NEW YORK, NY, USA/LEIPZIG, Germany: Dental health associations in the US have hailed the decision of the US Senate to recognise a number of measures for improving the oral health status of children, including expanded coverage for pediatric oral health services in its health reform bill. The new health legislation, which passed the House of Representatives and its crucial first vote in the Senate in November, also contains a number of measures for improving prevention, training and resources for tracking and monitoring oral health data amongst vulnerable populations.

Dental caries is one of the most prevalent health problems in the US, and disparities in oral health are evident across ages. A report by the US National Maternal and Child Oral Health Resource Center states that although more than 90 per cent of general dentists in the US provide care to children and adolescents, very few provide care to children under four. Amongst children and adolescents from families with low incomes, nearly 80 per cent of decayed primary teeth have not been restored in children between the ages of two and five, the report states.

“The Senate has taken a historic step toward safeguarding the oral health of millions of Americans,” said Dr Burt Edelstein, chair and founder of Children’s Dental Health Project, a non-profit organisation based in Washington, DC. “As the bill moves toward passage in the Senate and a conference with the US House, it is vital to preserve these provisions.”

“We are confident that members of the House and Senate will remain steadfast in their commitment to oral health and will work together to ensure that the oral health measures contained in this legislation remain strong,” he added.

The Senate version of the sweeping health bill, which is the centrepiece of President Obama’s social policy and will cost more than US$800 billion over the next ten years, would extend coverage to 56 million people without insurance, while creating a government health insurance programme.

New oral health guidelines for people with diabetes

The International Diabetes Federation (IDF) recently presented new guidelines for the oral-health care of patients with diabetes at the World Diabetes Congress in Montreal in Canada. The document, which is the result of collaboration between the IDF and the FDI World Dental Federation, reviews the latest clinical evidence of the oral health–diabetes relationship and provides dental professionals with recommendations regarding implementation of the guidelines.

Growing evidence affirms that poor oral health has a negative impact on the general health of people living with the condition. The IDF estimates that 285 million people worldwide will be living with diabetes in 2010. Numbers in regions like Africa and Asia are expected to increase by 50 per cent in the next twenty years, owing to economic development and the change of lifestyles.
with the help of incubating pro-
stay in business for the long term
90 per cent of start-up companies
programming channels. Almost
mneys, funding prototypes and find-
ing partners through support resources
ment of entrepreneurial compa-
accelerate the successful develop-
companies. Their main goal is to
world for assisting early-stage
as a significant tool in the business
these programmes have become
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical buildings
ally incubators. Introduced in the
late 1950s as physical builds
Anxious people have worst teeth, study shows

Daniel Zimmermann

HONGKONG/LEIPZIG, Germany: Anxious people are more likely to have problems with and related dental problems like gum disease, according to a new study from New Zealand has confirmed. Researchers from the University of Otago recently investigated the anxiety levels of 1,057 participants aged between 15 and 52. They found that dentally anxious people had almost twice the amount of decay, missing or filled tooth surfaces by the age of 52 as people who are not dentally anxious.

In the study, participants were classified into three groups: those who had always been dentally anxious; those who had developed dental anxiety as adolescents, and those who had developed dental anxiety as adults. The first group had more tooth decay at age 5 and early experience of dentists. The second group had more tooth decay from the age of 15. The third group had lost teeth between the ages of 26 and 52.

In addition, a ‘recovery’ group was discovered of people who had been dentally anxious at age 15 but had ceased to be so by the age of 52.

The findings will help dental professionals better understand what makes people dentally anxious, and inform them that some people can grow out of it, one of the researchers said.

In countries like New Zealand and Australia approximately 15 per cent of all people suffer from some form of dental anxiety.

Bollywood teams up with dental show

Claudia Salwiczek

HONGKONG/LEIPZIG, Germany: Bollywood’s biggest Gen-next star Deepika Padukone recently joined forces with the Indian Dental Association (IDA) and Wrigley India for an oral-care marathon at the World Dental Show 2009 in Mumbai. The former model, who had her big break as an actress in the 2007 feature Om Shanti Om, became an ambassador for Orbit sugar-free chewing gum in early 2009 and has represented the brand at public events since then. She is also the first actor in India to have partnered with a manufacturer to promote the oral health benefits of chewing gum.

The record 24-hour long dental check-up, called Mumbai Smiles – IDA fights against the Tooth Decay, aimed to provide free dental check-ups to underprivileged locals who cannot afford to visit a dentist on a regular basis, including school children, elderly people and temporary workers. People with symptoms of systematic conditions, such as diabetes or cardiovascular diseases, were examined by dental and medical experts from the University of California, San Francisco (US). The event was accompanied by an online campaign throughout October.

“Dental care in India remains a neglected area and tooth decay has become common at a comparatively young age,” Dr Paramjit Singh, President of the IDA, said. “Through this initiative here at the World Dental Show, our organisation and Orbit sugar-free chewing gum is trying to generate awareness on dental health and oral regime.”

The World Dental Show, organised by the IDA, is one of the biggest dental shows in India. According to the organiser, more than 20,000 visitors, including 18,000 dentists, attended the first show held in early October. The event is supported by the Association of Dental Industry and Trade of India and the University of California, San Francisco. The next show is scheduled for October 2010.

DTAP109_01-03_TitleNews 04.12.2009 17:04 Uhr Seite 3
Dear reader,

“This tooth is hard to pull out.”

Claudia Sabiwicky
Editor
Dental Tribune International

I just returned from the Greater New York Dental Meeting where I had the opportunity to conduct a number of interviews with well-known opinion leaders in dentistry. What struck me most about the line-up was that only 1 out of the 30 professionals that I spoke to was a woman.

It is a sad fact that compared to other fields in medicine, dentistry is still predominantly a male profession. There are exceptions, of course, such as Dr Catrise Austin, a New York-based dentist, who I recently met to talk about her decision to offer HIV tests to her patients. Or Dr Bo Chen from Beijing, who I met at the 15th Bränenmark symposium in Sweden where she presented a revealing study on patient satisfaction figures with facial and orofacial reconstruction. Unfortunately, though large in impact, these developments and ideas do not usually receive the recognition they deserve.

However, what these examples also demonstrate is that women often tend to develop solutions that are socially applicable and that offer benefits for all members of society; a fact acknowledged by a recent World Health Organisation report. In the study on Women and Health, the question was also raised why women generally have to carry much of the health care burden while getting hardly anything back. It may be time for women, especially those working in medical and dental professions, to step up and offer free HIV tests to her patients.

The International Diabetes Federation publication Guide- line: Oral Health for People with Diabetes addresses the reported bi-directional relationship of dia- betes mellitus and periodontal disease. It has long been recog- nised that periodontitis is a com- plication of diabetes mellitus, and periodontitis has been suggested as the sixth clinical complication of diabetes. More recently, data has been published that suggests that metabolic control in diabetes is adversely affected by peri-odontitis. The mechanism that accounts for this association is the production of inflammatory mediators in the periodontal tis- sues, with a resultant elevation of serum levels of these mediators, leading to the desensitisation of peripheral insulin receptors.

The guideline group that prepared and wrote this report addressed two questions: “What level of surveillance for periodontal disease should be recommended for people with known diabetes” and “Is active management of periodontitis particularly recommended for people with diabetes”. In response to both ques- tions, the guideline group con- cluded that the evidence does not support an affirmative answer to either of these. Despite these con- clusions, the publication provides recommendations for oral health care for people with diabetes. These include an emphasis on the need to educate patients with diabetes that their periodontal health can be adversely affected by diabetes, the importance of regular personal and profes- sional oral health care, and the need for periodontal care if peri- odontal disease is present.

The findings presented in this document are surprisingly lim- ited in scope. While it is recog- nised that the committee did not have specific instructions regard- ing the amount of evidence re- quired in order to be able to make a recommendation, the literature reviews cited in the guideline document provided solid evi- dence that periodontitis is more se- vere in patients with diabetes. Furthermore, while evidence suggesting that periodontal treat- ment can improve glycaemic con- trol in patients with diabetes is not as solid, the trend observed in these studies is that the greatest beneficial effects are seen in cases in which the glycaemic con- trol is very poor. It can thus be de- ducted that these patients require the most attention, as they are at the greatest risk for clinical complica- tions of diabetes.

The provision of appropriate oral care to patients with diabetes mellitus will improve oral health, which in itself is a desirable out- come. Diabetes is a chronic dis- ease that patients must manage on a daily basis. Appropriate oral health care, with a focus on pre- vention, can lead to a lifetime of good oral health, efficient mastication and a better diet, the last two of which can have important positive effects on weight control. Weight control is critical for gly- caemic control.

Another important considera- tion is the likelihood that patients who target overall diabetes care will have diabetes and not be aware of their diagnosis. In the US, approximately 25 per cent of patients with diabetes are not aware that they have diabetes. Given the increased prevalence of periodontitis in this patient group, careful examination by a dental professional (in identify advanced periodontal disease) and a thorough health history (that is, family history of diabetes, or a report by the patient of ex- cessive thirst, urination and/or hunger) can suggest the need for evaluation of diabetes. If dental professionals are to assume this more active role, they need to be familiar with all aspects of dia- betes mellitus, including risk fac- tors, health history and clinical complications, and treatment approaches. This may require ad- ditional training, but the outcome will be the improved general health, not only oral health, of patients treated in the dental practice.

The guideline document is important because it focuses at- tention on the oral health of the increasing number of patients across the globe with diabetes. Dental disease is a component of the diabetes clinical spectrum. Additional studies appear in peer- reviewed journals each month. Thus, the findings regarding the bi-directional relationship of diabetes mellitus and oral health presented in this guideline docu- ment are not final.

Endo vs. Implants

Endodontic therapy is often the last opportunity to preserve a natural tooth. If a tooth has a sufficient restorative and peri- odontal prognosis and the neces- sary endodontic treatment is done properly, the longevity of patients’ teeth can be extended to decades. There is ongoing de- bate comparing endodontics and implants as therapy alternatives. Yet, there seems to be a tendency towards the replacement of na- tural teeth with implants, sometimes even in cases where the tooth could have been preserved.

Research figures show that there is a significant difference between the high success rates of endodontics and the con- trolled studies and the incidence of apical periodontitis after en- dodontic treatment, as demon- strated in cross-sectional studies. This maybe an indication of the difference between the controlled protocol and what is accomplished in reality, thereby explaining the endodontic treatment results we often see in our patients.

Controlled studies in implan- tology have mostly presented data indicating implant survival and not implant success, as de- manded by Dale, Albrektsson and others. Even early implant loss, within the first weeks of placement, is often not included in many statistical calculations. In the last two years, reports have indicated instances of peri-im- plantitis at a rate of 10 per cent and in some implant types of up to 29 per cent. Some studies have shown higher incidences of peri-implantitis in patients that have lost teeth because of periodontal- tis before and therefore suggest a possible predisposition. Addi- tionally, we are only beginning to understand the treatment of peri-implantitis.

In my opinion, implants are a very valuable instrument if the natural tooth has already been lost or is at risk of being lost due to diab- etes. But if a tooth has a sufficient restorative, periodontal and en- dodontic prognosis, it should be preserved in most cases. Thus, I consider that the situation is not one of endodontics versus im- plants but one of two disciplines working alongside in the goal of best serving our patients.
WHO says women need better health care

Daniel Zimmermann

HONG KONG/LEIPZIG, Germany: The World Health Organization (WHO) has stressed the need to improve health care for women, especially those services pertaining to key stages of life, such as adolescence and older age. According to a new report by the organisation, lack of access to education, decision-making positions and income limit women’s ability to protect their own health and that of their families. Policy change and action is needed within the health sector and beyond to remove these barriers, WHO Director-General Dr Margaret Chan said.

According to Dr Chan, women provide between 80 and 90 per cent of health care worldwide, whether in the home or as nurses, but rarely receive the care they need themselves. For example, in many countries sexual and reproductive health services tend to focus exclusively on married women. Few services also cater for marginalised groups of women, such as sex workers, intravenous drug users, ethnic minorities and rural women.

Although considered to be ‘male problems’, heart attacks and strokes are two leading, global causes of death of women—who often exhibit different symptoms from men.

Panasil® initial contact. Precise, even in extreme situations.

To the Editor

Re: Editorial, (Dental Tribune Asia Pacific No. 6, Vol. 7, page 4)

"...to treat health care not as a market commodity but as a public benefit institution."

Obviously, the writer of this article knows nothing about economics. The demand for health care is infinite. Making things free through a government programme will bankrupt governments and inevitably lead to rationing. Health care, like any other service, involves labour of individuals and is therefore NOT a right—unlike freedoms of press, religion or speech, which require nothing other than people leave us alone. We don’t need lectures from Euro-socialists like the writer. Europe, with its practically non-existent growth rates and entitlement culture, is definitely NOT a model we wish to emulate!

Kim Henry, USA, 13 Nov. 2009

Re: “Experts discuss future of implantology in Gothenburg” (Dental Tribune Asia Pacific No. 10, Vol. 7, page 1)

Fulfilling patient needs is the aim of my daily practice. Dental professionals would be better helped if they could have access to accurate information on the effectiveness of treatments found to have positive results, as reported in scientific papers. This means that opposing the commercial publishing of articles on treatments with non-positive results is surely the best and ethical approach, although not widespread. It’s odd that the person who promoted advertising of a surgical procedure is now blaming people for pursuing commercial interests.

Leopoldo Bozzi, Italy, 18 Nov. 2009

If people were satisfied with just good solutions, only small advancements would be made. This applies to dental impressions as well. The modern A-Silicon Panasil® initial contact features not just good, but remarkable initial hydrophilicity. Following the usual sulcus preparation, it flows directly onto the moist tooth surface and thoroughly wets it—plus it retains the moisture through the entire process. The result: impressions with utmost detail accuracy of the preparation, even in extreme situations. Whether you are performing a two-step putty-wash impression technique, a one-step double mix technique or a one-step putty-wash impression technique, A-Silicon Panasil® initial contact will provide optimum results. Together with Panasil® tray materials, we offer the ideal system for any of these techniques. To request an information package, please call +49 (0) 2774 70599 or visit our website: www.kettenbach.com
HIV/AIDS, pregnancy-related conditions and tuberculosis are other causes of death and disease of women aged between 15 and 45.

The WHO report seeks to identify key areas for reform both within and outside the health sector, including improving health systems to better meet women's needs throughout their lives, as well as leveraging changes in public policy to address and monitor the ways social and economic determinants of health adversely affect women. It points out that strategies to improve women's health care must take full account of gender inequality and address the specific socio-economic and cultural barriers that prevent women from protecting and improving their health.

"It's time to pay girls and women back, to make sure that they get the care and support they need to enjoy a fundamental human right at every moment of their lives, that is their right to health," Dr Chan said.
LEIPZIG, Germany: Materials used in root canal procedures are not always compatible with each other or do not bond properly with the hard dental tissue. Root filling materials, for example, should not shrink as they harden and should be visible in X-rays. Materials used to rebuild the tooth should mimic the properties of the tooth itself.

Researchers at the Fraunhofer Institute for Silicate Research in Würzburg (Germany) have developed a new material that can be used for all components of root canal treatment. The material, which was developed in collaboration with researchers from VOCO GmbH, a German manufacturer of dental restorative materials, is based on organic-inorganic hybrid substances called ORMOCERS that are combined with various nano- and micro-particles. While standard materials shrink by 2 to 4 per cent, ORMOCERS only shrink by 1.3 per cent as they harden. They can also be adapted to adhere to the different parts of the tooth, the researchers said.

ORMOCERS are already used in optical functional coatings for glass and ceramic components and easy-to-clean coatings for metals and leather. According to ISC officials, a final product for dentistry will be launched in a few years.

New York meeting installs new chairman

The Greater New York Dental Meeting has elected Dr John R Halikias as new chairman for the years 2010 and 2011. He will lead the organisation in its effort to continue the GNYDM’s mission of fostering lifelong learning for dental professionals and providing enormous sales opportunities for the dental industry, meeting officials told Dental Tribune America in New York.

Halikias will accept his honour after he was unanimously elected by the GNYDM Organization Committee.

Halikias has served the GNYDM for more than 25 years while also being president of the Second District Dental Society, one of the sponsors of the meeting. He learned his dental degree from the New York College of Dentistry in 1985. He is also a member of the American Dental Association, New York State Dental Association, American College of Dentistry and Hellenic Dental Society, and is a fellow of the Academy of General Dentistry. He currently practices general dentistry with his father, Dr Robert Halikias, in Brooklyn, NY.

As the largest dental convention, exposition and congress in the United States, the meeting continues to attract more than 57,000 attendees including 17,000 dentists from all US states and 118 countries.
In November, an agreement in concept was reached by a World Health Organization-convened international expert group meeting, supporting the phase-out of dental mercury use worldwide. Dental Tribune Group Editor Daniel Zimmermann spoke with Prof. Lars Hylander, Associate Professor at the University of Uppsala in Sweden who attended the meeting, about the agreement and strategies for future biomaterials use in dentistry.

Daniel Zimmermann: Prof. Hylander, you recently attended a joint meeting of the World Health Organization (WHO) and the United Nations Environment Programme (UNEP) that aimed to assess the latest clinical evidence on dental restorative materials. Could you tell us about the outcome of the meeting?

Prof. Lars Hylander: Most participants agreed that amalgam should be phased out or at least phased down. Dr. Poul Erik Petersen, Responsible Officer for Oral Health at the WHO, however, raised several good questions, such as what to tell people in poor countries who cannot even afford dental amalgam fillings. At this point, the room grew rather silent.

A similar consultation was held more than ten years ago. What has changed since then concerning the manner in which dental restorative materials are perceived?

What has been decided regarding dental amalgam?

The WHO has not been as quick as Norway, who instituted a ban on dental amalgam in less than six months after the proposal of a ban was presented in the country. Thus far, nothing has been decided, but the WHO can hardly ignore the decision made by the world's governments within the UNEP to negotiate a mercury treaty, which will begin in Stockholm next June.

There was some consensus that mercury use in dentistry should be phased down. A suitable way to do this is to begin teaching alternative restoration techniques, other than dental amalgam, in dental schools.

There was a focus on the oral cavity, which thus ignored the environmental aspects such as mercury emissions from crematoria and leakage of mercury into wastewater from dental clinics and the wearing of amalgam surfaces due to everyday chewing. The American Dental Association demonstrated this most clearly in the presentation by Dr. Daniel Meyer, in which it was stated that of the 35 tons of amalgam used annually in the US, only a few hundred kilograms are emitted into the environment.

Which restorative materials were considered to have the most potential for use in developed and developing countries?

Composites and other white filling materials have replaced amalgam in several developed nations. Even in countries with an amalgam ban, such as in Japan, less than 4 per cent of the fillings are now fabricated with amalgam, for aesthetic reasons. In addition, many patients do not find it sensible to have as toxic an element as mercury just a few centimeters from their brains.

Composites and glass ionomers are also widely used in many developing countries. The question of why such developments progress so slowly in the big nations of the rich world was raised. Atraumatic restorative treatment with glass ionomers and using only hand tools is a promising alternative, not only for developing countries. In countries in which glass ionomers or composites are produced locally, the cost of these fillings is lower than that of amalgam.

Thank you very much for the interview.
Dealing with stress in the 21st century—a perspective for the dental profession

Ros Edlin
United Kingdom

Ask the average man in the street for his opinion as to whether or not dentists experience stress, and your query will, in all probability, be met with a look of incredulity and a shrug of derision. After all, isn’t stress in the domain of the poor patient rather than the high-earning, fast-living, Porsche-driving dentist? A media-fuelled opinion such as this may be true for a minority of dentists, but for the majority this is an entirely inaccurate assessment of dentistry today.

What is true, however, is that dentists are identified as one of the most stressful of the UK professions. A recent study by HL Myers and LB Myers conducted using an anonymous cross-section of 2,441 UK GPDs, found that 60 per cent of GPDs reported being nervous, tense or depressed, 55.5 per cent; when we feel ourselves to be challenged, 60 per cent reported difficulty sleeping and 48.2 per cent reported feeling tired for no apparent reason—albeit signs possibly related to worked-related stress.

So why are dentists so susceptible to stress? Not only are they required to work in an intricate manner in a sensitive and intimate part of the body, sitting in the same position for long periods of time, but they also have to be responsible for the smooth running of the practice with regard to both staff and patients, as well as managing the financial aspect. Added to this are the ever-increasing demands and expectations of patients and the constant awareness of running behind schedule. As if this wasn’t enough, they have to ensure that they maintain clinical excellence in the eyes of regulatory bodies. Faced with all these factors, and for the most part, not having received any particular training in, for example, people skills or financial management, it is little wonder that many dentists fall victim to stress-related illnesses, either mental, physical or both.

Stress itself is not an illness but is, according to the Health and Safety Executive (HSE) definition, ‘the adverse reaction people have to excessive pressure or other types of demands placed upon them.’ The HSE also makes an important distinction between the beneficial and adverse effects of reasonable pressure and challenge (which can be stimulating, motivating and can give a ‘buzz’) and work-related stress, which is the natural but distressing reaction to demands or ‘pressures’ that the person perceives they cannot cope with at a given time.1 The concept of perception is particularly relevant in that, faced with the same situation, a difficult procedure or a demanding patient, one dentist may relish the challenge and yet the other feel threatened in their shoes! Also pertinent to the definition of stress are the notions of control and change. It is clear that we function best when we are in control of our circumstances; when we feel ourselves to be responsible for our successes or failures due to our own personal attributes. This could also include the responsibility of the welfare of both patients and staff. As is often the case however, bureaucracy mitigates against this feeling of control which could result in work-related stress. The recent NHS Dental Contract for the UK is a prime example where it can be argued that dentists have a loss of control of their own destinies. It also illustrates the importance of involvement in the process of change for the best results to be achieved. ‘Today’s dental environment is not going to change to accommodate the individual. It’s the individual who needs to learn to accommodate the environment if she or he does not want to pay the price of chronic stress.’2

There is no doubt that we all need pressures and challenges in our lives to get us up in the morning and to keep us going. These can galvanise us into achieving great things, to work at our most productive level, but we have to be aware that having unrealistic goals or expectations can possibly result in the ‘law of diminishing returns’. In other words, the more we push ourselves to reach that elusive goal, the less well we can sometimes perform. This is not to underestimate the thrill of achieve- ment, but it is worth paying heed to the warning signs. These warning signs are like traffic lights in our lives. Green means that everything (or nearly every- thing) is going well with us. We are enjoying our work, the practice is flourishing; we have a great team and the patients are appreciative. Home and social life is good; the children are behaving themselves and the sun is shining. Then perhaps things start to go slightly awry—your valued nurse leaves, creating extra pressure at an already full practice. This can galvanise us into achieving tense and irritable.

This situation may carry on for a while with perhaps other events occurring to add to the mix—a complaint or family illness for example. At home, your evening glass of wine is turning into two or three. You are sleeping badly, relationships are suffer- ing and you are starting to feel that you can’t cope. The red light is beckoning! If the symptoms continue to intensify to the extent of absolute exhaustion, ill health and the inability to cope, it could be advisable to seek help.

Personality can also have a bearing on the dentist’s ability to cope with stressful situations. A study carried out by Professor Cary Cooper et al.3 suggested that dentists had a tendency to exhibit ‘Type A’ behaviours. People with ‘Type A’ personalities tend to be driven, highly ambitious, impa- tient, aggressive and intolerant. They have high expectations of themselves and those around them. ‘Type B’ personalities although they may be equally ambitious and successful, are able to perform in a calmer and more relaxed manner. People can fluctuate between these two behaviours which are said to be on a continuum.

A successful practice is one where effective stress manage- ment strategies are firmly in place. This contributes to the al- musphere of well-being and competence within the practice. The positive effect emanates throughout—the staff feel valued and motivated and the patients feel more relaxed and welcomed. ‘A win win’ situation for all concerned. Achieving this ideal situation is not automatically to many practitioners who may require guidance. It may be nec-
It is clear that we function best when we are in control of our circumstances.

To address stress in dentistry, it is necessary to consider what your goals and aspirations are in relation to both yourself and your practice. Hopefully, some of the coping strategies that follow will be of assistance.

In terms of individual stress, try to take a step back and assess where the stress is coming from. Writing a list of causes from the most stressful down to the least will help you gain some perspective on the problem and may inspire you to tackle some of the issues raised. It is even possible that you could be the cause of the stress! You may need help in dealing with some of these issues. Try not to let pride stand in the way of getting the help you need.

It could also be useful to employ this technique with your staff by asking them to identify the sources of stress. By airing and discussing grievances, concerns and new strategies, the various members will feel part of the dental team and provide mutual support in time of stress.

For the individual, relaxation techniques are also recommended. Although it is often thought that relaxation is not compatible with working in a dental surgery, with organisation and planning it is feasible. (Some European countries manage successfully to incorporate this into their working day.)

A prerequisite would have to be a competent receptionist who would not fill your appointment book so full that you do not have time to breathe, let alone try some deep breathing (which is excellent for calming you down). Take in a deep breath (don’t hold it) and count one, two, three as you exhale slowly.

In your everyday life having a period of relaxation is vital. It could be as basic as taking breaks in the day or going out at lunchtime to listening to music or having a relaxing bath.

The importance of relaxation is that it enables you to switch off and recharge your batteries.

Equally important is physical exercise. Exercise burns up the excess adrenaline resulting from stress, allowing the body to return to a steady state. It can also increase energy and efficiency. Do find an exercise which you enjoy that will motivate you to continue doing it.

Balance your diet. Eat breakfast, drink sensibly and include lots of water to rehydrate the system. Include complex carbohydrates (wholemeal bread, jacket potatoes) in your diet to counteract mood swings, and fruit and vegetables to provide vitamin C to support the immune system.

Manage your time (and yourself) efficiently. Again, taking a step back and reviewing your working practice is essential. Do you have an allotted time for dealing with emergencies and administration? Are you constantly running behind schedule causing your stress levels to escalate? Developing leadership and organisational skills will enable you to feel more in control of your working environment.

Ensure that your staff are properly trained and aware of their individual roles and responsibilities. Encourage a culture of mutual support whereby asking for help is not viewed as weakness. Taking problems with someone you trust can be such a help. As mentioned previously, some dentists may be excellent practitioners but sadly lacking in interpersonal skills. An ability to listen is a gift. If you feel you need some training in communication, there are plenty of courses available.

By incorporating at least some of these strategies into your everyday life and your working life, you could create an environment which is stress-free and an environment in which it is a pleasure to work. It could make the difference between a good practice and an outstanding one. Who wouldn’t want that?

Contact Info

Ros Edlin is a freelance stress consultant from Hale, United Kingdom. She can be contacted at ros@stresswatch.co.uk.
Does dentine hypersensitivity affect oral health-related quality of life?

Dr Katrin Bekes

Dentine hypersensitivity is an oral complaint frequently reported in clinical dental practice. While many individuals do not seek treatment to desensitise their teeth because they do not perceive dentine hypersensitivity to be a severe oral health problem, a substantial number of patients experience discomfort to the extent that it interferes with their eating, drinking, oral hygiene habits and sometimes even breathing. These symptoms often have a considerably adverse impact on their daily quality of life (QoL). This article reviews the impairments of oral health-related quality of life in patients seeking care for dentine hypersensitivity.

Traditionally, dentists have been trained to recognise and treat oral diseases and to describe them by using dental indices. Dental indices provide a quantitative method for measuring, scoring, and analysing dental conditions in individuals and groups. They describe the status of individuals or groups with respect to the condition being measured. However, important as these objective measures are, they only reflect the end-point of the disease processes. They give no indication of the impact of the disease process, especially oral disorders, on function or psychosocial well-being, and only provide little insight into the impact on daily living and QoL.

Therefore, QoL research in medicine and dentistry has attracted increased attention over the past years. QoL is defined as an individual’s perception of his or her position in life, in the context of the culture and value systems in which he or she lives and in relation to his or her expectations, goals and concerns. QoL has multiple dimensions (such as cultural factors, social integration, socio-economic status, quality of environment and personal autonomy). One dimension of QoL is health. The real impact of health and disease on QoL is known as health-related quality of life (HRQoL). Oral health-related quality of life (OHQoL) is that part of HRQoL that focuses on oral health and orofacial concerns (Fig. 1). The concept of OHQoL facilitates studying the impact of a disease on a person’s total oral health because it can be used across conditions. It describes the way in which oral health affects a person’s ability to function, his or her psychological status, social factors and pain or discomfort.

How to measure OHQoL

OHQoL is a multi-dimensional construct that cannot be observed directly. It needs to be visualised by means of suitable indicators. In order to comprehend a construct like this, target persons, that is patients, have to be asked pertinent questions. For example, some questions focus on function, some are concerned with pain and discomfort, and others evaluate self-image and social interaction.

The Oral Health Impact Profile (OHIP) is amongst the most widely used instrument in studies evaluating OHQoL. It attempts to measure both the frequency and severity of oral problems on functional and psychosocial well-being. This tool was developed by Slade and Spencer in Australia in 1994. The OHIP is a 49-item measure, with statements grouped into seven theoretical domains, namely functional limitation, pain, psychological discomfort, physical disability, psychological disability, social disability and handicap. Examples of some OHIP questions are:

- Have you had trouble pronouncing words because of problems with your teeth, mouth or dentures?
- Have you found it uncomfortable to eat any foods because of problems with your teeth, mouth or dentures?
- Have you felt that your sense of taste has worsened because of problems with your teeth, mouth or dentures?

For each of the 49 OHIP questions, subjects are asked how frequently they have experienced the oral problem. Responses are according to a Likert-type scale: 0 = never, 1 = hardly ever, 2 = occasionally, 3 = fairly often, and 4 = very often.

A summary score of between 0 and 196 results from the 49 questions, with 5 scoring steps each, which provides a good impression of the extent to which OHQoL is affected. A score of 0 indicates the absence of any oral health-related problem. Higher scores represent an OHQoL that is more impaired. The most
OHRQoL is expressed by extensive impairment of the development of a German version of the OHIP (OHIP-G), which determines the OHIPoL of German-speaking persons. OHIP-G includes the 49 items of the English original, as well as four additional items that were regarded as important for the German population specifically. OHIP-G can be applied to patients of 16 years and older.

OHIPoL in patients with dentine hypersensitivity

Dentine hypersensitivity is a condition of oral stomatitis that is frequently reported in dental practice. It is characterised by a sharp and sharp pain arising from exposed dentine and occurring in the presence of thermal, chemical, tactile or olfactory stimuli (Fig. 2). From the relatively few studies that investigate the prevalence of dentine hypersensitivity, it can be concluded that it is a frequent condition. Studies have reported a prevalence of dentine hypersensitivity in the adult dentate population ranging from 4 to 57 per cent. However, figures as high as 60 to 98 per cent have been reported in patients with periodontitis. While many individuals do not seek treatment to desensitise their teeth because they do not perceive dentine hypersensitivity to be a severe oral health problem, 10 to 25 per cent of patients experience discomfort to the extent that it interferes with their eating, drinking and even breathing. The degree of discomfort depends on individual pain perception, pain tolerance, and emotional and physical factors. These symptoms are highly relevant from the patient’s point of view and often have a considerably adverse effect on daily QoL.

A study was conducted at the Martin Luther University Halle-Wittenberg, Germany, to describe and evaluate OHIPoL in patients with dentine hypersensitivity. Data was collected using a questionnaire as part of a cohort study targeting several areas of oral health beyond hypersensitive teeth, such as oral hygiene, prevention efforts, and oral behaviors and habits. There were 724 patients (mean age: 42.8 ± 13.0 years) who participated in the study, presenting at 161 German dental offices because of hypersensitive teeth and reacting positively to an air stimulus from the patient’s point of view and often have a considerably adverse effect on daily QoL.

Dentists of all oral problems frequently encountered. A table of standard values represents that all oral problems are frequently encountered. The demand for Portuguese, Spanish and Swedish speaking populations, cross-cultural tool led to the development of a German version of the OHIP into Chinese, Dutch, Hungarian, Italian, Japanese, Portuguese, Spanish and Swedish has been achieved in various countries. The demand for an internationally comparable German tool led to the development of a German version of the OHIP into Chinese, Dutch, Hungarian, Italian, Japanese, Portuguese, Spanish and Swedish has been achieved in various countries. A table of standard values represents that all oral problems are frequently encountered.

After these exclusions, 656 patients remained in the study for analysis. These patients were compared with 1,541 subjects without removable partial dentures from a national general German population sample (mean age: 37.7 ± 15.4 years). OHIPoL was assessed using OHIP-G. The patients completed the OHIP-G questionnaire in the dental office.

The OHIP-G summary score characterised the OHIPoL construct as a whole. The OHIP-G summary score of patients with hypersensitive teeth was 54.5 (± 22.6), while the general population sample had a score of 12.2 (± 18.6). The 22.3 difference was statistically significant. The general population subjects had an OHIP-G median score of 5, while the patient group had an OHIP-G median score of 50 (Fig. 5). Ten per cent of the subjects with the highest OHIP-G summary scores had scores of 56 (general population) and 66 (patients).

Differences according to gender were not statistically significant. Although the difference between gender of a mean 2.8 points was statistically significant (p < 0.01), it was regarded as negligible. Amongst the patient group, women reported more problems with the condition of dentine hypersensitivity than men, which is in contrast to the general population, in which men had higher OHIP scores than women (Fig. 4).

Conclusions

QoL has been established as an important outcome for evaluating the impact of a disease and for assessing the efficacy of treatment.

“QoL has been established as an important outcome for evaluating the impact of a disease and for assessing the efficacy of treatment.”

After these exclusions, 656 patients remained in the study for analysis. These patients were compared with 1,541 subjects without removable partial dentures from a national general German population sample (mean age: 37.7 ± 15.4 years). OHIPoL was assessed using OHIP-G. The patients completed the OHIP-G questionnaire in the dental office.

The OHIP-G summary score characterised the OHIPoL construct as a whole. The OHIP-G summary score of patients with hypersensitive teeth was 54.5 (± 22.6), while the general population sample had a score of 12.2 (± 18.6). The 22.3 difference was statistically significant. The general population subjects had an OHIP-G median score of 5, while the patient group had an OHIP-G median score of 50 (Fig. 5). Ten per cent of the subjects with the highest OHIP-G summary scores had scores of 56 (general population) and 66 (patients).

Differences according to gender were not statistically significant. Although the difference between gender of a mean 2.8 points was statistically significant (p < 0.01), it was regarded as negligible. Amongst the patient group, women reported more problems with the condition of dentine hypersensitivity than men, which is in contrast to the general population, in which men had higher OHIP scores than women (Fig. 4).

Conclusions

QoL has been established as an important outcome for evaluating the impact of a disease and for assessing the efficacy of treatment. The impact of oral disorders and interventions on patients’ perceived oral health status and OHIPoL is increasingly recognised as an important component of health. Dentine hypersensitivity is a frequent problem that can be observed in adults of all ages. In this study, patients with sensitive teeth reported substantial OHRQoL impairment.
Nothing else is Sensodyne

- **Established expertise in dentin hypersensitivity**
  - Continuous development of dentin hypersensitivity solutions since its launch as the first desensitizing toothpaste providing both sensitivity relief and caries protection.¹
  - Strong scientific evidence in the field of dentin hypersensitivity.²⁻³⁻⁶
  - Extensive research and development in collaboration with leading experts.

- **Treats your patients’ sensitivity at the source of the pain**
  - Sensodyne’s potassium formulations work by blocking pain signals at the nerve.

- **Proven to provide your patients with significant relief from the pain of sensitive teeth**
  - Proven in publications²⁻¹¹ and confirmed by patients.²

- **Specifically developed to provide the right care for your patients**
  - Proven to relieve the pain of dentin hypersensitivity.²⁻¹¹
  - Provides ongoing and effective pain relief with continued use.²⁻¹¹
  - Low abrasion¹² to minimize damage to exposed dentin.¹⁻³⁻¹⁴
  - Protects against caries.³⁻⁸⁻³⁹ and strengthens tooth enamel.³⁻⁴¹
  - Offers a range of variants to encourage patient compliance.

---

Number 1 patient preferred desensitizing toothpaste brand.⁴²
Jack of all trades, master of none

Peter Dunn

“Savvy dental professionals appreciate the worth of seeking specialist advice from experts who understand the intricacies specific to the dental industry.”

Misplaced demand seems to have created a society of ‘one-stop shops’. We can now buy insurance from supermarkets, candles from post offices and shoes from pharmacists. Where will it end—contact lenses from libraries? Everyone is familiar with the phrase ‘Jack of all trades, master of none’. Many companies that became experts in their field have now branched out into other areas as a way of appealing to a wider audience. They may well have boosted their profile and profits in the process, but by expanding in this way, they have watered down their skills and potentially the service that you receive.

Once upon a time dentistry was offered by pharmacies but it failed, and although one major supermarket in the UK has set up an in-store dental practice, the service has yet to be rolled out nationally. Sometimes convenience is beneficial. The facility to collect your prescription from the supermarket pharmacy is helpful but are generalists properly placed to assist you in choosing your ideal pension or investment portfolio and are you willing to chance it?

The cost of convenience

A generalist financial services or accountancy practice will appear to offer the full gamut of services to all manner of trades and professions, but their package tends to be fairly off the shelf to cater for all these different markets. Sure the convenience of fitting so many boxes from one roof is tempting and if your purpose is to find the most convenient route then your goal has been achieved. However, if your aim is to fulfil your needs in the most effective and successful way possible, a one-size-fits-all approach is hardly likely to give you the specific outcome that reflects your perfect fit.

A specialist company may not offer an all-singing, all-dancing menu of services or boast a large office housing scores of employees but what it will have is a dedicated team of people who know their field inside out.

Take marketing for instance. Many dental professionals feel competent enough to write their own web copy, to create the text for their welcome packs and even to create their own logos, and build their own websites. Generally the outcome is anything but professional and actually undermines the often superb clinical skills and experience patients can expect when choosing to attend that practice.

The perceived cost saving from a do-it-yourself approach becomes a massive lost opportunity when the marketing communications not only fail to generate the desired level of business but create negative associations that can take years to change.

It would be wrong to assume that because a financial planner, accountant or solicitor has a long list of letters after their name, that they are best suited to supporting your business. We were horrified recently to see a client’s NHS income shown as expenditure in the accounts rather than income generating a loss in that year for the dental practice whereas he had actually made a substantial profit.

And what about the dentist who purchased a new practice but who wasn’t advised that, had not planning permission been required to convert a previous office into a second surgery? His solicitor, unfamiliar with the nuances and needs of the dental industry, hadn’t asked the right questions.

Investing in specialists

The dictionary defines an ‘investment’ as ‘to commit money to a particular use in order to earn a financial return’. That means there is a reasonable expectation that your investment in professional advice should result in an otherwise better outcome.

Savvy dental professionals appreciate the worth of seeking specialist advice from experts who understand the intricacies specific to the dental industry and how this specialist knowledge can affect long-term decisions.

Specialists from financial planners, banks, accountants, insurance companies and solicitors to business consultants, mentors, life coaches, marketing specialists and practice valuers, can offer the best terms and services specific to you and your needs. They understand your world—and its challenges.

Being outcome focused

The goal for most forward-thinking dental professionals is to be financially independent and for their families to be secure. The aim is to minimise tax liabilities, enjoy a strong capital base, good income and sufficient, quality time to enjoy the fruits of their labour.

Dental specialists are ideally suited to help you with any one of these scenarios; purchasing a practice; practice finance; property in a pension fund; practice insurance; business protection. They can structure the purchase of your practice property in the most tax-efficient way, and when selling your business, they will strive to guarantee you the best possible value.

Ensure every aspect of your financial future is safer with expert advice from specialists who have an affinity with the dental profession. From business development to investing and saving, tax planning to retirement and pensions; mortgages to finance—wouldn’t you feel more assured knowing that someone who understands your market and your needs is helping you to make those important decisions correctly?

Be risk averse

There are times when taking risks can help you to reap fantastic returns, but wouldn’t you prefer those risks to be calculated and supported by expert advice that increases your chance of success? Opt for convenience when that is all that matters but for those big life decisions, like your long-term financial success, choose a specialist partner and benefit from their thorough understanding of the dental industry. Take advantage of the step change in expertise and advice you receive when engaging someone who understands your language and tailors their services to the differing stages of your very unique career: someone who understands the unique products that are only available to dentists.

We have made it our business to establish links with other specialist dental professionals whom we recommend to our clients, those with whom we work closely, and whom we trust to help our clients develop their businesses. We recommend that you do the same.

Talking to clients, we trust to help our clients develop their businesses, we recommend that you do the same.
Lights off. LEDs on!

Be lightyears ahead: with innovative LED technology in innovative products such as the Synea Turbines, the new Alegra contra-angles, the new surgical instruments or our new piezo sclaer, Pyon 2. From now on work in daylight quality and look forward to longlasting lightsources that outshine everything else.

Rely on the competence of the worlds first manufacturer of sterilizable LED products.

More info now at wh.com
Dental lasers: A new tool for the treatment of periodontal and peri-implant infections

Dr Gerald Mettraux

Periodontal infections without proper treatment lead to the loss of teeth. The reason for periodontal infections is dental plaque. A central role in this process is given to black-pigmented gram-negative anaerobes, yet other factors such as smoking, immunodeficiency and diabetes can influence the formation and progression of plaque.

The classical treatment of periodontitis is based on the use of mechanical energy, for which the goal is to eliminate the infection and stabilise the attachment.

When clinical studies in the 1970s identified the possibilities and long-term results of periodontal therapies, dental implants were still a new concept in dentistry. Antibiotics and regenerative technologies were part of classical periodontitis treatment. Until recently, this had not changed much. The limits of periodontal therapy were hardly discussed. The maintenance of periodontally involved teeth was limited but the call for fixed tooth replacement was growing. The time for the artificial root-haft came. The field of implantology was developing rapidly and soon rivalled periodontal therapy in the field of restorative dentistry.

After years of unquestioned success, however, it was back to business. Dental implants were suddenly developing infectious lesions similar to those that occurred with periodontitis, and were failing. At the end of the 1980s, new diagnostics such as mucositis and peri-implantitis based on disease patterns and retrospective studies found their way into clinical practice.

It did not take long to realise that the aetiological factors were the same as those responsible for periodontitis. Risk factors also corresponded. Moreover, studies were showing that periodontitis could facilitate the formation of a peri-implantitis. It all came back to the classical periodontal therapy.

After a long period of scientific silence, the analogy of the classical periodontal treatment was extended to infections that occurred with dental implants. In 2000, N.P. Lang developed the CIST principle (Cumulative Interceptive Supportive Therapy). Depending on the outcome of the clinical and radiological examination, the treatment combined mechanical treatment, local disinfection, systemic use of antibiotics and surgical incision. Although the principle was good, the outcome was not satisfactory.

The need for a new treatment principle was evident. Studies have shown that peri-implant infections occurred after five years in 15 per cent of all placed implants (Berglundh 2002). Only one type of oral infections remained insurmountable: the surface of an implant could not be mechanically treated and was considered as ‘sacred’. After all, the rough implant surface is responsible for the osseo-integration. Therefore, the classical treatment of periodontal infections and its limits was not suitable for the treatment of peri-implant infections.

The following tissues play a major role in the treatment of periodontitis and peri-implant infections:

- Soft tissue: gingival, mucosa, epithelium, connective tissue; Hard tissue: enamel, dentine, cementum, bone, calculus, titanium; and
- Enzymes/pigment tissue: bacteria, viruses, fungi.

These can be divided into three groups: water, hydroxyapatites and enzymes/pigment.

Classical treatment is predominantly based on mechanical energy utilised in the form of instruments that are more than 1,000 times larger than the infections they are meant to treat and cannot reach far sites and rough surfaces. The laser as a light source can overcome this limit of the classical periodontal treatment by reaching far deeper into the tissue.

The outcome of the CIST therapy can be significantly improved by dental lasers. If laser treatment and the principle of multiphase periodontal therapies are added, a new concept is at hand that synergistically includes all successful methods.

Table 1 lists the absorption of the three laser systems in all three elements, as well as their utilizable effects. All three systems provide a decontamination of the surface. The most important attributes of the laser systems regarding decontamination are given in Table 2.

These laser systems can be utilised in all stages of the CIST treatment protocol including debridement and decontamination. Er:YAG and antibacterial Photodynamic Therapy (PDT) can be used for closed treatment of the implant surface, as well as the Diode laser which has a good effect on black pigmented bacteria. In addition, CO2 laser and Er:YAG can be used for open treatment. Studies are currently underway that may show if the use of antibiotics and disinfectants is still necessary.

Table 1: Characteristics of the three laser systems.

<table>
<thead>
<tr>
<th>CO2</th>
<th>Diode laser</th>
<th>Er:YAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorption</td>
<td>Water</td>
<td>Pigmets</td>
</tr>
<tr>
<td>Application</td>
<td>Open Surfaces</td>
<td>Pocket Surfaces</td>
</tr>
<tr>
<td>Decontamination</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Lesions with right parameters</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Calculus removal</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PDT</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

Wave length!
Icon® – the innovative caries treatment without drilling.

For incipient caries even a minimally invasive therapy will sacrifice healthy hard tissue. Icon now offers a revolutionary solution: First, the enamel surface is prepared with a specially developed HCl gel. The pore system is then filled, stabilized and sealed with a light-curing resin, thus arresting caries progression and preserving healthy hard tissue – without drilling.

Icon is indicated for incipient caries with non-cavitated enamel and a radiological lesion progression into the outer third of the dentine. Treatment sets are available for proximal and smooth surface applications. DMG. A smile ahead.

More information at www.drilling-no-thanks.com
Several studies have revealed the decontamination effect on the implant and tooth surface:

- **CO2 lasers:** G.E. Romanos, H. Deppe, T. Kato and D.W. Coffelt, etc.
- **Er:YAG lasers:** A. Sculean, F. Schwarz, R. Crespi and G.E. Romanos, etc.
- **Diode lasers:** A. Moritz and G. Bach, etc.

The treatment of a peri-implantitis can be performed in the following phases:

**Initial phase**
- Hygiene instructions, mechanical debridement with carbon curets, 3 x 30 sec treatment with diode laser or antibacterial PDT
- Retreatment after one week.
- Another laser treatment after one week in case clinical parameters show improvement.
- Surgical incision in case clinical parameters show no improvement.
- Evaluation after four weeks.

**Evaluation phase**
- Starting supportive treatment phase should infection be eliminated.
- Diode laser or PDT treatment or surgical incision in case the infection persists.

**Surgical phase**
- Flap elevation, mechanical debridement of the surface; calculus removal with Er:YAG or ultrasound; decontamination of the surface with Er:YAG, CO2 or diode lasers; augmentation; or reduction of the gingival tissue.

**Supportive treatment phase**
- Enrolment of the clinical and radiological parameters, hygiene instructions.
- Dependant on the presence of infection go back to the phases mentioned above.

Case 1
The left X-ray in Figure 1 shows acute peri-implantitis on implant 24 with Pus, BOP, probing depth 10 mm. Therapy consisted of mechanical debridement, 3 x 50 second treatment per session with a diode laser, two times repeated within three weeks.

The patient took 3 x 500 mg Flagyl over the course of seven days. There was no incision of the tissue, since the infection could be eliminated after triple use of the diode laser.

Case 2
The pictures on the left of Figure 2 show peri-implantitis on implant 25 that has not responded to diode laser treatment. An excessive amount of cementum was detected and removed with a Cavitron, followed by decontamination of the surface with a CO2 laser and augmentation of bone tissue.

Case 5
Figure 5 shows peri-implantitis in the maxillary front region. The lesion was extensive and did not respond very well to treatment with a diode laser. Therefore, the implant surface was surgically displayed. The CO2 decontamination was followed by augmentation with Bio-Oss and Bio-Gide. The figure shows the implant incision, as well as two X-rays before and three years after treatment.

An important factor for a successful peri-implant treatment is the periodontal condition of the residual dentition.

Diode lasers do not only have a decontaminating effect but also show biostimulating effects that can be of benefit for the healing of peri-implant defects.

**Conclusion**
The laser systems presented in this article offer new possibilities that augment the classical treatment of periodontal and peri-implant infections. Treatment protocols should be discussed. By selecting the correct wavelength, the causes of periodontal and peri-implant inflammation can be treated more effectively with decontaminating laser systems in the closed pockets (Diode, antibacterial PDT, Er:YAG) and in open flaps (CO2 laser, Er:YAG). The use of antibiotics can be reduced, owing to the decontaminating effect of the laser on tissues and surfaces.

The development of a new therapy for peri-implantitis offers new possibilities for periodontal treatment. Further studies are required to define the parameters for each working step in laser treatment.

**Contact Info**
Dr Gérald Mettraux is a practicing periodontist in Bern in Switzerland. He can be contacted at mettraux@bluewin.ch.
DENTAL SOUTH CHINA
INTERNATIONAL EXPO 2010
MARCH 2010 · GUANGZHOU, CHINA

www.dentalsouthchina.com

15th DENTAL SOUTH CHINA INTERNATIONAL EXPO 2010
March, 2010 · Guangzhou, China
Guangdong International Science & Technology Exhibition Company (STE)
Tel.: 0086-20-8354 9150, 8356 1174, 83558271 Fax: 0086-20-8354 9078
Email: dental@ste.cn
“Patients’ satisfaction towards functional reconstruction is very high”

An interview with Dr Bo Chen, Beijing University School of Stomatology

With increasing public awareness of the benefits of dental implants, an increasing number of patients are considering this treatment option. While current studies often focus only on clinical aspects such as osseo-integration, patient responses to psychological and psychosocial changes are only infrequently addressed. Dental Tribune International Group Editor Daniel Zimmermann spoke with Dr Bo Chen from the Department of Oral Implantology (Beijing University School of Stomatology in China) about her latest study on patients’ attitudes following implant placement and subsequent restoration.

Daniel Zimmermann: Dr Bo, studies on patient satisfaction figures of patients who have had maxillofacial surgery with implants are very rare, even in well-developed dental markets like Europe or the US. What motivated your study in China?

Bo Chen: Severe jaw-bone defects due to tumour resection present a major problem for functional restoration (mastication, swallowing and speech), which severely influences patients’ quality of life. Reconstruction of lost tissue in order to facilitate implant placement often means relatively complex maxillofacial surgeries accompanied by certain morbidities. Unlike Europe or the US, where patients suffering from head or neck tumours are mostly treated by ENT surgeons and plastic surgeons, oral and maxillofacial surgeons in China treat such tumours in addition to conducting the subsequent bone reconstruction. The sample of such patients at the Peking University School of Stomatology is quite large compared with what is available in the literature. Thus, I decided upon investigating patient satisfaction of this kind of treatment series.

What measures did you use for the study and how did you implement them?

Questionnaires in the form of a visual analogue scale (VAS) of patients’ treatment satisfaction were used in addition to OHIP-14 (Oral Health Impact Profile-14) in this retrospective study. Patients were invited to the clinic for these evaluations, which took 50 minutes on average. For those who could not come to the clinic, the evaluation was conducted by telephone.

What conclusions did you draw from these results? The patients’ satisfaction of functional reconstruction is very high. Their quality of life has greatly improved as demonstrated by the OHIP score. For financial reasons, only about 10 per cent of the patients are undergoing functional reconstruction with implants thus far. It is not easy to find figures on implant procedures in China. What is the estimated number of dentists placing implants and where are they located?

Indeed, it is quite difficult to find reliable figures! The estimated number of dentists placing implants on a regular basis in China may be around 500. Thus far, they are mostly located in university-affiliated dental hospitals in the large cities. Some, but not many, are in private practice.

Industry experts have forecasted a 30 per cent annual growth rate in the implant market in China. What prospects do you predict for the specialty from a clinical perspective?

The next decade will witness a boom in implant dentistry in China. There will be increasing demand for training and education in this field in order to guarantee standardised development. Owing to the shortage of competent clinicians, we foresee a critical period ahead of us. We certainly need to strengthen cooperation with any possible positive resources, including the industry, for training and educational programmes.

The Chinese Stomatological Association recently announced a new partnership with the International Congress of Oral Implantologists to promote implantology and improve quality of life. Is there a need for more public awareness in this field? There is definitely a need for more public awareness in the field. We are lagging far behind in this regard compared to Europe or the US.

Thank you very much for the interview.
Healthy choices for a healthy practice.

Thanks to its progressive design and integration capabilities, A-dec 500® has become a top choice in the industry. Now we’re happy to introduce another member to our product family: A-dec 300™. A complete system of dental equipment, A-dec 300 features a robust design with an ultra-thin profile. As one of the most compact dental equipment systems available today, its minimal moving parts simplify maintenance and cleaning. Simple. Smart. Stylish. It’s everything you need, nothing you don’t, and it’s all A-dec.

Contact A-dec at 1.800.547.1883 or visit www.a-dec300.com to learn more about A-dec 300 and our complete family of healthy solutions.
India is a vast and varied country with a population of a billion, of which 70 million are disabled—more than the population of the UK. I was looking forward than the population of the lion are disabled—more than a billion, of which 70 million are extremely poor. While the word ‘Delhi’ conjures up images of crowding, poverty and sickness, Delhi domestic terminal was like any other European airport—all Jasper Conran-designed hotels, five-star cuisine, designer shops and even a place to grab a coffee and a chocolate muffin. It seems Delhi has changed incredibly since my last visit three years ago.

After a good evening meal (during which I choked over the wine list, as luxury items cost three times more than in London; yet everyday living costs less than one-third), I caught the red-eye flight from Delhi to Jabalpur in the Madhya Pradesh state. Touching down in Jabalpur revealed a complete contrast. A solitary, simple, plain concrete terminus greeted us, surrounded by a barren and dusty landscape. Jabalpur is just like many other small towns in India: low rise, an army presence and an air of poverty and sickness, which I choked over the wine list, as luxury items cost three times more than in London; yet everyday living costs less than one-third.

Dr Neelam Kshirsagar, General Manager of Special Projects for Impact India, met me and immediately took me to the Lifeline Express. The train revealed two operating theatres, extreme heat. A quick tour revealed two operating theatres, three operating theatres, three beds in each, with waiting and recovery areas; three large, gleaming, industrial autoclaves; lecture room; stores; office; changing room; staff room; and finally the dental room, all wonderfully air conditioned!

I was introduced to Zelma Lazarus, the charismatic CEO of Impact India. She explained that the Lifeline Express was here to provide free treatment for all, but it could only be successful with the support and cooperation of the local community. Local hospitals had been contacted many months prior to arrival, and teams of local orthopaedic, eye, cleft lip and ENT surgeons agreed to give freely of their time. The local Hitkarmi Dental College was also supporting the project. The Director Dr Dhiranwani and his team would be assisting me for the duration of my visit.

Getting things moving

As only certain types of operations could be performed on the train, all patients had to be screened prior to commencement. The orthopaedic team alone saw more than 3,000 patients of which 200 were suitable cases. Lazarus explained that the only way to “get things moving” was to go straight to the ‘District Collector’. He is the head of local government and in India holds a position of considerable power and influence. He agreed to mobilise his network of officials to ensure that all in the town and outlying villages would be aware of the visit. The Collector also wanted to meet ‘the dentist from London’, and so at the daily appointed hour he arrived for the inaugural ceremony of the dental suite. He assured me that he was committed to spreading the word and promised me many patients for the next day. To
As a result, patients never turn up before 10:15. The team from the dental college arrived at 9:30. I had thought they would send a dental nurse to assist me but to my surprise two dentists, Dr Mangesh Ghate and the newly qualified Dr Pratiba Patel; a hygienist, Amos; and our nurse, Reena, welcomed me. Dr Patel and he would initially screen the patients and any non-urgent cases would be asked to return at a later date. Anyone else would be given a written prescription for treatment. This was of enormous assistance, as my Hindi is terrible and most patients spoke a local dialect (one of the 1,500 languages in India).

As my time was limited, we decided to focus on those most in need. True to the Colonel’s word, we were very busy. He proposed that as it was our first day they wanted to ensure I was fully supported! As a result, patients never turn up before 10:15. The team from the dental college arrived at 9:30. I had thought they would send a dental nurse to assist me but to my surprise two dentists, Dr Mangesh Ghate and the newly qualified Dr Pratiba Patel; a hygienist, Amos; and our nurse, Reena, welcomed me. Dr Patel and he would initially screen the patients and any non-urgent cases would be asked to return at a later date. Anyone else would be given a written prescription for treatment. This was of enormous assistance, as my Hindi is terrible and most patients spoke a local dialect (one of the 1,500 languages in India).

Some of those I examined had difficulty in opening their mouths and on further investigation, I noticed clinical changes on the buccal mucosa consistent with chewing tobacco and betel nut. By the end of my two days, we had seen and treated 62 patients for dental problems, a number that rose to an impressive 554 at the end of the three-week clinic. The medical teams on the Lifeline Express also treated 405 patients with eye problems, more than 100 for cleft lips, 85 patients with ear problems, and 211 sufferers of polio; in total a staggering 1,134 patients were treated.

Impact India’s ultimate aim is to raise awareness in communities of the medical benefits available to them, by encouraging them to demand treatment at local and regional health centres. Most poor Indians are illiterate and unaware of their right to treatment. For instance, in Madhya Pradesh those below the poverty line are entitled to 500 (US$850) in treatment a year, paid for by the state. While funds are available to treat those below the poverty line, less than 10 per cent of the allocated funds reach those in need.

On my final day, I asked Lazarus what her ultimate dream for the Lifeline Express would be. “Neil, I hope that one day the train becomes deficit. If we can educate and inform people of their rights, treatment will be fully provided locally and our train will be surplus to requirements”.

Here’s to hoping!
**COMPREHENSIVE ORTHODONTICS**
From a Leading American Dental Continuing Education Center

**Learn World Class**

**High Education Standard**
IN TWO FORMATS

- Fully accredited, with 25 years of experience teaching Ortho and 10 yrs of experience in Internet Assisted Training (IAT) Program
- You will be able to do a wide variety of cases, including the most difficult, with our comprehensive training
- Lifetime Free Retake policy in either live or internet format for the rest of your career...the best support in the industry
- Study at your own pace, on your own time, from anywhere in the world = less time away from your practice
- Regional Locations allow students from all areas of the world access to live portion

**Internet Assisted Training**

300 Hours Self Study
+ 10 Days Live Seminars in 3 modules

**IAT MODULE 1 LOCATIONS & DATES**

**Hong Kong**
June 4-7, 2010
Beijing, China November 4-7, 2009
Sacramento, CA, USA February 19-22, 2010
Tel Aviv, Israel April 26-29, 2010
Dubai, UAE March 23-26, 2010

**Come experience our education for yourself!**

- Cases presented to show the basics of orthodontic diagnosis
- Treatment selection and alternatives
- Introduction to software, computer cephal tracings, model predictions with VTGs
- Appliances and wire types

**High Tech Teaching**
At Progressive, we use technology to give us every advantage in the classroom and the clinic
- iPSoft™ diagnostic software (included free with series): get the best diagnosis every time
- Online Case Diagnosis: get instructor help at any time
- Clinical Videos: help you visualize our concepts
- Online Forum: discuss ortho with thousands of colleagues

**1 DAY FREE INTRO CLASSES**

Beijing November 8, 2009
Ho Chi Minh City November 13, 2009
Shanghai November 10, 2009
Kuala Lumpur November 14, 2009
Bangkok November 12, 2009
Medan November 15, 2009

Contact us to reserve your seat today!

Aliso Viejo, USA • San Jose, USA • Sacramento, USA • Seattle, USA • Phoenix, USA • Houston, USA • Detroit, USA • Atlanta, USA • Miami, USA • Washington DC, USA • New York, USA • Bilbao, Spain • Madrid, Spain
Amsterdam, Holland • Vienna, Austria • Germany • London, England • Tel Aviv, Israel • Dubai, UAE • Singapore • Sydney, Australia • Melbourne, Australia • Auckland, New Zealand • Hong Kong • Beijing, China

INFO@POSORTHO.NET
WWW.POSORTHO.COM
+1 714 973 2266 (USA)
+61 2 8883 2122 (Australia)
+65 6444 0546 (Singapore)
+34 94 836 1096 (Spain)
+31 20 647 2272 (Holland)
+43 7259 32028 (Austria)

ADA CERP | Continuing Education Recognition Program