

Dentistry for Persons with Disabilities

1. Staffs and Students(April,2009)

Associate Professor	Tsuneyoshi YAMAZAKI	
Junior Associate Professor	Osamu SHINOZUKA	
Junior Associate Professor(Part-time)	Minoru INADA,	Yasuka KUSUMOTO,
	Yohei TAKEUCHI,	Syohei TAMURA,
	Hidenobu SENPUKU,	Kouichi YOSHIMURA,
	Yuuzou TAKAHASHI,	Susumu NAKACHI
Hospital Staff	Takae SAKAMOTO,	Mariko WATANABE
	Tomo SUZUKI,	Anna KUMAKURA,
Graduate Student	Taisuke FUJIBAYASHI,	Moriyuki NAKAMURA,
	Naoki HAYASHI,	Norihiko KANAKUCHI,
	Yousuke KINOSHITA	
Research Student	Hiromichi MIYAZAKI,	Seiji SAKURAI

2. Purpose of Education

Our department was started as a graduate course of the special dentistry section on April, 1999. The sections are the dentistry for persons with disabilities and medical problems.

The main objective of this course is to provide the opportunity for students to understand the outline of the reconstruction of functional and esthetic disorders of oral and/or maxillofacial areas by means of the high-advanced dental cares for patients with special needs.

3. Research Subjects

- 1) General research about the dentistry for persons with disabilities
- 2) Oral bacteria and systemic illness
- 3) Oral biofilm formation and elimination (Drug Delivery system)
- 4) Oral stimulation and cerebral function
- 5) Development of the paste for the dry mouth
- 6) Development of the welfare apparatus (Toothbrush with irrigation and suctioning capabilities, e-Brush II[®] etc)
- 7) Oral care by e-Brush II[®]
- 8) Gingival overgrowth of the pharmacogenic
- 9) Development of the clinical pathway of the systemic illness
- 10) Microanalysis of the salivary chemical component
- 11) Functional water
- 12) Dental phobia

4. Clinical Services

The clinical purpose of our section is to treat oral problems of special patients who are unable to receive normal dental care by reason of a disability which may be physical, mental, medical, or emotional, or combination of any of these under using behavior management and systemic support.

For example,

- 1) The patients requiring behavior management are physically disabled, mental retardation, autism, etc.
- 2) The patients requiring systemic support are internal impediment, dental phobia, etc.

5. Publications

Original articles

1. S. Tamura, H. Yonezawa, M. Motegi, R. Nakao, S. Yoneda, H. Watanabe, T. Yamazaki, and H. Senpuku: Inhibiting effects of *Streptococcus salivarius* on competence-stimulating peptide-dependent biofilm formation by *Streptococcus mutans*. Oral Microbiology Immunology 24(2):152-161, 2009.
2. T. Fujibayashi, M. Nakamura, A. Tominaga, N. Satoh, T. Kawarai, N. Narisawa, O. Shinozuka, H. Watanabe, T. Yamazaki, H. Senpuku : Effects of IgY against *Candida albicans* and *Candida* spp. Adherence and Biofilm Formation. Jpn J Infect Dis. 62(5):337-42, 2009.

Abstracts

1. N. Isogawa, O. Shinozuka, T. Yamazaki, M. Ishikawa, Y. Takagi: An Application of the Structured Visual Guides for Preschool Autistic Children at the Dental Checkup, Abstract Book, 66, 2009. (50th. Annual Conference of Korean Academy of Pediatric Dentistry, Apr 24-26, 2009, Seoul, Republic of Korea)