

APPLICATION OF CO₂ LASER FOR ORAL SOFT TISSUE SURGERY IN CHILDREN

J.A. JAYAWARDENA*, J. KATO AND R.L. WIJEYEWEERA*

*JICA (Japan International Cooperation Agency) Expert, Faculty of Dental Sciences,
*Division of Paedodontics, Department of Community Dental Health
Faculty of Dental Sciences, University of Peradeniya*

Lasers are increasingly being used for many operative procedures in Dentistry. One of these lasers, namely CO₂, has been reported to be very effective in surgery involving oral soft tissues. CO₂ laser is capable of incising and excising soft tissues through a mechanism called tissue vaporization, during which a surface coagulation layer is produced, at the operating site. As a result, the operating field remains clear during the operation, and there is no need of suturing after the operative procedure.

The objective of this study was to clarify the effect of CO₂ laser irradiation on oral soft tissue problems of children in Sri Lanka. In this report the continuous CO₂ laser at 10.6μ m with low power was used in 20 subjects, aged between 2 and 15 years, having main indications for labial frenectomy, treatment of ankyloglossia and excision of mucocele. The results indicated that CO₂ laser has the following advantages 1. The operation time required was lesser when compared with the conventional surgical procedure. 2. The procedure of the operation was simple. Hence, there was no need of general anaesthesia. 3. There was no post-surgical infection. 4. The contraction and scarring of the wound was minimal. We conclude that the use of CO₂ laser is a safe and effective method for soft tissue surgery in children.