

3<sup>rd</sup> International Conference on  
PAST AND PRESENT RESEARCH SYSTEMS OF GREEN CHEMISTRY  
September 19-21, 2016 Las Vegas, USA

### Application of laser in modern oral therapy

Raúl Vicente Perales Garza

University Autonoma de Nuevo León, México

The medical laser technology has been widely applied in clinical practice and basic research. This word laser is the acronym for “Light Amplification by Stimulated Emission of Radiation”. The laser is a device that consists in a highly focused beam of light that removes soft and hard tissues vaporizing them. The focused laser light travels through an optical fiber or through an articulated arm with mirrors which the dentist directs to the treatment area. Today, there are two types of dental laser: Therapeutic and surgical lasers. Therapeutic lasers emit less energy than the surgical laser and its effect is non-thermal, therefore it is not used to remove tissue. An example of this is the low level laser that help us to stimulate wound healing and relief from inflammation, as well as cellular proliferation which serves as an antioxidant, demonstrating it as a promising technique for gingival repairing. The surgical laser help us in the cauterization of soft tissues, a quick healing along with pain relief, also it shows some advantages and procedures that could not be achieved with conventional methods. The dental lasers helps us to perform a more conservative and a rapid and effective procedure in oral therapy and it also reduces post-operative pain that is left by the conventional methods.

rag9015@hotmail.com

### Extraction of maxillary teeth by dental students without palatal infiltration of local anesthesia: A randomized controlled trial

Sara Rahim Khan

CMH Lahore Medical and Dental College, Pakistan

**Objective:** Palatal infiltration of Local Anesthesia (LA) for maxillary tooth extractions is painful. One of the techniques for reducing the discomfort of this injection is to avoid it altogether. Given enough time, LA given only as buccal infiltration diffuses to reach and anaesthetize the palatal tissues. The aim of this double blind randomized controlled trial was to test the hypothesis that LA infiltrated by dental students only into the buccal tissues should be adequate for maxillary tooth extraction.

**Patients & Methods:** Fifty adult patients presenting for single tooth maxillary extractions were randomly allocated between to two groups. The control group received palatal injections of 0.1 ml 2% Lidocaine with 1:100,000 epinephrine, while the experimental group received a similar amount of saline (placebo). Extractions performed without further administration of LA were categorized as successful.

**Results:** Palatal infiltration of lidocaine with epinephrine was significantly more effective than saline ( $p=0.002$ ). Overall buccal infiltration alone was successful in 28% patients, with a 40% success rate in the posterior maxilla.

**Conclusion:** Results suggest that dental students should as a matter of routine extract maxillary teeth with both buccal and palatal infiltration of LA, while buccal infiltration by itself may be considered in selected cases for the posterior maxilla.

sarark791@gmail.com