Preventive Oral Health Care Science

1. Staffs and Students (2009)

Professor	Astuhiro KINOSHITA	
Junior Associate Professor	Keiko KONDO	
Assistant Professor on Special Assignment		
	Masayo SUNAGA	Hiromi OTSUKA
	Yuki OHARA	Yuri YOSHIDA
Resident	Sayaka KATAGIRI(～March)	Ikufumi SATO(April～)

2. Purpose of Education

In order to cultivate students' abilities to prevent and detect oral diseases at an early stage, which are important to maintain and improve the nation's health, we help students acquire deep academic knowledge and high standard skills in preventive oral health care such as skills to check over the condition of oral cavities. Additionally, we help students develop skills to provide oral health counseling and oral health promotion, and nurture human resources who can actively contribute the development of oral health promotion.

3. Research Subjects

1) Development of education system for the patients to prevent oral diseases, and for the dental hygienist students.

In our university, we execute a project, Establishment of a Computer Assisted Education System on Clinical Simulation for Medical and Dental Practice Training, which was adopted as a project in Support Program for Distinctive University Education in 2005, and develop computer simulation materials on clinical education by utilizing a plenty of clinical digital contents of our Medical and Dental hospitals. In this study, we develop computer simulation materials for patients and dental hygiene students to learn preventive oral health care sciences, utilize them to our students, and evaluate and analyze their educational effect. We will illustrate whether it is possible or not to apply this self-learning system using computer assisted simulation as a new teaching method in addition to conventional lectures and practices in the oral health care clinical education.

The project was expanded and taken over as the new project, 'Progress of the Computer Assisted Simulation for Medical and Dental Practice Training. - Computer Assisted Simulation Promoting Clinical Inference, Decision-making, Problem Solving, and Cooperation Ability of Health Professional. -' which was selected as a project of Program for Promoting University Education Reform in 2009 by the Ministry of Education, Culture, Sports, Science and Technology.

2) Development of new assessment programs (self assessment, achievement assessment) in technical education for dental hygienist students.

On dental hygienist education, to learn expertise, it is important to take process to pile up the basic skills. Our study is aiming to develop a new assessment program which ensures the acquisition of dental hygienist skills with utilizing student's self assessment in each step of learning and instructor's assessment and feedback. We develop a computer assisted education system which helps students to recognize the goal and assess their own skills in each step of practice.

3) Development of new dental model on technical education for dental hygienists

Practices using dental models are very important on technical education for dental hygiene students. We develop newly designed dental models for the practice of probing and sensing the bottom of periodontal pocket with various depths. Our students and instructors evaluated the newly designed dental model as a suitable model for the training of pocket probing. They also became interested in other related practices, described that the new model would contribute to their future, and wanted to try other dental models with various pocket depths.

We will develop more versatile dental model which enables students practice pocket probing and practice subgingival scaling and root planning.

4. Clinical Services

In our Oral Health Care Clinic, dental hygienists support patients' oral health care, and prevent dental caries and periodontal diseases, for the patients to maintain their oral health for the entire lifetime.

5. Publications

Original Article

1. Toshiaki Yoshino, Akira Aoki, Shigeru Oda, Aristeo Atsushi Takasaki, Koji Mizutani, Katia Miyuki Sasaki, Atsuhiro Kinoshita, Hisashi Watanabe, Isao Ishikawa, and Yuichi Izumi: Long-Term Histologic Analysis of Bone Tissue Alteration and Healing Following Er:YAG Laser Irradiation Compared to Electrosurgery. J Periodontol 80(1), 82-92, 2009.
2. Katagiri S, Nitta H, Nagasawa T, Uchimura I, Izumiyama H, Inagaki K, Kikuchi T, Noguchi T, Kanazawa M, Matsuo A, Chiba H, Nakamura N, Kanamura N, Inoue S, Ishikawa I, Izumi Y. Multi-center intervention study on glycohemoglobin (HbA1c) and serum, high-sensitivity CRP (hs-CRP) after local anti-infectious periodontal treatment in type 2 diabetic patients with periodontal disease.Diabetes Res Clin Pract. (83) 308-15; 2009.