2010 APLI
2010 Congress of Asia Pacific Laser Institute
6th-13th

Theme: Expertise on Laser Dentistry and Implantology
Dental clinics use various types of instruments, for example, to cut, remove, prepare, grind, scale. Engine drills, air turbine bur, ultra sonic instruments, surgical knife, etc are common instruments for those treatments. Laser is also used in these situations as an everyday instrument. Dental clinics which use laser have a positive image for patients. Therefore, at the present time, many dental clinics in Japan use laser instruments. I will introduce the following laser treatments: Esthetic use (pigmentation and gingivoectomy), Preventive treatment (maintenance of periodontal tissue and peri-implant tissue, sealant for pit and fissure), General dentistry and Pedodontics (Root canal treatment, composite resin restoration and peripheral periodontitis), Oral surgery (Extraction, soft tissue diseases (stomatitis, ulcer), apicoectomy, abscess (Pus discharge) and Implant surgery (Preparation of starting dimple for implant bed, Preparation of pilot hole for implant bed, Bone hole in bone block for fixation screw, Modification of block’s contour, and Second stage surgery and Peri-implantitis)
Demonstration title:
Oral bone surgery using Lite Touch Laser (Er:YAG)

Purpose: Modification of small bone blocks in alveolar plastic surgery or implant bed preparation using conventional engine drills is sometimes difficult to manipulate the blocks and also keep the drill in position. Recently, it was reported that Er:YAG was used satisfactory with almost no constraint on the positioning of the laser tip. The aim of this lecture is to discuss the possibilities of a Er:YAG laser (Lite Touch, Syneron, Israel) for oral bone surgery.

Part A: Presentation (Effect of laser beam without water mist, Water drop at the apex of the tip, Effect of laser beam on experimental bone)

Part B: Training for attendees
1. Transplantation of bone block
   Bone hole in bone block for fixation
   screw Modification of block’s contours
2. Implant bed preparation
   Preparation of starting dimple (point) for implant bed
   Preparation of pilot hole for implant bed