



# Return on investment of dental laser education and technology

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**Innovation is key to beating** the competition and staying ahead of it. The current trend of Blue Ocean Strategy (creating uncontested market space) becomes applicable to dentistry as innovative practices are adopted. Lasers have become a tool of choice in dentistry in the last few years. Many dental professionals have incorporated lasers into their daily practice in order to provide high-end technology-based treatments to their patients.

Education on using dental lasers is certainly important in order to offer treatment within ethical considerations. An in-depth education makes a difference in performing the procedures with care and skill.

As with the technology, laser education requires a reasonable amount of financial resources. There is always an initial phase of doubt when such huge investments are involved, as, at first, the returns are not clear, promising and lined up.

## Is in-depth knowledge of lasers an absolute necessity?

According to the American Academy of Pediatric Dentistry's "Oral Health Policies & Recommendations", 2017 revised edition, the dental professional must receive didactic and experiential education and training on lasers before clinical use of the technology.

There is a great deal of information that can be obtained through online portals, manufacturers' pamphlets and brochures, and continuing dental education all over the globe, but the foundation of good dental laser practice is in-depth knowledge of the subject.

The dentist can certainly manage with knowledge of the laser as a tool combined with dental knowledge, but what makes the difference and sets a benchmark are the following key factors: (a) the level at which we want to educate our patients; and (b) the level at which we want to perform the procedures with legality in our respective countries. When true knowledge and information are combined, the likelihood of patients accepting laser as a treatment approach seems to increase. These are, indeed, the criteria that make a significant difference in our

practice. Knowing what we are doing and knowing it the best is the way forward.

## Value proposition of lasers

The main question that comes to mind is whether we really want or need the laser in our practice. The answer is not always clear-cut. Some dentists prefer their practice to remain without lasers. They believe in their knowledge of their respective specialties and continue to apply this knowledge for the best care of their patients.

Sometimes it is also difficult to figure out whether the practice can accommodate all the procedures that laser technology has to offer. Another factor for consideration is the time-based financial situation of the practice. If the practice is not on the higher plateau of performance, the ability to afford a dental laser may be questionable.

Value proposition indicates the reasons why a dentist would introduce lasers into his or her practice. Michael Treacy, co-author of "The Discipline of Market Leaders", suggests four different types of basic value propositions:

- 1. Being reasonable and affordable:* In order to accommodate this proposition, the cost variation between laser and normal treatments should not be high. In our private practice in Dubai in the United Arab Emirates, we have a 35 per cent difference between the two costs. Since the overall pricing difference in the treatment plans is not very high, more than 80 per cent of patients agree to the laser approach.
- 2. Improving the overall treatment experience for the patient:* Use of lasers reduces the need for local anaesthesia in the practice. This factor raises the standard of comfort of laser treatments to the highest end. In paediatric practice, children are most likely to sustain traumatic lip bites even after the most successful clinical procedures. This can then lead to the child having an unpleasant post-procedure experience. With lasers, however, the need for and use of anaesthesia are minimised. The use of anaesthesia in the practice is then limited to minor infiltrations and root canal therapy. The greatest fear of a child coming to the dentist is that

of needles. Lasers with their magic popping-light effect overrule this fear.

*3. Having a better product than others:* Not many practices invest time and effort in lasers. Those who do definitely raise their service standards and can proclaim a better and more technologically advanced service than their competitors.

*4. Taking ownership of customer results:* This proposition relates to establishing lasers as a standard protocol of treatment. Having explained the benefits of lasers to the concerned patient, the dentist can help him or her decide and consent to laser treatment. Once lasers are projected as strategic function with all their benefits, the specialised dental care provider can become a fully integrated part of the enterprise and not just a vendor of laser treatment.

### Clinical assessment-based return on investment propositions

A practice that can achieve the best treatments in fewer appointments is certainly the practice of choice. Lasers allow multi-quadrant dentistry in one appointment. This leads to indirect savings in terms of fewer subsequent appointments or to a rapid complete treatment time for certain procedures. The increased efficiencies include taking impressions in bleeding tissue and being able to prepare multiple cavities and restorations without having to wait for anaesthesia to take effect.

From the parents' perspective, laser treatment is a blessing as it reduces the number of visits and saves children the stress of multiple appointments. For clinicians, the time saved on many back and forth appointments can easily be allocated to more practice-building protocols.

### Presence of laser as self-marketing

Nothing screams high technology more than the presence of laser in the surgery. It certainly increases internal

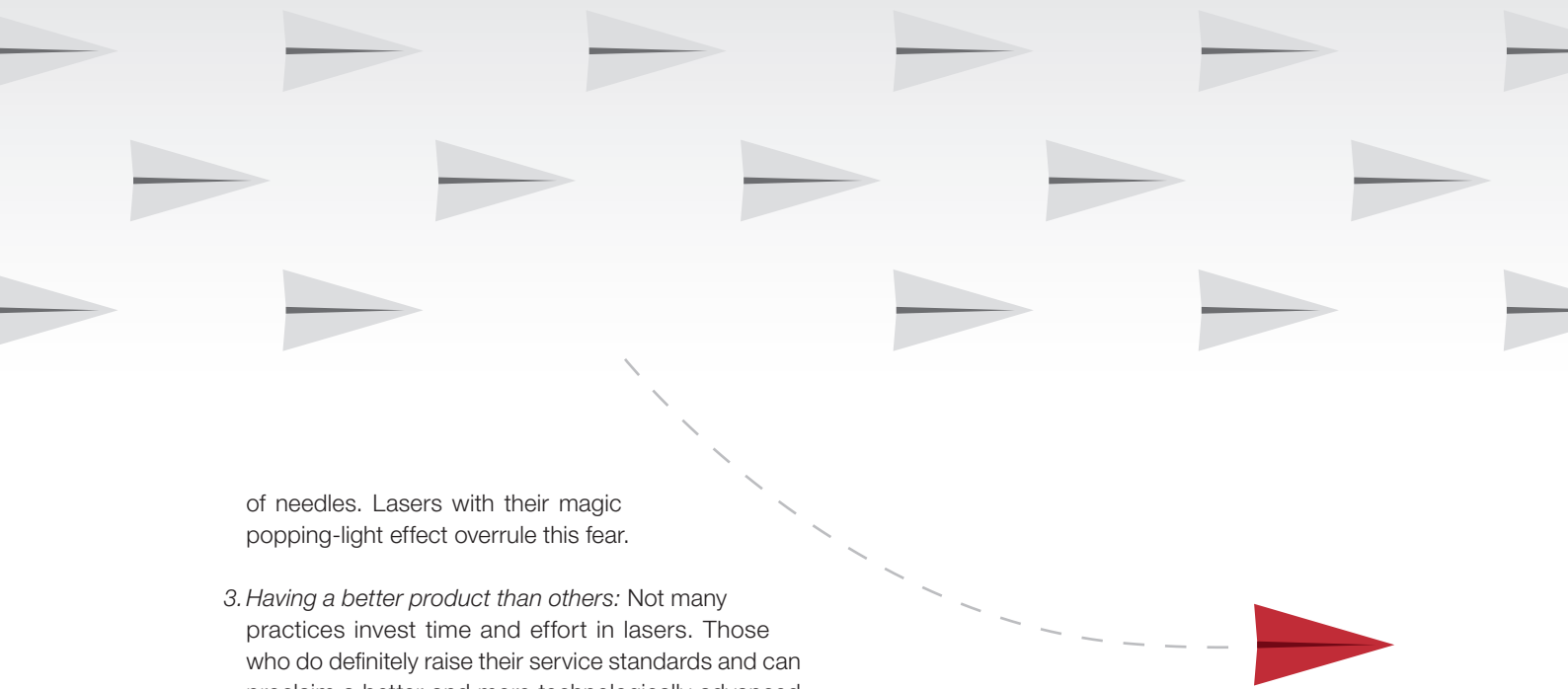
marketing and referral possibilities. Patients today, especially young ones prefer anything high-tech. Initial resistance and reluctance towards dental treatments seem to decrease when paediatric patients are informed about no-needles dentistry. In addition, laser manufacturer web pages provide videos and images that can help patients to understand the concept of lasers.

Once the patient has received a comfortable laser treatment, he or she not only is happy to finish the rest of the treatment (if any), but also feels comfortable in referring others to our practice.

### Selecting the proper laser

The same innovative steps that advanced computers from desktop versions to laptops and tablets is the one that has encouraged lasers to be reinvented since they first began to be used in dental practice. New dental lasers are certainly more reliable, efficient, clinically friendly and capable. This could be among the possible reasons that laser costs have not declined. To date, there has been no mass production of lasers.

Several companies manufacture hard- and soft-tissue lasers (hard tissue lasers: DELight, 2.97  $\mu$ , Continuum; Waterlase, 2.8  $\mu$ , BIOLASE; Opus Duo, 2.97  $\mu$ , OpusDent; soft tissue lasers: Ceralas, biolitec; DioDent, Continuum; Epic 10, BIOLASE). The costs certainly vary from one producer to another. The decision to invest in any particular laser brand is always at the buyer's discretion. The bottom-line idea is to invest in the right wavelength that can accommodate multiple varieties of procedures. There is no standard protocol for buying



laser. It depends on the buyer's field of work, areas of interest and budget.

### Basic calculation of laser investment

According to the principle calculation in laser practice, the increase in the treatment cost is calculated at about 35 per cent. This augmented amount helps to even out the equipment and educational investment.

The average time recorded in our practice for laser break-even is 12 months, after which treatment becomes profitable. Direct and indirect profits attained with word of mouth and increased publicity of the practice also add to the long-term gains.

### Conclusion

There is without a doubt a good rate of return on investment in lasers. The time frame recorded for this return is not too long either. Our practice statistics have shown that lasers can lead to long- and short-term gains for the

practice, and from experience we have concluded that the return on investment in lasers is certainly motivation enough for anyone to incorporate this modality into his or her practice.

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### Kurz & bündig

Innovative Technologien und Behandlungsmethoden sind Schlüssel zum Erfolg, vor allem im Bestehen gegenüber Mitbewerbern. Der Einsatz von Lasern bietet der Autorin zufolge daher nicht nur finanzielle Investitionserfolge, sondern lohnt sich auch im Sinne des Eigenmarketings sowie zur Steigerung der Patientenzufriedenheit. Besonders junge Patienten sind für moderne Methoden und Technologien empfänglich. Laser erhöhen zudem die Behandlungseffizienz, bspw. können durch die verminderte Notwendigkeit von Anästhetika Sitzungsdauer und -anzahl sowie Stress für Patienten und ggf. Eltern konsequent reduziert werden.

Im Zuge einer Investition gilt es, nicht nur die Anschaffungs-, sondern auch die nötigen Weiterbildungskosten zu bedenken. Bei der Kalkulation der Behandlungskosten werden in der Regel etwa 35 Prozent aufgeschlagen, um beide Kostenpunkte langfristig zu decken. Die Gewinnschwelle ist nach Erfahrung der Autorin etwa nach zwölf Monaten erreicht. Vor der Investition sollte entsprechend der geplanten Einsatzarten, Arbeitsfelder sowie Interessengebiete abgewogen werden, welches Lasermodell am besten geeignet ist. Die Wahl der passendsten Wellenlänge, um diverse Behandlungsmethoden abdecken zu können, wird besonders betont.

Der Einsatz von Lasern bietet somit diverse Vorteile für die eigene Praxis und resultiert sowohl in langfristigen als auch kurzfristigen Erfolgen. Es ergeben sich ein überschaubarer Investitionszeitraum sowie vielfältige Motivationsimpulse für die Realisierung einer derartigen Kapitalanlage.