NEWS

From the use of lasers to aesthetic implants

by Javier Martínez de Pisón

The third day of lectures of the Dental Tribune Study Club Symposia introduced on Tuesday a good variety of speakers and topics at the Greater New York Dental Meeting. A total of six speakers of different backgrounds spoke at these well-known series of lectures, which are part of the educational arm of Dental Tribune International. Among them were Dr Gregori Kurtzman,





who talked about "Core Buildups, Post & Cores and Understanding Ferrule"; Dr Paul Goodman, who disserted on how to "Capitalize on the Hidden Implant Production in Your Practice"; Dr George Freedman and Dr Fay Goldstep, who gave an explanation of the clinical advantages of the now affordable laser therapy, entitled "The Diode Laser: The Essential Soft Tissue Handpiece".

The 4-day series of lectures of Dental Tribune Study Club attracted a large number of dentists interested in learning about these topics. The Tuesday lectures offered six hours of ADA-CEP Continuing Education credits.

Dr Pedro Lázaro, a Spain-based specialist in periodontics and dental implants, said that what is really difficult is to get results that are perfect from an aesthetic point of view, or as close to perfect as possible.

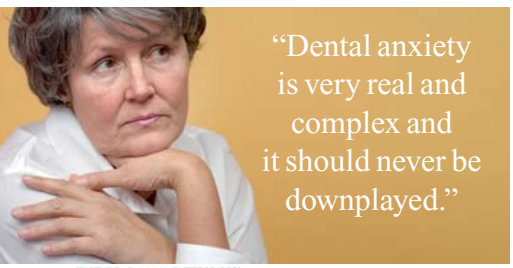
"It's like when you see a professional tennis player and the game looks very easy, but you know that there are only a few real top level champions like Rafa Nadal or Roger Federer," said Lázaro in an interview after his lecture. "Not using the appropriate technique could worsen the results of treatment," he warned.

Australian survey finds

Dental mid-life crisis in women

Middle-aged women are most likely to suffer from fear of the dentist, a new study found. Clinical observation of patients taking part in a multi-year clinical trial conducted at the Dental Phobia Clinic in Westmead, Sydney, has indicated that the level of dental anxiety is highest among women in their forties.

According to the researchers, this demographic was also found to have perceived a traumatic dental experience, including orofacial trauma, in the past and to be more prone to stress or mental disorders like depression. The results are intended to help investigate the relationship between dental anxiety and the perception of and coping with pain, as well as to develop strategies for managing the condition successfully.



[PICTURE: ©JUNIAL ENTERPRISES]

In addition, the study could confirm findings of earlier research that found that cognitive processing of dental phobia in women differs significantly from that in men.

Forty per cent of people in the developed world are estimated to have some form of dental anxiety. Surveys have shown that compared with the general population, phobic patients wait more than five times longer to make a dental appointment, co-ordinator of the study and special needs dentist Dr Avanti Karve said. She added that the key strategy for managing dental phobia is to help the patient develop the skills for coping with or overcoming the condition. "Dental anxiety is very real and complex and it should never be downplayed," she said. The anxiety study has been running in association with clinical psychologists for five years.

Compostable toothbrush

Produced by German manufacturer

Engineers have developed a cardboard toothbrush that could replace not only disposable toothbrushes in hotels and aeroplanes but also conventional household toothbrushes. The materials used in manufacturing this toothbrush are bio-based, renewable and fully recyclable.

According to the German Federal Environmental Agency, experts agree that plastic products decompose extremely slowly. Depending on environmental conditions, they estimate that plastic bags, for instance, take up to 500 years to decompose.



In a collaborative research project, the Zahoransky engineering corporation and the West Saxon University of Applied Sciences of Zwickau developed an innovative injection-moulding process, which made it possible to produce a toothbrush using renewable raw materials. This invention could be an alternative to disposable toothbrushes, which are also given regularly to patients at dental practices.

According to Zahoransky, the new toothbrush is manufactured from a biodegradable, fibre-filled composite, which is made by first pressing waste paper fibre into free-flowing bulk solids and thereafter processing the solids into injectable granulate using a biopolymer matrix.

Given the rising oil price, which affects the price of synthetic oil-based plastics, and increasing public awareness of ecologically safe products and processes, the designers wanted to create a disposable toothbrush that is environmentally friendly at the same time. The production of the newly developed toothbrush does not involve any fossil fuel because it is made solely from bio-based synthetic materials. After use, the toothbrush can be disposed of in the composting bin.

Survey finds

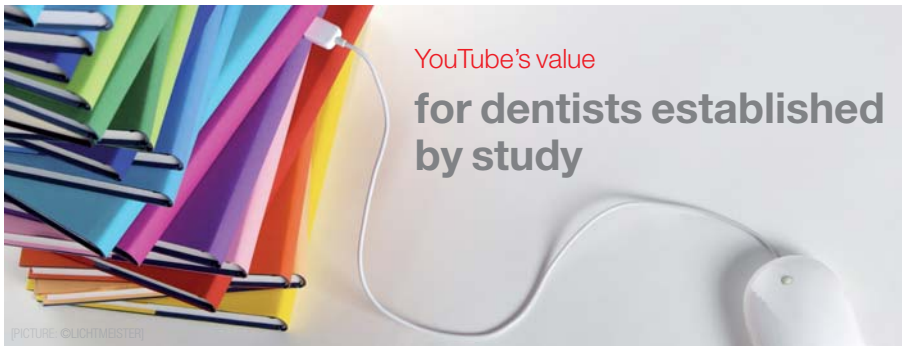
Most unattractive oral problems

A survey conducted by the British Dental Health Foundation (BDHF) ahead of its annual oral health campaign, National Smile Month, demonstrated that an imperfect smile usually makes a bad impression. National Smile Month from 20 May to 20 June, is the largest oral health campaign in the UK. The survey of more than 1,000 people aimed to determine which oral health problems are generally considered the least desirable to one's appearance. Missing teeth was considered to be the least desirable problem by 57 per cent of respondents, and stained teeth turned off nearly one in five respondents (18 per cent). Surprisingly, only six per cent of the respondents were most put off by braces, and only two per cent of people thought fillings were the least desirable feature. Opinions were also sought on cracked teeth, uneven teeth and receding gums, problems that put off a combined total of roughly one in five respondents (18 per cent).

According to Dr Nigel Carter, Chief Executive of the BDHF, the findings do not come as a great surprise: "Images portrayed in the media of celebrities have led to a society where image and the way we look is an important facet of daily life. Young people particularly associate celebrities with attractiveness, achievement and affluence, so it is only natural they will seek to mimic what they see on TV and in print."


[PICTURE: ©IOFOTO]

Carter added, "It is great to see oral health in the country improving over the years of the campaign, but there are still improvements to be made. By taking responsibility for your oral health, your teeth and your mouth, it's clear from the survey desirability can improve too."


[PICTURE: ©LICHTMEISTER]

YouTube's value

for dentists established by study

Researchers investigating YouTube have suggested that the potential of the online video-sharing platform and similar social media sites as means of dental education is highly underdeveloped. In a study, they found that it could hold important implications for dental professionals, as well as dental education staff.

Owing to an increasing integration of multimedia sources into professional and academic education, Dr Michael Knösel, an orthodontic specialist, and his team from the University of Göttingen, assessed the value of videos on YouTube related to dentistry. Two assessors with an academic background evaluated 60 videos in the general category "All" and 60 videos in the "Education" category. The results were first sorted "by relevance" and later by "most viewed". Videos in the educational category were mostly uploaded by practitioners but also by academic institutions and dental companies. The majority of videos in the general category, which were aimed at entertainment generally, were mostly posted by patients and laypersons, but there was also a significant percentage of videos with a commercial purpose and posted by dental manufacturers. The assessors said that videos in the educational category depicted an optimistic view on dentistry, whereas those in the general category tended to be rather negative. They found that between 68 and 93 per cent of the videos represented dentistry accurately, and videos in the general category were inaccurate in this regard.

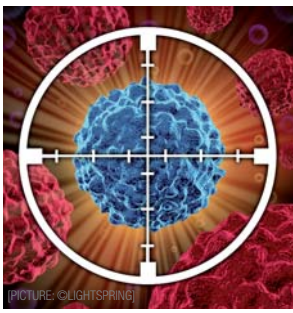
The researchers recommended that more academic institutions acknowledge YouTube as an effective supplementary medium for education: "YouTube and similar social media websites offer new educational possibilities for dentistry, but are currently both underdeveloped and underestimated regarding their potential value. Dentists should also recognise the importance of such websites in relation to the formation of public opinion about their profession," the researchers stated. "We would therefore like to encourage educators to make greater use of this medium, to work to improve the quality of videos, and to demand that contents are updated on a regular basis."

Novel portable probe

Detects early oral cancer

In order to reduce the time taken to diagnose oral cancer, researchers have developed the first prototype of a handheld detection device capable of fast imaging with a large field of view.

"To achieve a higher survival rate, early and on-site diagnostic methods are much needed in oral health programs. The compact handheld confocal imaging system shows great promise for clinical early oral cancer diagnosis and treatment," the researchers from the University of Texas at Austin's Department of Biomedical Engineering concluded. The probe uses a laser to illuminate the examination area and a micro-mirror, an instrument also used in barcode scanners. The micro-mirror is controlled by micro-electro-mechanical systems, enabling the laser beam to scan the area as programmed. Preclinical trials showed good correspondence with control images from conventional laboratory microscopes and clinical trials are currently being planned. The paper was published online on April 27 in the *Journal of Micromechanics and Microengineering* ahead of print.


[PICTURE: ©LIGHTSPRING]