Lower Lip Mucocele Excision using 940 nm Diode Laser

Abstract

Mucocele is a common benign neoplasm of the oral cavity and the most common after fibroma. The various treatment options available for the treatment of mucocele are cryosurgery, intrallesional corticosteroid injection and marsupialization. However, these techniques are associated with a relatively high incidence of recurrence making surgical treatment necessary for a permanent cure. Conventional surgical approach, however, arouses patient apprehension and is associated with bleeding and post-operative pain. Recently, treatment of mucocele with lasers has become a viable treatment option. Various types of lasers are being used and are preferable over the conventional surgical procedure as they provide good hemostasis, reduced postoperative swelling, reduced bacterial population, lesser need for suturing, faster healing, less postoperative pain and low recurrence rates. The diode laser device has specifications such as a relatively small size, portability, and lower cost that attract dental practitioners to its use for various surgical procedures in comparison with other laser equipment. However, up to date, only a few studies have reported its use in the removal of lip mucocele in young children. Under local anaesthesia, mucocele excision was done for a selected number of pediatric patients using a 940 nm diode laser in continuous wave mode. Bleeding was stopped using a hemostasis setting and no suturing was needed. The specimens were sent for histopathological examination. Patients were assessed for intra-operative and post-operative complications. The procedure was easy to perform with excellent precision and with minimum bleeding. The patients reported no post-operative pain and optimum healing was achieved within 1 month. Laser assisted mucocele excision using 940 nm diode laser offers technical and clinical advantages over other mucocele management techniques. Therefore, it can be a viable treatment option for oral mucocele and should be considered as an alternative to conventional surgical technique.

Lubna Al-Otaibi
Prince Sultan Military Medical City, Saudi Arabia

Biography

Lubna Al-Otaibi has completed her PhD at the age of 35 years from UCL, UK. She is a Consultant of Oral Medicine and Director of the Dental Center Education and Training Affairs at Prince Sultan Military Medical City (PSMMC), Riyadh, Saudi Arabia. A member of multiple medical societies and committees, with many international publications and poster presentations. Recently obtained a Fellowship in Laser Therapy in Dentistry from RWTH Aachen University (2016).