NEUE ARBEITSGRUPPE PARODONTOLOGIE E.V.

Inhalt:

EDITORIAL

Der Wille zur Prävention …

Auf der DGP-Tagung in Erfurt konnten wir wieder einmal hören, dass uns die skandinavischen Länder in der Prävention und dem Zahnerhalt weit voraus sind. Die Mundgesundheit ist in jeder Altersgruppe besser als in Deutschland, und es bleiben viel mehr Zähne viel länger erhalten.

Der schwedische Kollege führte diesen Vorsprung unter anderem darauf zurück, dass in Skandinavien die Kinder- und Jugendzahnpflege in der Hand des staatlichen Gesundheitsdienstes liegt. Des weiteren erinnerte er etwas ironisch daran, dass Zähne ja in der Regel vom Zahnarzt gezogen werden und nicht von selbst aus dem Mund verschwinden …

Sind schwedische Zahnärzte also eher erhaltungsorientiert? Zumindest fängt die Ausbildung dort nicht mit 5 Semestern Zahnersatz an, bevor das erste Mal die Rede von Erhaltung ist. Es ist zumindest vorstellbar, dass dieser Umstand die persönliche Einstellung des Absolventen lebenslang prägt.

Trotz aller Lippenbekenntnisse zu Prophylaxe und Zahnerhaltung: Die Zahnmedizin in Deutschland ist immer noch eine Reparaturmedizin. So wie vor 30 Jahren alles, was nicht bei drei auf den Bäumen war, überkront und verblockt wurde, wird heute auf Teufel komm raus gerupft und gedübelt – die Parodontologie fristet bestenfalls ein Randdasein, und in den Fällen, die PAR-therapiert werden, wird an Vor- und Nachbehandlung gespart, so dass man nach folgerichtig eingetretenem Rezidiv im Brustton der Überzeugung folgern kann: Siehste, bringt ja doch nix das Ganze Gekratze auf Dauer …

Unsere Standespolitik fördert Zahnerhaltung und Prävention? Schauen wir doch mal in die Neue GOZ … PAR: unter dem Strich ± 0. Füllungen? Weniger.

Aber hieß es nicht, da sei eine Steigerung von 6% drin gewesen? Wo ist die denn? Man braucht nur in die Prothetik und Implantologie schauen: Steigerungen bis zu 48%. Soweit zur Förderung der Zahnerhaltung.

So lange es immer noch das meiste Geld dafür gibt, einen erhaltbaren Zahn herauszureißen und ein Implantat hineinzudübeln oder reihenweise kariesfreie Zähne für eine teleskopierende Versorgung herunter zurödeln, wird sich an unserem schlechten Platz im Zahnarzt-PISA auch kaum etwas ändern.

Es wird Zeit, Bescheidenheit zu lernen! Die allerbesten Implantate macht Mutter Natur. Sie hat mehrere Millionen Jahre Entwicklungsvorsprung.

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Er:YAG laser treatment in supportive periodontal therapy

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Key words: attachment level; ER: YAG laser; microbiology; supportive periodontal treatment

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Abstract

Objective: To assess clinical and microbiological outcomes of an Er:YAG laser in comparison with sonic debridement in the treatment of persistent periodontal pockets in a prospective randomized controlled multicentre study design.

Material and Methods: A total of 78 patients in supportive periodontal therapy with two residual pockets were included, 58 were available for the whole follow-up period. Root surfaces were instrumented either with a sonic scaler (Sonicflex® 2003 L) or with an Er: YAG laser (KEY Laser® 3). Clinical attachment levels (CAL), Probing depths (PD), Plaque control record (PCR) and Bleeding on prob ing (BOP) were assessed at baseline, 13 and 26 weeks after treatment. In addition, microbiological analysis was performed employing a DNA diagnostic test kit (micro-IDent® Plus).

Results: Probing depths and CAL were significantly reduced in both groups over time ($p < 0.05$), without significant differences between the groups ($p > 0.05$).
BOP frequency values decreased significantly within both groups ($p < 0.05$), with no di□erence between the laser and the sonic treatment ($p > 0.05$). PCR frequency values did not change during the observation period ($p > 0.05$). Microbiological analysis failed to expose any significant di□erence based on treatment group or period.

Conclusion: Employing both sonic and laser treatment procedures during supportive periodontal care, similar clinical and microbiological outcomes can be expected.

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Periodontal therapy regimens comprise non-surgical and surgical anti-infective approaches as well as systematic follow-up care. The importance of supportive therapy within a periodontal treatment regi-men has been shown in several studies (Axelsson & Lindhe 1981, Lindhe & Nyman 1984, Kaldahl et al. 1996).

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Thus, supportive periodontal care (SPC) must be regarded as an integral part of periodontal management (American Academy of Periodontology 2000, Cohen 2003). The overall aims of SPC are: (i) to pre- vent the recurrence and progression of periodontal disease in patients previously treated for gingivitis, periodontitis, or periimplantitis; (ii) to prevent or reduce the incidence of tooth loss by monitoring the dentition and any prosthetic replacements of the natural teeth; and (iii) to increase the probability of locating and treating, in a timely manner, other diseases and conditions found in the oral cavity (Committee on Research, Science & Therapy of the American Academy of Periodontology 1998). Any therapy designed to achieve these goals has to be based on clinical evidence and provide successful clinical outcome. It is not yet clear which regimen is most effective for periodontal supportive therapy.

Supportive periodontal care can be performed by the mechanical removal of subgingival deposits of plaque and calculus with hand instruments (Pattison 1996). Sonic and ultrasonic scalers are also valuable tools in SPC. The vibration of the scaler tips is the main force that removes the deposits from the dental surface. With respect to ultrasonic devices, there are two other mechanisms that may aid in the removal of the deposits from the root surface. The first mechanism is high-energy shock waves produced by the cavitation occurring within the coolant supply (Laird & Walmsley 1991, Busslinger et al. 2001); the second is acoustic microstreaming. These patterns are formed close to the surface of the scaler tip (Khambay & Walmsley 1999). No difference concerning clinical outcome between power-driven and manual debridement in the treatment of chronic periodontitis was found (Drisko et al. 2000, Tunkel et al. 2002, Walmsley et al. 2008). Studies have shown that smoother surfaces are obtained with manual curettes than with sonic or ultrasonic instruments (Schlageter et al. 1996). However, no significant difference in the attachment and growth of gingival fibro-blasts on periodontally diseased root surfaces treated with either hand or ultrasonic instrumentation has been observed (Khosravi et al. 2004). It was concluded that both methods could equally provide biologically compatible root surfaces for the attachment of gingival tissues.

The use of laser radiation has been expected to serve as an alternative or an adjunctive treatment to conventional mechanical periodontal therapy. The Er:YAG (erbium- doped: yttrium, aluminium and garnet) laser seems to possess character- istics most suitable for the non- surgical treatment of chronic periodontitis. Research conducted so far has indicated that its safety and effects might be expected to be within the range reported for conventional mechanical debridement (Schwarz et al. 2008). It could be demonstrated that Er:YAG laser treatment in supportive periodontal care showed similar effects on clinical and microbiological parameters as ultrasonic instrumentation (Tomasi et al. 2006). The only difference was less treatment discomfort in the laser group. This

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difference could be confirmed for laser *versus* sonic instrumentation as well (Braun et al. 2010). However, laser treatment during supportive peri- odontal care and to compare the results with the outcomes of sonic instrumentation, testing the hypothe- sis that Er:YAG laser treatment can improve both clinical and microbio- logical parameters at sites of residual periodontal pockets.

Material and Methods

A total of 78 patients with chronic periodontitis (30 women, 28 men, mean age: 57 ± 10 years, all non- smokers), each of whom presenting with two residual periodontal pockets at two teeth, were treated using a sonic scaler (Sonicflex 3000 L; KaVo, Biberach, Germany) and an Er:YAG laser (KEY Laser® 3; KaVo, Biberach, Germany) in a prospective randomized controlled splitmouth multicentre study design. The participating centres were: (i) Department of Operative Dentistry and Periodontology, University Dental Clinic Freiburg (28 patients), (ii) Department of Periodontology, University Hospital Carl Gustav Carus at the TU Dresden (30 patients), (iii) Department of Periodontology, Operative and Preventive Dentistry, University Dental Clinic Bonn and (11 patients) and (iv) Department of Operative Dentistry and Periodontology, Johannes-Gutenberg University Mainz (9 patients).
Inclusion criteria were: patients with treated chronic periodontitis, no systemic diseases, two single rooted teeth with residual periodontal lesions in one jaw with probing depth >5 mm and bleeding on probing (BOP) (+) or probing depth (PD) > 6 mm and BOP (±) (Claffy & Egelberg 1995, Matuliene et al. 2008), respective teeth in different quadrants and not next to each other, no clinically observable sub- or supragingival calculus, systematic periodontal therapy no longer than 2 years ago, no administra- treatment in SPC is rarely evaluated. Thus, the aim of the present study was to assess the impact of Er:YAG laser tion of antibiotics during the last 12 weeks. Drop-out criteria for the follow-up examinations were set as follows: more than 2 mm increase in pocket depth, development of a periodontal abscess, administration of antibiotics between follow-up appointments, necessary re-treatment of the investigated teeth.
The primary outcome variable was change in clinical attachment level (CAL). Secondary outcome variables were probing depths (PD), (BOP), plaque [Plaque Control Record (PCR)] and amount of periodontal pathogens. All measurements were performed at baseline, 13 and 26 weeks after treatment.
All patients had been informed about the study and had given their informed consent. The study was conducted in full accordance with the declared ethical principles (World Medical Association Declaration of Helsinki, version VI, 2002) and had been approved by the Ethics Committee of the University of Freiburg (reference number: 198/05).

Treatment procedure

Teeth under study were assigned to laser (test) or sonic (control) instrumentation (Fig. 1). The sequence of the different treatment devices was randomly assigned by use of a computer generated random number table. Considering the tooth sequence upper right last molar to upper left last molar and lower left last molar to lower right last molar, the first diseased tooth in this sequence was assigned firstly to the randomly determined treatment device, leaving the remaining tooth to be treated with the other device.
The sonic device was turned to power setting "1" with the slim-line shaped per-

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iodontal insert No. 60. The scaler tip shows a predominantly ellipsoid oscillation pattern. According to the manufacturer, the maximum amplitude of oscillation was 120 Im at 6.5 kHz for the level "1" power setting (DIN EN ISO 1506:2000-07). The Er:YAG laser (KEY Laser® 3; KaVo) was operated with the 2061 handpiece and the 1.65 light wedge with an energy setting of 120 mJ at the laser panel, representing an effective energy of 97 mJ at the working tip (energy density: 14.7 J/ cm^2). Laser treatment was performed from coronal to apical with an inclination of the fibre tip of 15–20° to the root surface. The pulse repetition rate was 10 Hz with continuous water flow and the fluorescence feedback system switched off, as otherwise the laser would only have been activated if calculus was detected. Both, sonic and laser therapy in one patient were performed by the same operator, allowing an intra-experimental com- parison of the values.

Fig. 1. Er:YAG laser treatment of tooth 21 (a) and sonic instrumentation of tooth 22 (b) during supportive care.

The endpoint of treatment was time-dependent. As the patients presented after complete periodontal debridement, the teeth under study had clinically judged clean root surfaces. Therefore, the aim of the therapy was to remove the subgingival biofilm. Treatment time was set to 20 s per diseased root surface to achieve biofilm removal. The whole circumference of the tooth was divided into six root surfaces, resulting in a maximum treatment time of 2 min per tooth.

All operators were calibrated in the Department of Operative Dentistry and Periodontology in Freiburg. Test and control sites were treated at the same visit.

Clinical examinations

Pre- and post-treatment examinations were performed by one examiner in each participating centre, who was blinded in terms of which treatment had been performed.

Impressions of the upper and lower teeth were taken to fabricate customized splints adapting to the teeth by friction fit. These splints were used to assure reproducible measuring points for both probing depths and relative attachment status. There- fore, the individual splints were fabricated for every subject by a vacuum forming process. The oral and facial surfaces of the material were trimmed just short of the tooth equator. For every site under study, a groove was made into the splint and a line formed for the periodontal probe, facilitating a reproducible probe position during the measurements.

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The following clinical parameters were examined at baseline and at each follow-up examination for all lesions under study: PD using a PCP UNC 15 (Hu-Friedy, Chicago, IL, USA) periodontal probe, relative CAL, plaque [PCR (O'Leary et al. 1972)] and BOP assessed 30 s after probing. Subgingival plaque samples were harvested for microbiological evaluation. All values were documented by a blinded examiner who was not involved in the treatment of the patients. Measurements were performed by one experienced periodontal examiner, allowing an intra-experimental comparison of the values. The examiner underwent calibration training in the Department of Operative Dentistry and Periodontology in Freiburg at the beginning of the study. Percentage agreement with another experienced examiner within 1 mm was > 96%.

Microbiological examination

Prior to obtaining the samples and any examination procedure, the selected sites were cleaned supragingivally to avoid contamination. The tooth was air-dried, and a gauze roll was inserted into the vestibule to prevent contamination by saliva. At each site under study, a sterile paper point was inserted, kept in place for 20 s and transferred to vials containing transport medium (Cary-Blair-Transport medium; Hain, Neheren, Germany). The following periodontal pathogens were analysed with a DNA periodontal diagnostic test kit (micro-IDent® Plus; Hain, Nehren, Germany) at baseline and 13 and 26 weeks after treatment: *Aggregatibacter actinomycetemcomitans* (*Aa*), *Porphyromonas gingivalis* (*Pg*), *Tannerella forsythia* (*Tf*), *Treponema denticola (Td), Prevotella intermedia* (*Pi*), *Parvimonas micra* (*Pm*), *Fuso- bacterium nucleatum/periodonticum* (*Fn*), *Campylobacter rectus* (*Cr*), *Eubacterium nodatum* (*En*), *Eikenella corrodens* (*Ec*), *Capnocytophaga species* (*Cs*). Internal -standardization enabled the expression of the results as colony (CFU/ml).

Statistical analysis

A power-analysis was performed prior to the study to calculate the required sample size. Therefore, the effect size was set to 0.7 (Cohen 1988) with a clinically relevant mean difference of 1 mm between the pocket depths in the control and test group with an estimated standard deviation of 1.5 mm. For an alpha-error of 0.05 and a power of 0.8, a sample size of 52 subjects was calculated. For statistical analysis normal distribution of the values was assessed with the Shapiro–Wilk test. Since not all data were normally distributed, clinical values at baseline, 13 and 26 months after treatment were analysed with a non-parametric test (Wilcoxon) employing the SPSS®-software (SPSS® Statistics 17.0; SPSS Inc., Chicago, IL, USA). The Mann–Whitney test was used to evaluate differences between values in the test and control group. BOP, PCR and microbiological frequency values were analysed employing the chi-square test. Differences were considered as statistically significant at $p < 0.05$.

Results

Patient dropout

Of the 78 patients originally recruited for the study, only 58 were available for follow-up at week 26. The most frequent reasons for drop- ping out were administration of antibiotics because of bacterial infections in combination with flu, deteriora- tion of the periodontal status requiring immediate additional treatment, or lack of compliance including not respecting recall dates, or unwillingness to continue in the study.

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Clinical parameters

Both treatment modalities yielded statistically significant reduction in probing depths and relative clinical attachment levels (Table 1).

Table 1. Changes of clinical parameters 13 and 26 weeks after treatment with respect to baseline values

	Laser		Sonic	
	CAL	PD	CAL	PD
13 weeks				
Mean	−0.64	−0.95	−0.82	−1.22
SD	1.22	1.01	1.32	1.08
Median	−1	−1	−1	−1
Max.	3	1	4	
Min.	−5	−4	−4	−4
26 weeks				
Mean	−0.84	−1.18	−0.85	−1.24
SD	1.23	1.02	1.42	1.20
Median	−1	−1	−1	−1
Max.	2	0	4	2
Min.	−4	−4	−5	−5

Statistically significant changes for Clinical attachment levels (CAL) and Probing depths (PD) comparing baseline to both 13 and 26 weeks outcomes ($p < 0.05$) with no difference between laser and sonic group ($p > 0.05$). SD = standard deviation.

After laser instrumentation, the median PD of 5 mm (min: 4 mm, max: 9 mm) decreased to 4.24 mm (min: 2 mm, max: 7 mm) after 26 weeks (Fig. 2).

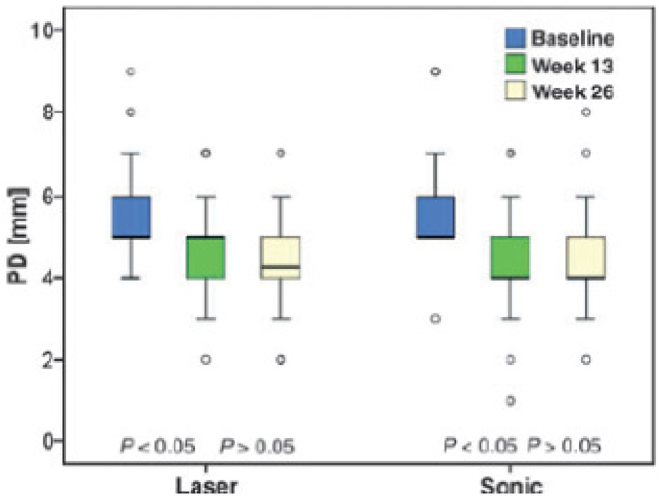

Fig. 2. Probing depths at baseline, 13 and 26 weeks after treatment with the laser and sonic device. Significantly lower values after both 13 and 26 weeks compared with baseline ($p < 0.05$) with no difference between 13 and 26 weeks ($p > 0.05$). Box plots show the median, first and third quartiles, minimum and maximum values (whiskers). Outliers are marked as data points and asterisks.

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In the sonic group a reduction in PD from 5 mm (min: 3 mm, max: 9 mm) to 4 mm (min: 2 mm, max: 8 mm) after 26 weeks could be observed ($p < 0.05$). Also the relative clinical attachment levels decreased from 9 mm (min: 4 mm, max: 13 mm) to7.5 mm (min: 3 mm, max: 11 mm) in the laser group and from 9 mm (min: 6 mm, max: 14 mm) to 8 mm (min: 4 mm, max: 12 mm) in the sonic group (Fig. 3) ($p < 0.05$).

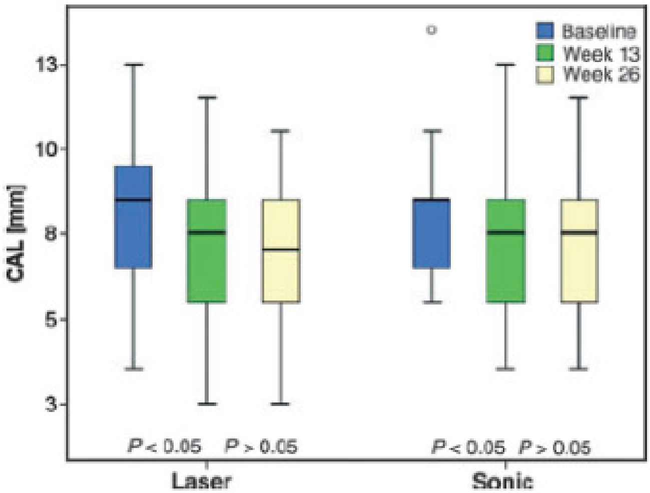

Fig. 3. Clinical attachment level at baseline, 13 and 26 weeks after treatment with the laser and sonic device. Significantly lower values after both 13 and 26 weeks compared with baseline ($p < 0.05$) with no difference between 13 and 26 weeks ($p > 0.05$). Box plots show the median, first and third quartiles, minimum and maximum values (whiskers). Outliers are marked as data points and asterisks.

No significantly different values were measured between the two groups for both PD and CAL ($p > 0.05$). Values for the BOP frequency did not show statistically significant differences between the laser (79.3%) and the sonic group (77.6%) ($p > 0.05$). After 13 months, the frequency values decreased significantly within both groups ($p < 0.05$), with no difference between the laser (48.3%) and the sonic (50.0%) treatment ($p > 0.05$). The 26 months recall did not show a significantly different change in BOP frequency both in the laser (46.6%) and the sonic (53.4%) group ($p > 0.05$). Plaque (PCR) frequency values did not differ significantly in the laser (44.8%) and sonic (32.8%) group ($p > 0.05$) at baseline. No statistically significant change could be observed after 13 (laser: 34.5%, sonic: 32.8%) and 26 weeks (laser: 43,1%, sonic: 36,2%) (p > 0.05).

Microbiological parameters

Analysing the obtained plaque samples, all bacterial species under study could be detected. Frequency distribution was not different in the laser and sonic group at baseline ($p > 0.05$) (Fig. 4).

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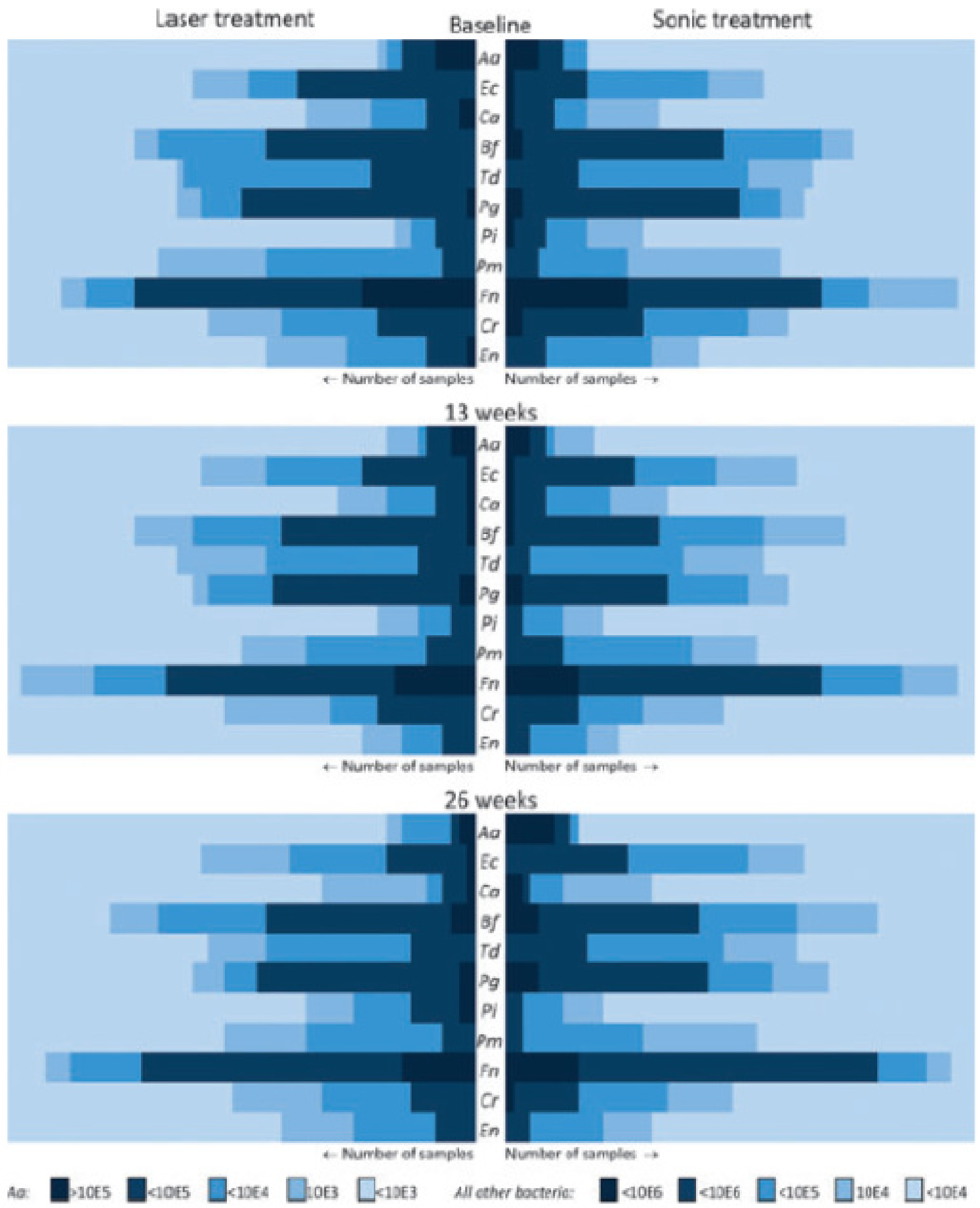

Fig. 4. Colony forming units (CFU/ml) of periopathogenic microorganisms before, 13 and 26 weeks after treatment with the laser and sonic device. Colours indicate the log number of every microorganism. Data are not linked to specific sites. The darker the shadowing of the boxes, the higher the amount of microorganisms. Data presentation according to Mombelli et al. (1995) and Bollen et al. (1998).

Evaluating the CFU values 13 and 26 months after treatment, no change of the bacterial load could be observed within each group ($p > 0.05$). Furthermore, no difference could be shown between the two treatment procedures both 13 and 26 months after treatment ($p > 0.05$).

Discussion

The present study showed a reduction of probing depths after both laser and sonic instrumentation during supportive periodontal care with no difference between the treatment procedures. Similar results were observed for the clinical attachment levels. The results are in accordance with the results of a study in patients with moderate to advanced periodontitis with a single episode of

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subgingival debridement (Sculean et al. 2004). Evaluating Er:YAG laser and ultrasonic root surface instrumentation, it was concluded that both therapies led to significant improvements of the investigated clinical parameters. Also other studies demonstrated that the clinical attachment gain following non-surgical periodontal therapy using an Er:YAG laser is comparable to that after ultrasonic scaling (Schwarz et al. 2003, 2005). In the present study, PCR values did not change significantly differently during the observation period. This indicates that the improved values for BOP, CAL and PD are not causally related to an improvement of oral hygiene. Moreover, the microbiological assessment did not reveal a change of the bacterial load over time. Thus, the improved clinical parameters might be explained by the root surface instrumentation and concomitant morphological changes (Schwarz et al. 2001) and/or removal of mineralized deposits. Another explanation for the improvements in the laser group could be that the Er:YAG laser might actually support a repair process at fibroblast level within the periodontal pockets with significantly higher fibroblast cell growth and more fibroblast attachment resulting in reduced probing depths and improved attachment levels (Pourzarandian et al. 2005, Crespi et al. 2006).

The Er:YAG laser irradiation for periodontal debridement was suggested to be not as aggressive as conventional treatment methods. Thus, the laser procedure showed only a minimal root cementum removal compared with conventional scaling and root planning (Eberhard et al. 2003). Particularly during supportive periodontal treatment, the primary goal is not calculus removal, as the amount of mineralized deposits on the root surface should have been removed previously. Thus, supportive periodontal care aims to remove a periopathogenic biofilm without affecting sound hard tissues of the root surface. Ultrasonic instrumentation of the root surface could be shown to remove less hard tissues than conventional hand instrumentation (Braun et al. 2005), but it could also be demonstrated that the aggressiveness of magnetostrictive and piezoelectric ultrasonic devices to root substance is significantly influenced by the scaler tip designs (Jepsen et al. 2004). As a consequence, the use of an Er:YAG laser and a sonic device can be suggested also for supportive periodontal treatment procedures. Comparing the two treatment groups, the present study failed to reveal significant changes for most periopathogenic bacterial species.

This result is in accordance with the outcome of a study assessing the microbiological effects of hand instruments, Er:YAG laser, sonic and ultrasonic scalers in patients with chronic periodontitis (Derdilopoulou et al. 2007). The various treatment methods resulted in a comparable reduction of the evaluated periodontal pathogens. Also other studies examined the antibacterial effect of the Er:YAG laser on periodontal pathogens and showed a bacterial effect for this treatment procedure (Ando et al. 1996, Ishikawa et al. 2003, 2004). A systematic review (Schwarz et al. 2008) compared laser treatment of chronic periodontitis to conventional mechanical therapy. A considerable percentage of the included studies demonstrated com- parable clinical results for both treat- ment types. However, despite an overall reduction of periopathogenic bacteria, no microbiological benefit was shown for laser therapy. A previ- ous study in a study examined the antibacterial effect of an Er:YAG laser and an ultrasonic device during periodontal supportive care (Tomasi et al. 2006). Subgingival microbiological samples were taken at baseline, 2 and 30

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days after treatment and evaluated using DNA–DNA hybridization against 12 periodontal disease-associated species. Both treatments resulted in reduction of the subgingival microflora. However, no significant differences in microbiologic composition were identified between the treatment groups at various time intervals. Thus, the results of the study failed to demonstrate any apparent advantage of using an Er:YAG laser for subgingival debridement during supportive periodontal care.

Employing different methods for root surface instrumentation that cause less discomfort and pain, it might be possible to increase the patient's compliance during non-surgical periodontal therapy and recall (Braun et al. 2003, 2007). Comparing Er:YAG laser and sonic treatment of residual periodontal pockets during supportive periodontal care, patients perceived less treatment discomfort associated with the laser therapy (Braun et al. 2010). Thus, there is a benefit in patient comfort despite the lack of achieving increased clinical parameters or microbiological out- comes with respect to conventional treatment procedures.

The present study indicates that both sonic and laser treatment procedures during supportive periodontal care are suitable to achieve similar clinical and microbiological outcomes. Furthermore studies have to evaluate the long-term stability of the treatment outcomes. Further- more, a cumulative effect of repeated treatment procedures should be assessed.

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Clinical Relevance

Scientific rationale of the study: Patients susceptible to periodontal disease have a high risk of reinfection. Biofilm removal during supportive periodontal treatment may be performed using manual or power-driven instruments. Dental laser systems are available for the same purpose. However, laser treatment in supportive periodontal treatment is poorly evaluated.

Principal findings: No clinical or microbiological differences were observed between sonic debridement and Er:YAG laser treatment of residual periodontal lesions during supportive therapy. Both treatment procedures were associated with clinical and microbiological improvements over time.

Practical implications: Both sonic debridement and Er:YAG laser treatment are equally effective for treating residual pockets in supportive periodontal therapy.

IN EIGENER SACHE

Sehr geehrte Kolleginnen,

sehr geehrte Kollegen,

wie Sie alle wissen, stellen die Banken im Februar 2014 auf das SEPA-Verfahren um. Dies bedeutet, wir brauchen zusätzlich zu Ihrer Bankverbindung, die wir bereits von Ihnen erhalten haben, wenn Sie am Lastschriftverfahren teilnehmen, die IBAN und die BIC.

Deshalb werden wir uns Ende des Jahres noch einmal an Sie wenden, um Ihre Kontodaten zu aktualisieren.

Die NAgP-News ist in erster Linie eine Mitgliederzeitschrift der **NAgP**. Übrigens ist die Redaktion für alle Textbeiträge dankbar. So könnte die News noch vielseitiger werden, wenn Sie ein Thema/eine Frage/eine Idee haben.

Wir wollen Sie an dieser Stelle nochmals auf unsere Tagung am 15./16. November 2013 in Leipzig hinweisen. Es wäre schön, wenn wieder mehr NAgP-Mitglieder an der Tagung teilnehmen würden.

Es ist uns auch in diesem Jahr wieder gelungen, ein hochkarätiges Programm zusammenzustellen. Für die Teilnahme an der 21. Jahrestagung der **NAgP** erhalten Sie 8 Fortbildungspunkte.

Des Weiteren bieten wir auch dieses Mal am Freitag 4 Vorkongresskurse an, davon 2 Hands-On-Kurse.

Wir würden uns sehr freuen, Sie auf der Tagung in Leipzig zu sehen.

Hier ist der Link für die Online-Anmeldung:

http://www.nagp.de/tagungen-und-termine/jahrestagung/online-anmeldung/

TAGUNGSANKÜNDIGUNG

21. Jahrestagung der NAgP e.V.

in Zusammenarbeit mit der Friedrich-Louis-Hesse-Gesellschaft, Zahn-, Mund- und Kieferheilkunde an der Universität Leipzig e.V.

pentahotel Leipzig, Großer Brockhaus 3, 04103 Leipzig

15.11.2013 **Mit dem Messer geht es besser - chirurgische Parodontitistherapie - was ist neu?**

Vorkongresskurse/Workshops

14.30 - 18.30 Uhr **Betreuung von Patienten nach regenerativen Eingriffen und Implantattherapie**
für ZMF, ZMP und DH

PD Dr. Pia-Merete Jervøe-Storm, Bonn

4 Fortbildungspunkte / 70,- €

maximal 50 Teilnehmer (es gilt die Reihenfolge der Anmeldungen)

14.30 - 18.30 Uhr **Regenerative Parodontitistherapie.**
Hands-On-Kurs

PD Dr. Adrian Kasaj, Mainz

4+1 Fortbildungspunkte / 150,- €

maximal 20 Teilnehmer (es gilt die Reihenfolge der Anmeldungen)

14.30 - 18.30 Uhr **Methoden zur plastischen Parodontalchirurgie,**
Rezessionsdeckungsverfahren für die Praxis
Hands-On-Kurs

Dr. Matthias Roßberg, Darmstadt

4+1 Fortbildungspunkte / 150,- €

maximal 20 Teilnehmer (es gilt die Reihenfolge der Anmeldungen)

14.30 - 18.30 Uhr **Medikamentöse Parodontitistherapie -**
aktuelles Vorgehen bei Diagnostik und Therapie

Prof. Dr. Dr. h.c. Holger Jentsch, Leipzig

4 Fortbildungspunkte / 90,- €

maximal 20 Teilnehmer (es gilt die Reihenfolge der Anmeldungen)

TAGUNGSANKÜNDIGUNG

21. Jahrestagung der NAgP e.V.

in Zusammenarbeit mit der Friedrich-Louis-Hesse-Gesellschaft, Zahn-, Mund- und Kieferheilkunde an der Universität Leipzig e.V.

16.11.2013 **Mit dem Messer geht es besser - chirurgische Parodontitistherapie - was ist neu?**

Hauptkongress / 8 Fortbildungspunkte

9.00 Uhr **Tagungseröffnung**
Prof. Dr. Dr. h.c. Holger Jentsch, 1. Vorsitzender der NAgP. e.V. und der GZMK

9.10 Uhr **Resektive Parodontalchirurgie - immer noch aktuell?**
PD Dr. Adrian Kasaj, Mainz

9.40 Uhr **Kann full-mouth scaling and root planing Parodontitischirurgie vermeiden?**
PD Dr. Pia-Merete Jervøe-Storm, Bonn

10.10 Uhr **Diskussion**

10.20 Uhr **Kaffeepause**

10.50 Uhr **Antibiotika bei chirurgischer Parodontitistherapie - eine zeitgemäße Therapie?**
PD Dr. Sigrun Eick, Bern

11.20 Uhr **Zahnerhalt vs. Extraktion - die Sichtweise aus der Oralchirurgie**
Prof. Dr. Hans-Ludwig Graf, Leipzig

11.50 Uhr **Zahnerhalt vs. Extraktion - die Sichtweise aus der Parodontologie**
PD Dr. Stefan Reichert, Halle/Sa.

12.20 Uhr **Diskussion**

12.30 Uhr **Mittagsbuffet**

13.30 Uhr **Therapie des Furkationsbefalls - sind regenerative Verfahren sinnvoll?**
OTA Dr. Thomas Eger, Koblenz

14.00 Uhr **7. Einsatz von Schmelzmatrixproteinen bei supraaveolären Taschen?**
Prof. Dr. Dr. h.c. Holger Jentsch, Leipzig

14.30 Uhr **Diskussion**

14.40 Uhr **Posterpreisverleihung der NAgP**

14.50 Uhr **Kaffeepause**

15.20 Uhr **Regenerative Therapie von Knochentaschen - ein Verfahren für die allgemeinzahnärztliche Praxis?**
Prof. Dr. Peter Eickholz, Frankfurt

15.50 Uhr **Innovative Konzepte zur Behandlung von multiplen Rezessionen**
Prof. Dr. Dr. Anton Sculean M.S., Bern/CH

16.20 Uhr **Diskussion**

16.30 Uhr **Schlusswort**

17.00 Uhr **Mitgliederversammlung der NAgP e.V.**

19.30 Uhr **Gesellschaftsabend**

IMPRESSUM

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Redaktion: Dr. Eva Streletz
Beirat: Prof. Dr. Dr. Holger Jentsch, PD Dr. Adrian Kasaj
Dr. Beate Schacher
(verantwortlich für dieses Heft)

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Urheber- und Gerichtsstand