- DentCare Zirconia Platinum Plus
- DentCare Zirconia Platinum
- DentCare Zirconia Premium Plus
- DentCare Zirconia Premium Plus Full Contour
- DentCare Zirconia Premium
- DentCare Zirconia Premium Full Contour
- DentCare Zirconia BruxCare
- DentCare Zirconia Classic
- DentCare Zirconia Classic Full Contour
- DentCare Zirconia Superlucent
- DentCare Zirconia Basic
- DentCare Zirconia Basic Full Contour
- DentCare Zirconia Translucent
- DentCare Zirconia Monolithic

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 ensures that the natural tooth shade comes right from the internal framework level, unlike PFM or other normal Zirconia systems with opaque frames
- ↻ Designing and manufacturing using CAD / CAM assures outstanding marginal fit

DentCare Anti Snoring Device

DentCare Anti Snoring Device consists of one splint for the upper jaw and another for the lower. The lower jaw is either held in a predetermined position or advanced by two connectors which are fixed laterally to the splint. DentCare Anti Snoring Device thus counteracts the narrowing of the respiratory tracts. The velocity of the inspired air decreases and so does the noise-generating vibrations of soft tissues. With DentCare Anti Snoring Device, jaw movements are possible and there is no falling back of the lower jaw. With this function, DentCare Anti Snoring Device is a comfortable and at the same time effective snore guard.

With the DentCare Anti Snoring Device, the lower jaw and the tongue are held in a protrusive



(forward) position which opens up the airways, stopping the snoring sounds when asleep.

DentCare Mouth Guard Triple




DentCare proudly introduces the ultimate mouth guard, DentCare Mouth Guard Triple, which makes possible the philosophy for a safe play in high impact sports or may be for a pickup game in the backyard, whether it is for an amateur or professional athlete.

DentCare Mouth Guard Triple is a triple layer laminated professional sports mouth guard available in 26 different colours, which is soft on the inside and outside while hard in between. It shows the DentCare Mouth Guard Triple logo and upon request, can also bear the name of the athlete.

Conclusion

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

World-class products are the outcome of our passion in improving dental care. And this keeps us at the forefront of innovation. Our dental prostheses experts are passionate about exploring new ways to address challenges in enhancing the smile. All the materials we use in production have proven scientific quality and excellence, at par with international standards and lives up to the expectations of our customers. This has given us reason to brighten the smiles of more than 30 million patients, world over. 

Smile confidently, go for DentCare prostheses

TRAUMA RESCUE INITIATIVE

During an emergency, the ultimate aim is to provide right treatment to the patient / victim, at the right time or what is known as the “Platinum minutes”. However, most of the time, lag in providing treatment mainly occurs due to the delay in transferring the patient from the location to the hospital.

ANSWER (Ambulance Networking System With Emergency Response) has been implemented as Trauma Rescue Initiative (TRI) in Thiruvananthapuram, Kerala, India, with the motto “**Nobody should be on the road without treatment**”.

Hitherto, if an emergency arises, a call is immediately made to the police personnel who, in turn, make multiple calls to different

Network Centers, which finally helps identify a suitable ambulance for transferring the patient to the nearest hospital.

TRI is comprehensive software consisting of three encrypted apps. For the 'common man', it consists of ambulances and hospitals, for the 'Network Center', it is a single web portal that assists quick and efficient patient transfer and for 'hospitals', it provides a common platform where all hospitals can update the availability of different facilities like beds, Intensive Care Unit (ICU) beds, Ventilators etc., every 6 hours.

The ANSWER app for the common man enables the patient or bystander to make a call for the ambulance. This app will trace out

ANSWER (Ambulance Networking System With Emergency Response) has been implemented as Trauma Rescue Initiative (TRI) in Thiruvananthapuram, Kerala, India, with the motto "Nobody should be on the road without treatment"





Dr. Danish Salim
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by itself the current location of the call and forward the same to the Network Center.

Besides, the app for the common man permits an individual to make emergency distress alerts, as and when required. Besides, it allows storing of important health data of a person, including his blood group, existing diseases, medications, etc.

Therefore, when a distress call is made in the app, an option will pop up asking, if this emergency alert is made for the caller or another person. If it is meant for the caller, then the feature allows all the necessary medical data of the person to be forwarded to the Network Center for taking necessary arrangements. If it is meant for another person, then it will share only the location.

The Network Center will

have a web portal that shows all the ambulances within the city, along with their availability status and the location of hospitals nearest to that of the patient.

The ambulances are also registered on 'ANSWER app for ambulances'. This app will automatically open with an alert when the Network Center asks for acceptance of a transfer. If the request is accepted, the driver of the ambulance will be given the routes to the patient and also from there to the nearest hospital. This facility will help avoid all communication delays.

In case, a patient wants to be taken to a specific hospital, his wish will be respected and the ambulance driver can manually change the hospital in the app and the same will be updated on the Network.



Classification of Ambulances and Hospitals

⇒ Hospitals are classified into:

- a. Tier 1
- b. Tier 2
- c. Tier 3


The classifications have been made according to the availability of Specialties and treatment facilities, such as Intensive Care Units (ICUs), Ventilators, etc. The hospitals that come under Tier 3 category are the highest tertiary care centers and shall be allocated to those patients requiring maximum care.

⇒ Ambulances are classified into:

- a. Basic
- b. Advanced

The classifications have been made based on the availability of equipment and paramedics.

The Network Center assesses the type of care needed to each patient based on the answers to a simple set of questions made available by the caller.

This project, launched as “TRAUMA RESCUE INITIATIVE” by Indian Medical Association (IMA) Thiruvananthapuram and accredited by Government of Kerala, has been implemented in the district of Thiruvananthapuram, Kerala, India, with the help of the Police Department and R. K. Foundation, United States of America. 

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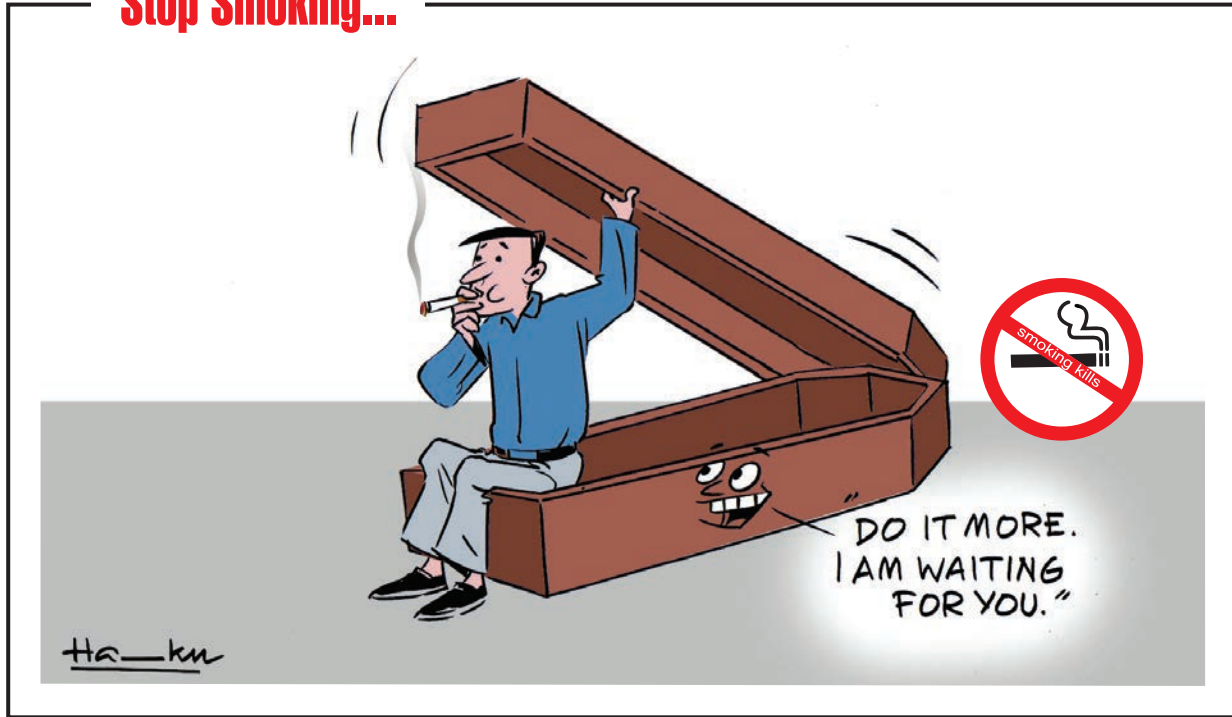


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A New Toothbrush with An Auto - tilting Head



Mr. R. Prakash Urs, an innovator and engineer from Bengaluru (Karnataka, India) has come up with a new Toothbrush - “**Dynamic Manual Toothbrush**” - with an auto -tilting head which converts the horizontal movement of the hand into an angular one, ensuring that the brush bristles reach into the space between teeth. The bristle tips have a small circular motion which enables the bristles to enter every nook and corner and clean interdental places much better than other types of Toothbrushes.

According to him, 'Sideways brushing' can scrape off the enamel and hurt gums. The 'auto-tilting head' helps reduce the pressure on the tooth as well as ensures that the bristles reach where they are supposed to, with no extra effort by the user.

With an Indian patent, Urs plans to sell the Toothbrush for less than Rs.100/- (Rupees hundred) per piece. The brush comes with 'three detachable heads' which increase the longevity of the product. Perhaps, the best brush is yet to come, but this is a good way of ensuring that everyone gets to a healthy brushing routine and habit.

The Toothbrush is both user - and eco-friendly. The brush head can be replaced when the bristles get worn out. The same handle can be used with a new bristle head. This gives the Toothbrush much longer life than a regular one




The Toothbrush is both user- and eco-friendly. The brush head can be replaced when the bristles get worn out. The same handle can be used with a new bristle head. This gives the Toothbrush much longer life than a regular one.

It took more than two years to finalize the superior design and make the Toothbrush commercially viable. This design helps reduce at least 30% of applied force on the

tooth and this in turn, helps save the enamel.

Though the head has got a dynamic motion, it does not require battery or electric power for its motion.


A minor limitation of the new design is the size of the Toothbrush, which is a little (2 millimeters) bigger than other types of Toothbrushes, but it is only as big as an electric Toothbrush. 

A Robot that Devours Insects and Rodents

Insects, pests and rodents are often either disease-carrying agents

or a wrecker of crops. Modern devices for the elimination of these pestering creatures are robotic vacuum sweepers, singing androids and mechanical dogs. But soon, they will become outmoded.

British inventors, Jimmy Loizeau and James Auger, have invented a robot, '**Carnivorous Domestic Entertainment Robot**' that would stalk and devour rodents (mice) and insects, and then digest them to produce their own power.

The device is still in the 'conceptual phase'. It is expected that very soon this robot will become a reality. 



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DentCare in My Experience




I have had a long-standing association with DentCare, which kick-started ever since my inception into practice and it has been maintained so dearly all these years.

The lab is noted for their greatest infrastructure facilities with myriads of sophisticated machines. They keep striving for innovations and futuristic technologies and introduce the same as soon they come in vogue.

The lab technicians and supporting staff are really committed to their work. A complete professional attitude, due consideration of doctors' lab instructions, superb quality of work and prompt services are some of the attributes that make the lab unique.

The determined effort of a person like Mr. John Kuriakose should be applauded for launching such an institution which has outgrown as a world-class lab.

I thank the Almighty for having given such a lab that caters to the ever-changing needs of the dentists and patients alike. 



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