Present Status of Periodontal Therapy at the Dental Hospital of the Hokkaido University School of Dentistry

Masamitsu Kawanami and Hiroshi Kato

Department of Periodontology and Endodontology, Hokkaido University School of Dentistry

The dental hospital of the Hokkaido University School of Dentistry was established in 1967. The Second Department of Conservative Dentistry (Periodontology and Endodontology) has been in charge of periodontal therapy since 1968. For successful periodontal therapy a great emphasis has been put on the removal of local etiologic factors such as dental plaque and calculus. The patient's motivation for oral health and oral hygiene instruction is as essential to the therapy as removal of local plaque retention factors. An ultrasonic probe-type tip scaler was originally developed and is used for easy subgingival debridement in deep pockets without local anesthesia or gingival elevation. A furcation probe-type ultrasonic tip was also developed and is used for furcation-involvement mandibular molars. To perform thorough subgingival debridement and to obtain good architecture for the gingival tissue and its desired relation to the teeth for oral hygiene, several types of surgical procedures are performed. The modified Widman flap procedure is frequently preferred for thorough debridement. Root separation or root resection is often performed on molars with advanced furcation involvement. For periodontal regeneration of the angular bony defects, a guided tissue regeneration technique using fibrous collagen membrane is being investigated for clinical use. An experimental study using monkeys and human clinical cases demonstrated that the fibrous collagen membrane has good potential to be used as an absorbable barrier. Bone morphogenetic protein is being investigated in animal studies on regeneration of new bone at bone defect sites. Free gingival grafts are sometimes performed to increase the keratinized gingiva at less gingival sites. Subpedicle connective tissue grafts are preferred for gingival coverage at gingival extremely recessed sites. Periodontal patients are also treated with occlusal, endodontic, orthodontic, restorative and prosthetic treatment, if necessary, in our department. Patients are recalled after three to six months in the maintenance phase.