DENTAL TRIBUNE

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Heartburn drugs Prilosec, Nexium block benefits of blood thinner Plavix warns FDA

USA —A popular variety of heartburn medications can interfere with the blood thinner Plavix, a drug taken by millions of Americans to reduce risks of heart attack and stroke, Federal health officials said

The Food and Drug Administration said the stomach-soothing drugs Prilosec and Nexium cut in half the blood-thinning effect of Plavix, known generically as clopidogrel.

Regulators said the key ingredient in the heartburn medications blocks an enzyme the body needs to break down Plavix, muting the drug's full effect. Procter & Gamble's Prilosec OTC is available over-the-counter, while AstraZeneca's Nexium is only available with a prescription.

"Patients at risk for heart attacks or strokes who use clopidogrel to prevent blood clots will not get the full effect of this medicine," the agency said in a statement.

Plavix is marketed by Sanofi-Aventis and Bristol-Myers Squibb. With global sales of $8.6 billion last year, it's the world's second-best selling drug behind Pfizer's cholesterol drug Lipitor.

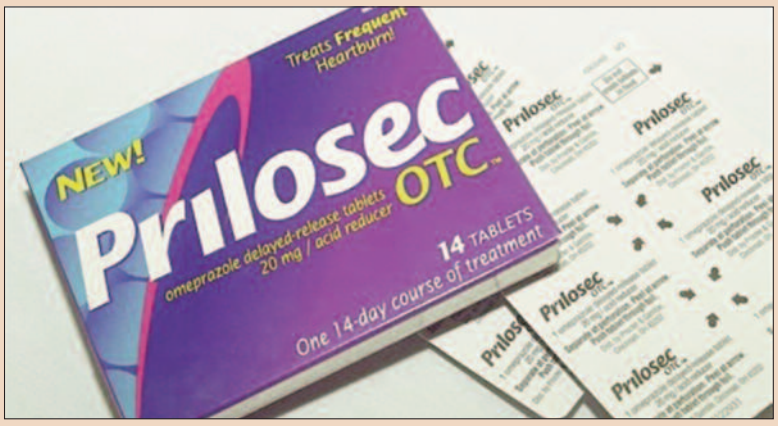
Because Plavix can upset the stomach, it is often prescribed with stomach acid-blocking drugs.

The FDA says patients who need to reduce their acid should take drugs from the H-2 blocker family, which includes Johnson & Johnson's Mylanta and Boehringer Ingelheim's Zantac. FDA scientists say there is no evidence those drugs interfere with Plavix's anti-blood clotting action.

Nexium and Prilosec are part of a class of drugs known as proton pump inhibitors, but FDA regulators said they don't have enough information to say whether other drugs in that class shouldn't be used with Plavix.

The FDA said the warnings on Plavix have been strengthened based on a 150-patient study submitted by Sanofi over the summer.

But some consumer advocates said the agency's action fell short, arguing that regulators should have placed the information in a "black box" warning label, the most serious available.



"This information still has not risen to as prominent a level of warning as it should have," said Dr. Sidney Wolfe, director of health research at the consumer advocacy group Public Citizen.

Information about the drug interaction between Plavix and other medications is not new. Researchers at pharmacy benefit manager Medco Health Solutions reported last year that taking Plavix with Nexium significantly increased patients' chances of being hospitalized for a heart attack, stroke or chest pain.

WBB Securities analyst Steven Brozak said the news would put pressure on Paris-based Sanofi and New York-based Bristol-Myers to provide more safety data on their best-selling product.

"This is going to create a chain reaction as patients start calling their physicians, and they are forced to make a spot decision on limited information," said Brozak. "That's not gonna help either company's bottom line." DT

Medical tourism slows down, but could recover

While the economic recession has eroded the growth rate for medical and dental tourism by approximately 13.6 per cent from 2007 to 2009, the economic recovery may help spur a sustainable 35 per cent annual growth rate for the medical tourism industry by 2010, according to a new report released by the Deloitte Center for Health Solutions in the US.

Medical tourism has experienced a significant slow down driven by consumers putting off elective medical procedures over the past two years. However, a better economy and health care reform in the US will likely propel growth in the elective outpatient market, particularly if elective cosmetic and dental procedures are not considered basic benefits, the report states. In 2009, a projected number of 648,000 Americans will travel abroad for outbound medical and dental care. DT

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Winners for Aesthetic Dentistry MENA Awards 2009 Announced!

The judging and evaluation process of the first edition of the awards was completed and the much anticipated results were announced on November 05th, at the prestigious Jumeirah Beach Hotel, where winners, nominees and judges from Middle East were gather with the elite of the aesthetic dentistry to pay tribute to the most outstanding achievements in dental treatment.

Members of the jury panel faced a tough evaluation process due to the large number of quality cases submitted but finally came to a conclusion. The event showcased 29 short listed dental professionals from 88 entries, from 14 countries across the MENA Region. All winning Doctors attended the Gala Dinner Ceremony at Jumeirah Beach Hotel. The trophies were presented by Emirates Medical Association – Dental Society, Ministry of Health and CAPP – Centre for Advanced Professional Practices.

The winners were awarded with special selection of professional equipment with the generosity of Sirona, Nikon, Al Mazroui, Nobel Medical, Al Hayat, Glaxo Smith Kline, Dentoflex and Canon. We would like to thank all participants who entered the awards for their hard work and dedication to the Dental Industry.

MENA "Aesthetic Dentistry" Awards 2009 is the biggest, one of the most remarkable dental assembly in the region which marks the dental calendars and puts the regional dental achievements on the World Dental Professional map.

We would like to invite all dental professionals to join the 2nd Edition of the Aesthetic Dentistry MENA Awards 2010. Presented by CAPP Centre of Advanced Professional Practiced and EMA Dental Society. DT

Conservative Best Case
1st Place Lamberto Villani, Oral Design Laboratory, Dubai
2nd Place Dr. Michael Ziegler, American Dental Clinic Dubai
3rd Place Dr. Michael Ziegler, American Dental Clinic Dubai
Orthodontic Best Case
1st Place Dr. Edgard Irany, Al Zahra Private Hospital, Sharjah
2nd Place Dr. Mazen Hamadi, Ghoudousi Medical Centre, Dubai
3rd Place Dr. Vishwanath Kedilaya, NMC Specialty Hospital, Dubai
Prosthodontic Best Case
1st Place Dr. Ajay Juneja The Dental Studio, Dubai
2nd Place Prof. Jean-Marie Megarbane, Lebanon
3rd Place Dan Stenkilsson, Middle East Dental Laboratory
Charity Best Case
1st Place Dr. Dushan Motwani Al Musalla Medical Centre
2nd Place Dr. Muhammad Zaman Sherani, Munir Shaheed Dental Clinic
3rd Place Winner Dr. Sanaz Soheilifar, Hamdan, Iran
Implantology & Red Aesthetic Best Case
1st Place Dr. Angela Husung, German Dental Clinic Dubai
2nd Place Dr. David Rose, Drs. Nicholas & Asp, Dubai
3rd Place Prof. Jean-Marie Megarbane, Lebanon
Facial Reconstruction Best Case
1st Place Dr. Ali Jamil, Iraqi Dental Association
2nd Place Dr. Joseph Kamal Muhammad, Rabha Hospital
3rd Place Dr. Vishalakshmi Sunethra, Rashidiya Private Polyclinic

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Does your patient suffer from dry mouth?

What is dry mouth?

We can all suffer from dry mouth at some point, for example, if we are nervous or stressed. So most of us are familiar with the feeling of not having enough saliva in our mouth to keep it moist and lubricated.

For some people, however, dry mouth can be a regular problem. As we get older we are more likely to experience dry mouth, but it's also a problem that can affect people from their 30s onwards.

What causes dry mouth?

Dry mouth occurs when the salivary glands stop working effectively. Medicines are known to cause over 60% of dry mouth cases, with more than 400 different medications linked to dry mouth. The number of medicines a patient takes is also directly related to the likelihood of experiencing dry mouth. Health conditions are also linked to dry mouth, such as diabetes or Sjögren's syndrome. People who smoke, who are pregnant, stressed, anxious or dehydrated are also more likely to have dry mouth.

What are the symptoms?

The symptoms of dry mouth can include:

- difficulty in eating, especially with dry foods,

such as cereals or crackers

- difficulty in swallowing and speaking
- a burning sensation in the mouth
- taste disturbances
- painful tongue
- dry, cracked, painful lips
- bad breath
- persistent difficulty in wearing dentures
- feeling thirsty, especially at night
- dry, rough tongue.

Sometimes the amount of saliva a person produces may be reduced by up to 50% before these symptoms are noticed. These symptoms can sometimes have a profound effect on self confidence. Does dry mouth cause other problems? Saliva plays a very important protective role in the body. It not only keeps our mouth moist, it also helps to protect our teeth from decay, helps to prevent infections and helps to heal sores in the mouth.

Are your patients dry mouth sufferers?

- Do they have difficulty swallowing certain foods?
- Does their mouth feel dry when eating a meal?
- Do they need to sip liquids to help you swallow dry foods?
- Are they taking multiple medicines?

If a patient answered yes to any of these, he/she may have dry Products to ease dry mouth

The Biotène system is specifically designed to treat dry mouth. The different products in the Biotène system allow you to choose the ones that best meet your lifestyle and dry mouth needs:

1 product specifically designed to help relieve your dry mouth: the gel provides long lasting relief

2 products to help maintain healthy teeth and prevent tooth decay in people with dry mouth: a toothpaste, with fluoride, and mouthwash which can be used twice a day in place of the usual products. These are designed to be gentle on your mouth as they are alcohol-free and don't contain harsh detergents. Biotène supplements the make-up of normal saliva to replenish dry mouths. It has a patented enzyme formulation that:

- helps supplement saliva's natural defences
- helps maintain the oral environment to provide protection against dry mouth
- helps supplement saliva's natural antibacterial system - weakened in a dry mouth. Biotène's gentle formulation is also free from alcohol and harsh detergents.

What else can a patient do to manage dry mouth?

- Sip water or sugar-free drinks often
- Avoid drinks which dry out the mouth, such as caffeine-containing drinks (coffee, tea, some fizzy drinks) and alcohol
- Chew sugar-free gums or sweets to stimulate saliva flow
- Avoid tobacco as this has a drying effect
- Use a humidifier at night to keep the air full of moisture.

To help keep healthy teeth and avoid tooth decay:

- Brush teeth with a soft toothbrush after meals and at bedtime
- Floss teeth gently every day. If there is bleeding from gums when flossing, this could be a sign of gum disease.
- Use an SLS-free, fluoride toothpaste, like Biotène, with its gentle formulation
- Avoid alcohol-containing mouthwashes as these can dry out the mouth
- Avoid sweet, sugary foods
- Visit the dentist at least twice a year for a check-up. DT

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Do you suffer from dry mouth?

Try the biotène® range

A complete dry mouth treatment

Visit www.biotene.com to learn more about dry mouth.

biotène® leaders in dry mouth treatment

gsk GlaxoSmithKline Consumer Healthcare

Dubai International Implantology Summit concludes with overwhelming Success

Dubai, United Arab Emirates, Dubai International Implant Summit has successfully concluded last Thursday. High end profile attendees, specialized in Implantology have strongly praised the high level of the first DIIS edition in terms of participation and organization.

"We are proud to achieve this success during the first edition of Dubai International Implant Summit, we are very pleased with the highly positive response from all attendees to the high level sessions in terms of attracting an elite of the most prominent experts in implantology in addition to presenting the latest techniques and treatments and the opportunity of exchanging knowledge and experiences related to this field. This achievement encourages us to continue putting all the efforts to develop the medical sector in UAE and the region" said Anas Al Madani, Vice President, Index Holding.

Latest international advanced technologies related to implantology have been presented and discussed at Dubai International Implant Summit. Sessions continued for three days highlighted the current major issues related to and implantology and ways of development. .

"The summit sessions are of a very high level in terms of participation as well as organization. And we had highly benefited from the opportunity of exchanging knowledge and experiences in major implantology issues from different countries around the world" said Dr. Khaled Sadek, who was among the summit attendees. DT

"Industry Specialists Praise High Participation and Organization Levels"

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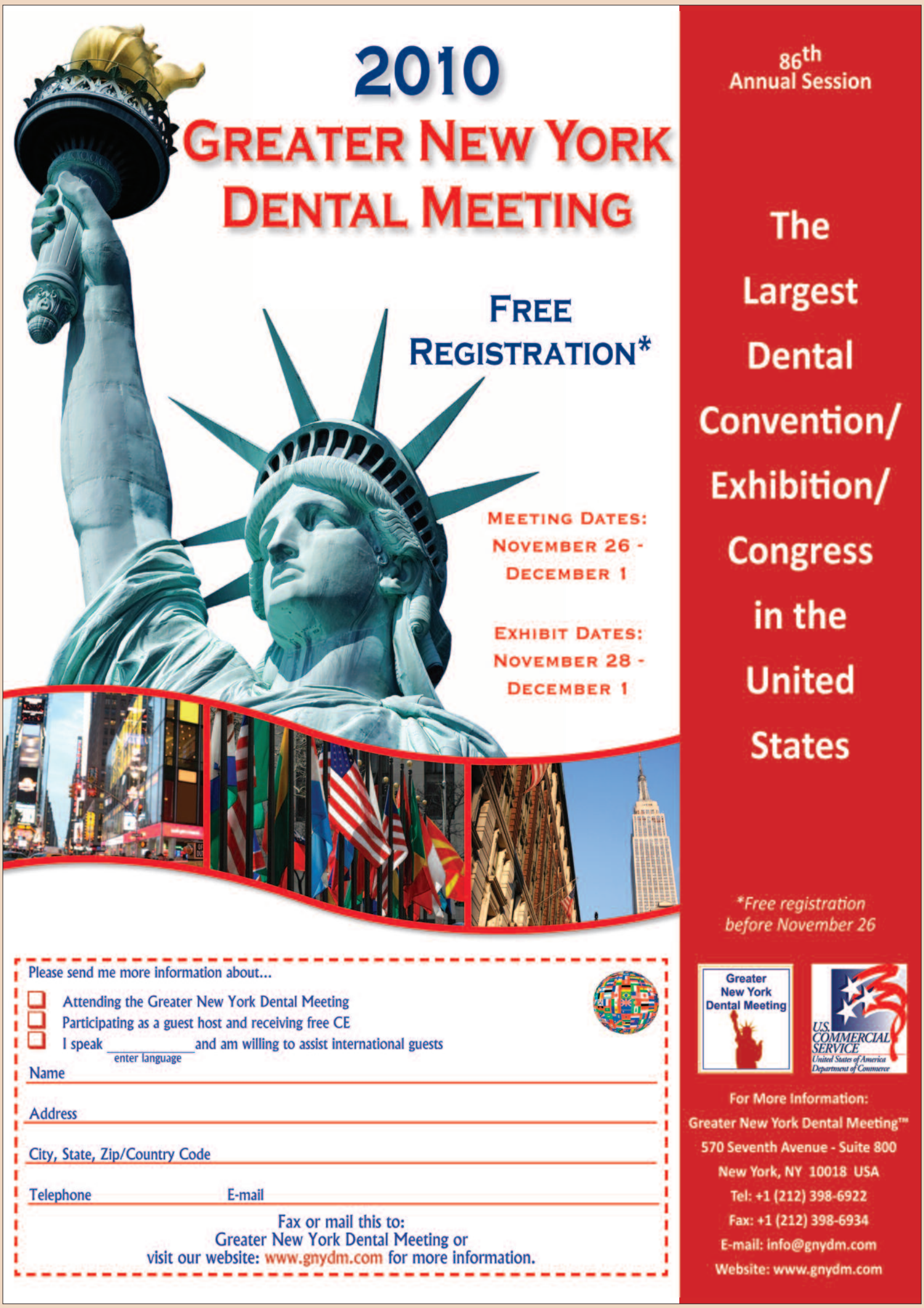


Alkalines can damage teeth too

A new study from the Sahlgrenska Academy in Sweden has revealed that substances with high pH values damage enamel, a condition usually associated with acid erosion. The researchers exposed extracted teeth to a number of alkaline substances such as household degreasers and found that organic material on the surface of the tooth dissolves rapidly indicating that the organic components of the enamel are also affected, as the enamel becomes more porous.

Alkaline degreasers are mainly used in the food industry, among other things to clean professional kitchens, but are also common in the automobile care industry and to remove paint from walls and other surfaces. DT

It is with great pleasure that Medicals International W.L.L. introduces to you our new Astra Tech Dental Implants.

The launching of Astra Tech Implants in UAE comes as a second step to the Pre-Launching seminar that was held at the Crowne Plaza Hotel, Sheikh Zayed Road, Dubai, on 13th and 14th of June 2009. During those 2 days, 4 well renowned speakers presented their latest clinical and experimental researches (Prof. Stig Hansson (one of the engineers of the Astra Tech of implant system), Dr. John Sorensen from USA, Dr. Tarek Bourzek and Dr. Hadi AL Saffar from Kuwait). Around 25 dentists from all over UAE had the opportunity to participate in this major event.

The theme tackled the issue of "Immediate Concept" in implantology in a demanding and fast moving environment. The seminar focused on developing implant esthetics utilizing Immediate Concepts, Minimal Invasive Protocols, Tissue Management, Restorative Techniques, Design and Material Selection.

Medicals International who hosted the event with the collaboration of Astra Tech Dental, is a regional organization servicing 12 countries in the Middle East, Arabian Gulf and North Africa. It was established in 1994 in Lebanon, and it supplies now 4 different businesses in the medical industry (Contact Lenses, Optical, Ophthalmology and Dental).

We have been in the United Arab Emirates market for over 10 years now. We have a very successful and well-experienced team bringing us to the top as Market Leaders in different segments and fields. We are situated in 48 Al Diyafa Street, in Dubai. Our phone numbers are 04 3460998 while the fax number is 04 3460986.

Our transparent "Business with Ethics" style of work helps us establishing greater visibility between final user and supplier through our entity thus ensuring smoother communication and on all levels, product, clinical support and service.

Our Mission Statement "We Think of the Patient First", describes exactly what Medicals International is all about. We believe that a better clinical outcome is the end result of a true team work effort combining good understanding of the product in question along with proper training for the professional who will end up prescribing or using this important tool. From this angle, we work hard and around the clock in search for better alternatives, get trained on how to present and service them better to ensure that the final outcome is optimized. DT

AD

Astra Tech Dental Implants

Now in UAE !

ASTRATECH DENTAL

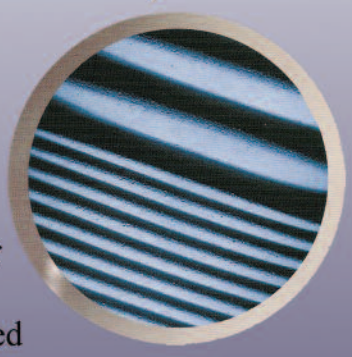
www.medicalsintl.com

Astra-Tech is a company in the AstraZeneca Group, one of the world's leading pharmaceutical companies.

Astra Tech is divided into four business areas, where Astra Tech Dental is the fastest growing. Astra's focus is clear: advanced research and development in the field of implant dentistry.

Astra Tech Dental has designed and developed a dental implant system based on years of scientific research and clinical documentations, which end resulted in a unique system with perfect balance of Simplicity, Reliability, and Esthetics. This system has proven, through long-term working relationships with dental professionals, that it does improve the quality of life.

The main advantages of using Astra Dental Implant System are many:



Microthread

Uniquely designed to optimize load transfer from the implant to the surrounding bone, the Microthreads on the implant neck lower the stress peaks in the marginal cortical bone. Through this, the marginal bone is successfully preserved. This provides an increased durability and stability of the implant plus the esthetic and functional results are predictable and reliable

Conical Seal Design

The conical relation between fixture and abutment is the backbone of Astra Implant, which provides a tight seal between the two components. Thus, the risk of micro movements and micro-leakages between the components are minimized. The self-guiding nature of the CSD simplifies handling and ensures easy and precise seating of the components.

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The first in the world with a chemically modified titanium surface that stimulates early bone healing and speeds up the bone healing process. The result of the micro-roughened titanium surface treated with fluoride is increased bone formation and stronger bone-to-implant bonding.

Connective Contour

The Connective Contour is the unique contour that is created when you connect the abutment to the implant. This contour allows for an increased connective soft tissue zone both in height and volume, which integrates with the transmucosal part of the implant, sealing off and protecting the marginal bone.

Patients in danger of zinc overdose

The US Consumer Healthcare Products Association has recently issued a national alert against the use of denture creams containing zinc. According to the organisation, exposure to excess zinc through those creams can lead to unexplained weakness, loss of sensation or other nerve symptoms. DT

China rivals US in research race

A new report by Thomson Reuters has found that Chinese researchers have more than doubled their output of scientific papers in recent years and now rank second after the United States in terms of volume. In 2008, China published 112,000 papers compared to 340,000 in the US. DT

Smile Design Wheel™: A practical approach to smile design

The article has been accredited by Health Authority - Abu Dhabi as having educational content and is acceptable for up to 2 (Category 1) credit hours. Credit may be claimed for one year from the date of subscription.

Dr Sushil Koirala
Nepal

Modern trends in cosmetic dentistry and media coverage of smile makeovers have increased public awareness of dental aesthetics. People now know that smile aesthetics plays a key role in their sense of well-being, social acceptance, success at work and in relationships, and self-confidence. The aesthetic expectations and demands of dental patients have increased substantially. Now, a glowing, healthy and vibrant smile is no longer available only to millionaires and movie stars. Therefore, many dentists are incorporating various smile design protocols in their daily practices to meet the increasing aesthetic demands of their patients.

Smile aesthetics

A smile is a facial expression that is closely related to the emotions and psychological state of a person. A smile is exhibited when a person expresses happiness, pleasure or amusement.1 It is the most important of facial expressions and is essential in expressing friendliness, agreement and appreciation.2 A smile requires the coordination of facial, gingival and dental components that are stimulated voluntarily or involuntarily by various emotions. It is evident that each smile is different and particular to each individual.3 An impaired smile on the other hand, has been associated with higher incidences of depression.4

Aesthetics deals with objective and subjective beauty.5 Objective beauty is based on the appreciable properties possessed by the object itself. However, subjective beauty is relative to the perception and emotion of the observing person. Perception, however, in smile aesthetics is based on personal beliefs, cultural influences, aesthetic trends and fashion, and input from the media. Hence, smile aesthetics is a multifactorial issue, which needs to be adequately addressed for any aesthetic treatment. The objective beauty of a smile can be established with the application of various principles of smile design, and the creation of subjective beauty may enhance cosmetic value.5,6

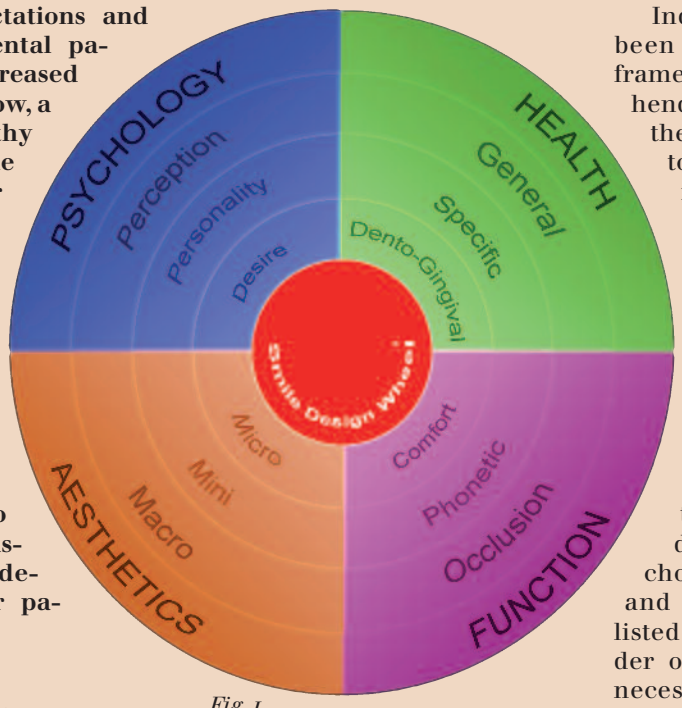

Fig. 1

Smile design

Smile design has been defined in various ways in the literature; I would like to summarise it as follows: "Smile design is a systematic process governed by the psychology, health, function and rules of natural aesthetics to bring about some changes in soft- and hard-oral tissue within anatomical, physiological and psychological limitations, thereby creating a positive influence on the overall aesthetics of a person's face and personality as a whole".7

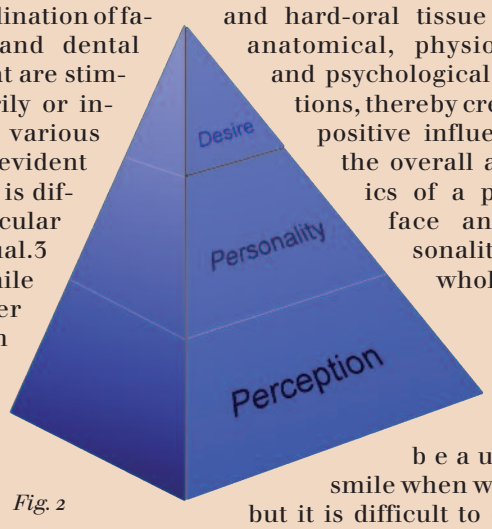

Fig. 2

We all appreciate a beautiful smile when we see it, but it is difficult to explain exactly what makes a smile beautiful. It is evident that a pleasing smile depends on the following features: the quality of the dental and gingival components, their conformity to the rules of structural beauty, the relationship between teeth and lips, and their harmonious integration with the facial components.8 Overall facial beauty and smile aesthetics are normally judged by psychological aspects—perception, personality, desire—the state of health, the mathematical ratio of the facial, dento-facial and dento-gingival components. The psychological aspects are highly subjective and fluctuate constantly because of identity, peer and media pressure. Hence, the only objective method of aesthetic analysis is mathematical.

Indeed, mathematics has been considered the only frame of reference for comprehending nature.8 Therefore, the cosmetic dentist needs to be familiar with various mathematical and geometric concepts for achieving smile aesthetics and their clinical protocols.

The Smile Design Wheel

For any smile design procedure, the clinician needs to consider the elements of the smile design pyramids—psychology, health, function and aesthetics (PHFA), listed here according to order of importance.7 It is necessary to determine the patient's psychological status, establish a healthy oral environment, restore function and then give attention to enhancing the aesthetic aspect. All four pyramids should be accorded equal importance to achieve a desirable clinical result.

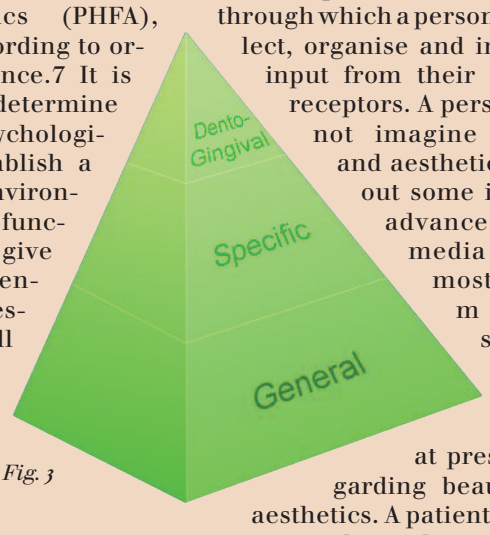

Fig. 3

By integrating these PHFA pyramids, I developed the Smile Design Wheel (Fig. 1), in which each pyramid is subdivided into three related zones. The Smile Design Wheel was devised as a simple guide to the most important components of smile design, their clinical significance and sequence to be maintained during the smile design procedure. I believe that the Smile Design Wheel will help clinicians to easily comprehend the 'complex' smile design procedures of aesthetic dentistry. In the next section, I briefly explain the Smile Design Wheel protocols with PHFH pyramids assessment and their basic objectives.

Step I: Understand— The pyramid of psychology

According to Prof. Robert A. Baron, psychology is best defined as the science of behaviour and cognitive processes. Behaviour deals with any action or reaction of a living organism that can be observed or measured. Cognitive processes deal with every aspect of our mental life: our thoughts, memories, mental images, reasoning, decision-making, and so on, in short, with all aspects of the human mind.

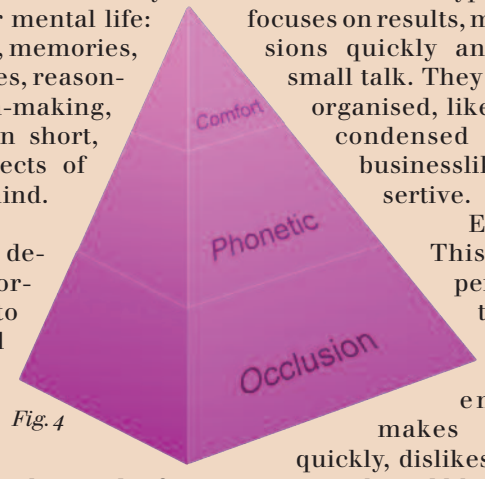

Fig. 4

In smile design, we normally try to understand the second part of psychology, i.e. the human mind or rather the minds of our patients. There are three fundamental zones we consider in detail for the psychological pyramid assessment: perception, personality and desire.

Perception

Perception is the process through which a person can select, organise and interpret input from their sensory receptors. A person cannot imagine beauty and aesthetics without some input in advance. The media is the most common source of information at present regarding beauty and aesthetics. A patient usually conceives his or her own perception of smile aesthetics based on his or her own personal beliefs, cultural influences, aesthetic trends within society and information from the media.

Dentists need to communicate with their patients to determine such information during the initial consultation, which helps in understanding the patient's perception of the treatment result. The use of questionnaires, visual aids, such as previous clinical cases or smiles of various celebrities, can aid immensely in this process.

Personality

According to the human psychology, personality is an individual's unique and relatively stable pattern of behaviour, thoughts and emotions. It is to be noted that each patient's problem or concern should be comprehensively evaluated with respect to his or her personality type. According to Roger P. Levin,9 there are four personality types:

Driven: This type of person focuses on results, makes decisions quickly and dislikes small talk. They are highly organised, like details in condensed form, are businesslike and assertive.

Expressive: This type of person wants to feel good, is highly emotional, makes decisions quickly, dislikes details or paperwork, and likes to have a good time.

Amiable: People with this personality type are attracted by people with similar interests, fear consequences, are slow in decision-making, react poorly to pressure, are emotional and slow to change.

Analytical: This type of person requires endless details and information, has an inquiring mind, is highly exacting and emotional. This type is the most difficult to convince and takes the longest to reach a decision.

Desire

Desire is a subjective component. Increased public awareness of smile aesthetics through the media has lead to a rapid increase in patients' desires and levels of expectation. Patients are now willing to pay for the enhancement of their smile aesthetics. Therefore, the ethical responsibilities of cosmetic dentists in identifying the need- or want-based desires of patients have also increased. The desires and levels of expectation in many patients are higher than what is clinically achievable, and it is the clinician's duty to explain and guide patients towards a realistic aesthetic goal.

The psychological assessment of any person is very subjective; however, aspects like perception, personality, expectation or desire are important for the smile design procedure. Patient satisfaction is closely related to these aspects. Hence, understanding the pyramid of psychology is an integral aspect in smile design.

Step II: Establish— The pyramid of health

The pyramid of health is divided into three zones: general health, specific health and dento-gingival health. The health pyramid assessment and its management play a vital role in most cases, as patients may have certain limitations owing to their health, like uncontrolled diabetes, soft-tissue pathology, poor bone structure, poor oral hygiene, tooth decay, periodontal disease etc., which should be addressed prior to functional and aesthetic treatment.

The health pyramid assessment process includes patient history (medical, dental, nutritional), examinations (extra-oral, intra-oral) and investigations (radiographs, pulp vitality test, study models analysis). Various types of questionnaires and clinical examination and investigation protocols can be used to obtain the necessary information relating to the patient's health.

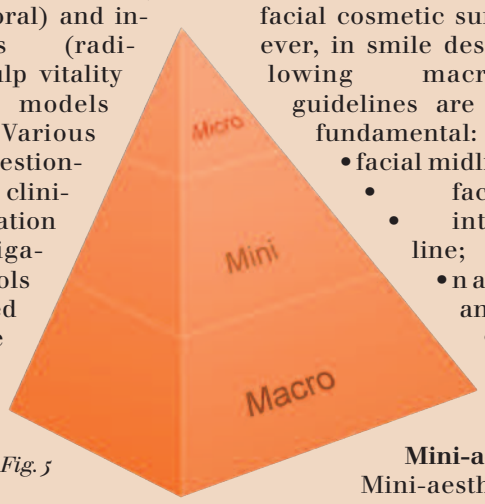

Fig. 5

The clinician can use this information to prepare a personalised treatment protocol. All three components of the pyramid of health should be established within normal limits before starting any aesthetic restorative procedure on a patient.

Step III: Restore—
The pyramid of function

Function is related to force and movement. Hence, for the pyramid of function assessment, the existing occlusion, comfort and phonetics are properly examined with the evaluation of para-functional habits, level of comfort during chewing and deglutition, and temporomandibular joint movement. The clarity of normal speech and pronunciation are also examined. The occlusion, comfort and phonetics components of the functional pyramid should be restored and maintained at an acceptable level before starting the treatment of any aesthetic component.

Step IV: Enhance—
The pyramid of aesthetics

The pyramid of aesthetics is the last but most sensitive pyramid of the Smile Design Wheel, as aesthetics has both subjective and objective aspects. The assessment of the subjective aspects—perception, personality, desire—is carried out during the pyramid of psychology assessment. It is to be noted that the assessment of the objective aspects depends on the distance (focal length) used to visualise the aesthetic component. Hence, the aesthetics pyramid can broadly be divided into three major zones: macro, mini and micro.

Macro-aesthetics

Macro-aesthetics deals with the overall structure of the face and its relation to the smile (Fig. 6). To appreciate the macro-aesthetic components of any smile, the visual macro-aesthetics distance should be more than 5 feet. However, in clinical practice the assessment of the macro-aesthetic components is done using various facial photographs with geometric and mathematical appraisals, using reference points and their interrelation. Various facial reference points and guidelines are used for aesthetic assessment for orthognathic and facial cosmetic surgery; however, in smile design the following macro-aesthetic guidelines are considered fundamental:

- facial midline;
- facial thirds;
- interpupillary line;
- naso-labial angle; and
- Rickett's E-plane.

Mini-aesthetics

Mini-aesthetics deals with the aesthetic correlation of the lips, teeth and gums at rest and in smile position (Fig. 7). The aesthetic correlation can be appreciated properly when viewed at a closer distance than the visual macro-aesthetics distance.

The visual mini-aesthetics distance is similar to the across-the-table distance, which is normally within 2 to 5 feet. There are various guidelines in aesthetics based on the relationship and ratio between lips, teeth and gingival tissue. These can be analysed during mini-aesthetic assessment using frontal, vertical and transverse characteristics of the smile. Clinical photographs are the basic tools for mini-aesthetic analysis. The smile can be analysed at rest (M-position) or smile (E-position).

In the M-position, the following references are measured and analysed:

- commissure height;
- philtrum height; and
- visibility of the maxillary incisors.

In E-position the following references should be analysed:

- smile arc (line);
- dental midline;
- smile symmetry;
- buccal corridor;
- display zone and teeth visibility;
- smile index; and
- lip line.

Micro-aesthetics

Micro-aesthetics deals with the fine structure of dental and gingival aesthetics (Fig. 8). Mini-aesthetics can be appreciated at a visual micro-aesthetic distance of less than 2 feet or within normal make-up distance. For the clinical assessment of micro-aesthetic components of the teeth and gingival tissue, appropriate illumination and magnification tools are required for intra-oral examination. Necessary clinical intra-oral photographs should be taken for documentation and future reference.

Fig. 6

Fig. 7

Fig. 8

For micro-aesthetics, the detail of the individual tooth structure and its relation to the surrounding gingiva and the adjacent teeth should be analysed. The following are the major points to be considered:

- upper centrals (tooth size ratio);
- principle of golden ratio;
- axial inclination;
- incisal embrasures;
- contact point progression;
- connector progression;
- shade progression; and
- surface micro-texture.

In smile design, the aesthetic conditions related to gingival health and appearance are an essential component. The gingival shape, position, embrasure, and contour in relation to the teeth are interdependent. The following are major aspects that should be addressed during smile design to achieve gingival or pink aesthetics:

- gingival shape;
- gingival contour;
- gingival embrasure;
- gingival zenith; and
- gingival height (position or level).

To achieve higher patient satisfaction and long-lasting treatment results, the following should be the sequence in any smile design procedure: proper comprehension of psychological aspects, the establishment of health and the restoration of function within its normal limit, and the subsequent enhancement of aesthetic components.

Conclusion

Today, various protocols of smile design are available in cosmetic dentistry. However, most clinicians wish to use the simplest protocol with the most predictable results. It is to be noted that smile design should always be a multifactorial decision-making process that allows the clinician to treat patients with an individualised and interdisciplinary approach.

The Smile Design Wheel presented in this article clearly indicates the most important components (PHFA pyramids) of smile design, their clinical significance and sequence to be maintained during the smile design procedure. I believe that the Smile Design Wheel is a simple and practical protocol in smile design that can help the clinician to easily comprehend the 'complex' smile design procedures of aesthetic dentistry. DT

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GlaxoSmithKline to re-launch the leading dry mouth brand, Biotene, in the Middles East.

GlaxoSmithKline Consumer Healthcare is planning to re-launch the Biotene® Oral Care products in the Middle-East early next year. The company finalized the agreement with Laclede, a privately held company, to purchase the leading Dry Mouth brand Biotene® end 2008.

"The re-launch of Biotene extends our portfolio in therapeutic oral healthcare to include a proven treatment for Dry Mouth in the Middle East," said Mazen Zaytoun, Biotene Brand Manager , GSK Consumer Healthcare. "This opportunity leverages our established capability with dental and medical professionals in the region and is a further step towards our mission of improving the quality of life of our Middle-East consumers."

Biotene is the world's number one dentist and hygienist-recommended Dry Mouth product for the growing population that suffers from this condition. Biotene is a brand in strong growth, with global sales in 2007 of around $50 million up 17%. Approximately 65% of the brand's current sales are in the United States.

Biotene was occasionally available in some Middle-East markets but on a very small scale. GlaxoSmithKline Consumer Healthcare plans to grow the brand behind an awaress campaign on the growing problem of Dry mouth.

Dry Mouth, a condition known as Xerostomia, is a significant health issue associated with chronic medical conditions that include diabetes, rheumatoid arthritis, Sjogren's syndrome and Parkinson's disease. Additionally, cancer chemotherapy or radiation treatment, as well as any of more than 400 medications that, as a side-effect, can cause Dry Mouth. Globally, Dry Mouth is as prevalent as dental sensitivity, affecting around one-in-five adults.

Biotene joins a world-class portfolio of Oral Healthcare Brands, including:

- Sensodyne®, the leading toothpaste to treat dental hyper-sensitivity
- Aquafresh®, a leading range of toothpastes, toothbrushes, mouthwashes and whitening products
- Corsodyl®, Chlorhexamed® gingivitis treatment
- Parodontax, a toothpaste for healthy gums
- Corega®, a range of denture adhesives & cleansers

How Biotene works

Biotene is a proprietary system founded on three enzymes: glucose oxidase, lactoperoxidase and lysozme, each found in healthy saliva. The augmentation of these enzymes through the introduction of Biotene into an oral healthcare regimen aids the symptomatic relief of Dry Mouth. The Biotene range includes mouthwash, toothpaste, gel, spray and gum formulations for convenient, effective relief. New innovation in 2008 added additional enzymes that attack and breakdown plaque biofilm.

GlaxoSmithKline – one of the world's leading research-based pharmaceutical and healthcare companies – is committed to improving the quality of human life by enabling people to do more, feel better and live longer. For further information please visit www.gsk.com DT

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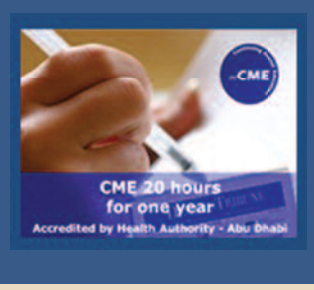

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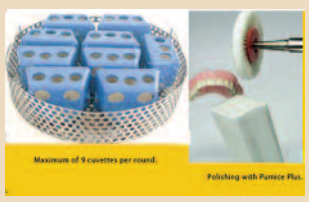

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AAE: Issue in implant debate comes down to saving teeth

Sierra Rendon
DT America

CHICAGO, IL, USA: The American Association of Endodontists (AAE) has expressed serious concerns over recent assertions by the American Academy of Implant Dentistry (AAID). According to the endodontist group, the implantologist group's position reinforces outdated myths about root canal treatment.

A press release distributed by the AAID on 21 September positioned implants as a better option than root canal treatment for a variety of reasons, including higher success rates and lower financial burdens—claims that root canal specialists say are inaccurate and misleading to potential patients.

"Not only has it been proven that both treatments have the same success rates," said Dr Gerald N. Glickman, president of the AAE, "but several studies show that root-canal treated teeth are retained at about 95 to 97 per cent after eight years, versus implant retention of 85 to 90 per cent during a similar time period. The AAID chose to ignore the scientific literature in its news release."

Dr Glickman also noted the inference that diseased teeth are not worth saving, which he said does a disservice to both patients and the dental profession as a whole.

"Do patients with a broken arm expect their doctor to give them a prosthetic arm?" he asked. "Why would the same patients believe they need to get a prosthetic tooth screwed into their jaw if the real tooth could be healed?"

Saving teeth is not so much a matter of 'dental heroics' as it is serving the best interests of the patient, and root canal specialists proudly do so in a manner that is consistent with the American Dental Association's Principles of Ethics and Code of Professional Conduct.

"And arguments that root canal treatment is more costly are fatuous," Dr Glickman added. "Recent research has proven that saving the natural tooth with a root canal rarely requires follow-up treatment and generally lasts a lifetime; implants, on the other hand, have more post-operative complications, and therefore would probably present the more significant financial burden."

Dr Glickman recognises that there are cases when a tooth cannot be saved, for which implants would be a realistic option. He pointed out that root canal specialists are ideally qualified to make such a determination with a patient's general dentist, and that all dental professionals are ethically obligated to inform patients of all available treatment options. "This whole paradigm is ultimately not about which treatment modality is better, but what is best for each patient. And that is the preservation of the natural dentition," he said. DT

AEE President Gerald N. Glickman. (DTI/Photo Daniel Zimmermann)

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