Step-by-step

Laser cavity preparation



A cavity preparation using a laser can maintain more tooth structure, and research has shown that patients prefer laser technology. Jose Marcano, DMD, who first used the Er,Cr:YSGG laser in his practice in 2005 and has lectured, authored and contributed to numerous research projects on the wavelength and its applications in dentistry, has shared his Er,Cr:YSGG cavity preparation method in a step-by-step guide. In a recent case study, Marcano stated that performing cavity preparations with the Er,Cr:YSGG laser offers many benefits for the patient, not the least of which is the possibility of completing the preparation without the need for injectable anesthetic. The ability to perform cavity preparations without anesthetic using an Er,Cr:YSGG laser on a reliable basis requires practice and repetition, but once the dentist has developed clinical confidence in preparing cavities without anesthetic, these types of procedures can be a powerful growth engine for the entire practice—both professionally and clinically. In the case study, Marcano and his team demonstrate the use of the Er,Cr:YSGG laser to complete a Class II cavity preparation on tooth #5 with no local anesthetic.

A copy of the step-by-step cavity preparation by Marcano can be downloaded from http://go.biolase.com/laser-cavity-prep-guide.

Source: Biolase

Dental hygienist among

Best jobs for women

A job search portal has recently rated the dental hygienist profession the fourth best job for women. Owing to an increasing demand for dental care services, which is primarily attributable to demographic changes, dental hygiene is one of the fastest growing professions in the US CareerCast, a US job search portal that offers national job listings from across North America, stated in its report about female job opportunities, that healthcare is an industry in which women are well represented.



Women do in fact make up the majority of the workforce in dental hygiene. CareerCast also found that the annual median wage of dental hygienists is $70,201, with a projected growth outlook of 27 per cent. Actuaries, advertising and promotion managers, and biomedical engineers preceded dental hygienists on their ranking of best jobs for women. According to the US Department of Health and Human Services, the profession will grow by up to 28 per cent from 2012 to 2025. The department estimates that there were about 153,600 dental hygienists in the national healthcare workforce in 2012. Until 2015, approximately 42,200 dental hygienists will leave and 91,000 new hygienists will enter the workforce.

Blueberry extract

A promising agent for new periodontal therapy

Periodontal disease is one of the most common microbial infections in adults. In order to treat periodontitis in its severe form, dentists often use antibiotics. However, researchers have now found that blueberry extract has a comparable antibacterial and anti-inflammatory effect and could thus replace antibiotic medications in periodontal disease management.

In a laboratory test series, researchers at Université Laval in Quebec tested the effectiveness of *Vaccinium angustifolium* Ait., an extract from the wild lowbush blueberry, against *Fusobacterium nucleatum*, one of the main species of bacteria associated with periodontitis.



They found that the polyphenol-rich extract successfully inhibited the growth of *F. nucleatum*, as well as its ability to form biofilms. This property may result from the ability of blueberry polyphenols to chelate iron, the researchers said. In addition, the extract blocked a molecular pathway involved in inflammation.

"This dual antibacterial and anti-inflammatory action of lowbush blueberry polyphenols suggests that they may be promising candidates for novel therapeutic agents," the researchers concluded.

The study, titled "Wild Blueberry (Vaccinium angustifolium Ait.) Polyphenols Target *Fusobacterium nucleatum* and the Host Inflammatory Response: Potential Innovative Molecules for Treating Periodontal Diseases", was published online on Sept. 4 in the *Journal of Agricultural and Food Chemistry*.

Study investigates

Attitudes towards drug screenings in dentistry

A visit to the dentist has the potential to be more than a dental check-up, researchers from the Columbia University Mailman School of Public Health have found. From a survey of US dentists on integrating preventive screening and testing alongside dental care, they found that 77 per cent of dentists ask patients about illicit drug use and 54 per cent of dentists believe that such screenings should be their responsibility.



[PICTURE: ©HAMSTERMAN]

In the study, the researchers used the responses by 1,802 US dentists on whether they include drug use questions in their health history forms and whether they generally consider substance abuse screenings part of their responsibility. Data was taken from a nationally representative survey by the American Dental Association Survey Center conducted from 2010 to 2011. They found that sex, age and date of graduation were associated with the belief that drug screenings are part of a dentists role. Younger dentists were more likely to report that their health history form included questions about substance misuse than were older dentists. Similarly, at 62 per cent, dentists under the median age of 53 were more likely to regard screening for illicit drug use as part of a dentist's role, compared with their more senior counterparts at 47 per cent. The study, titled "Screening for Substance Misuse in the Dental Care Setting: Findings from a Nationally Representative Survey of Dentists", was published online on July 2 in the *Addiction journal*.

SMART^{M} dental diode laser —

Versatile and ingenious



LASOTRONIX—a Polish manufacturer—is launching a new diode based laser platform for dentistry, the SMART^{M} series with a variety of most effective wavelengths increasing a number of applications. SMART^{M} is offered as a combination of two lasers in one package: 10 W at 980 nm wavelength for a wide range of applications in microsurgery, endodontics, periodontology and whitening as well as 400 mW at 635 nm wavelength for cold therapies like biostimulation and photoactivated disinfection. Combining two wavelengths in one device made our dental laser unique and one of the most advanced in the world for all soft tissue procedures. SMART^{M} is equipped with a wide range of fibers, application end tips and an advanced user interface, which makes the unit one of the most versatile dental lasers known so far. It is also upgradable in the field by other wavelengths if needed. If you want to join us and promote our unique innovation please kindly contact us.

Source: LASOTRONIX

Periodontal disease:

Meet your new worst enemy

After years of clinical research, both in the laboratory and in the field, a new protocol for treating periodontal disease has emerged for Er,Cr:YSGG laser dentists and periodontists. Periodontal disease remains one of the most prevalent oral health issues in the world today and the number of patients affected with mild to severe periodontitis is growing.



[PICTURE: ©OCSKAY BENCE]

Research has shown that periodontal disease may be associated with other chronic inflammatory conditions, such as diabetes and cardiovascular disease. Additional reports have linked periodontitis to chronic illnesses, such as rheumatoid arthritis, Alzheimer's disease and even cancer. As a result, it is incumbent on all dental professionals to play a more active role in the treatment and prevention of the disease.

In recent years, a proliferation of published research and studies have shown that the Er,Cr:YSGG laser wavelength is an effective tool for treating periodontitis. Using specially designed radial firing laser tips that create a corona of laser energy in the periodontal pocket, the laser has been proven to be an especially effective instrument for the minimally invasive removal of both subgingival inflamed tissue and calculus deposits. This unique combination, as discussed in the literature, sets the laser apart from other methods of treating periodontitis with a laser-based approach.

Source: Biolase

24. Internationale Jahrestagung der DGL

WELLENLÄNGEN

www.dgl-jahrestagung.de www.startup-laser.de

27. und 28. November 2015
in Berlin
Hotel Palace

Kongresspräsident:
Prof. Dr. Norbert Gutknecht
Aachen

Programmvorschau

Kongresseröffnung
DGL-Präsident Prof. Dr. Norbert Gutknecht/Aachen
Laser Supported Reduction of Specific Microorganisms in the Periodontal Pocket with the Aid of an Er,Cr:YSGG laser

Gastvorträge

Prof. Dr. Jens Malte Baron/Aachen
Untersuchung der biologischen Wirkung von Lasersystemen mittels dreidimensionaler In-vitro-Hautmodelle

Prof. Dr. Andreas Braun/Marburg
Der 445 nm-Halbleiterlaser in der Zahnmedizin – Einführung einer neuen Wellenlänge

Dr. James Carroll/Chesham (GB)
Debonding von Keramikbrackets – Eine minimalinvasive Aachener Lasertechnik

Dr. Marina Polonsky/Ottawa (CA)
Pain perception and need for local anesthesia during caries removal in class 1–5 cavity preparations using Er,Cr:YSGG laser – A prospective clinical study

Dr. Alin Odor/Constanta (RO)
Clinical Study of Er,Cr:YSGG (2,780 nm) and diode (940 nm) laser supported periodontal treatment concept according to Gutknecht

Dr. Ioannis Papadimitriou/Athen (GR)
Management und Entfernung von gingivalen Hyperpigmentierungen mittels Diodenlaser

Dr. Jaana Sippus/Vaasa (FI)
Sleep apnea and snoring therapy using an Er,Cr:YSGG laser

Dr. Habib Zarifeh/Beirut (LB)
Crown lengthening in Soft and Hard tissues in the esthetic zone

Prof. Dr. Gerd Volland/Sevilla (ES)
Die Farbe machts!

Priv.-Doz. Dr. Jörg Meister/Bonn
Abtrag von Dentin mit einem diodengepumpten Er:YAG-Laser – erste Ergebnisse

Dr. Dimitris Strakas/Thessaloniki (GR)
Bleaching – with Er,Cr: YSGG laser

Dr. Thorsten Kuypers, M.Sc./Köln
1 Jahr NightLase-Anti-Schnarch-Therapie – erste Erfahrungen

Dr. Joshua Weintraub/Stevenson, MD (US)
Using the First 9.3 µm CO_2 All-tissue Laser for Anesthesia-Free Caries Removal and Cavity Preparation

Prof. Dr. Peter Rechmann/San Francico (US)
In-vivo-Fissurenkaries – Prävention mit einem kurzgepulsten CO_2-Laser und Fluoridlack

Separates Programm für Helferinnen

Informationen bereits unter: www.mundhygienetag.de

Organisatorisches

Kongressgebühren

Zahnarzt (DGL-Mitglied)	185,– €*
Zahnarzt (Nichtmitglied)	220,– €*
Zahntechniker/Assistenten (mit Nachweis)	90,– €*
Studenten (mit Nachweis)	25,– €*

*Auf die Kongressgebühr wird keine MwSt. erhoben.

Programm Helferinnen

Helferinnen (Freitag – Vorträge)	99,– € zzgl. MwSt.
Helferinnen (Samstag – Hygiene oder QM)	99,– € zzgl. MwSt.

Tagungspauschale (alle Teilnehmer) 98,– € zzgl. MwSt.

Die Tagungspauschale ist für jeden Teilnehmer verbindlich zu entrichten (umfasst Kaffeepausen, Tagungsgetränke und Imbissversorgung).

Abendveranstaltung der DGL
Am Samstag, 28. November 2015, ab 19.00 Uhr
Hotel Palace, Bon Dia Restaurant
Kosten pro Person 75,– € zzgl. MwSt.
(Im Preis enthalten: Speisen, Getränke und Live-Musik)

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Fortbildungspunkte
Die Veranstaltung entspricht den Leitsätzen und Empfehlungen der KZBV vom 23.09.05 einschließlich der Punktebewertungsempfehlung des Beirates Fortbildung der BZÄK vom 14.09.05 und der DGZMK vom 24.10.05, gültig ab 01.01.06. Bis zu 16 Fortbildungspunkte.

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24. INT. JAHRESTAGUNG DER DGL

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Für die **24. Internationale Jahrestagung der DGL e.V.** am 27./28. November 2015 in Berlin melde ich folgende Personen verbindlich an. ONLINE-ANMELDUNG UNTER: www.dgl-jahrestagung.de

Name/Vorname/Tätigkeit	DGL-Mitglied	Programm Helferinnen
	❑ ja ❑ nein	❑ Vorträge (Freitag) ❑ Seminar A (Samstag) ❑ Seminar B (Samstag) Bitte Zutreffendes ankreuzen
	❑ ja ❑ nein	❑ Vorträge (Freitag) ❑ Seminar A (Samstag) ❑ Seminar B (Samstag) Bitte Zutreffendes ankreuzen

Abendveranstaltung der DGL (Samstag, 28. November 2015, ab 19.00 Uhr): ..... (Bitte Personenzahl eintragen.)

Praxisstempel

Die Allgemeinen Geschäftsbedingungen der OEMUS MEDIA AG erkenne ich an.

Datum/Unterschrift

E-Mail (Bitte eintragen!)