# 특강 I(Sepcial Lecture I)

# Clinical Evaluation on the Periodontal Diseases with the Saliva Detections



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## **Purpose**

The aim of this study is undertaken for detect on the standard value in biochemical enzymes using the saliva, correlating with periodontopathogens.

49 subjects who visited the NDU hospital were recruited, they are classified into two groups; gingivitis(n=90) and periodontitis(n=59). According to epidemiological survey, we checked up the clinical healthy subjects(n=852).

#### Materials & Methods

Saliva was taken up with no-sugar chewing gum for five minutes, and then kept in -80°C. We had committed the company(BML, Tokyo, Japan) to detect biochemical enzymes(GOT, GPT, LDH, ALP, NAG, F-Hb) and periodontopathogens (*Porphyromonas gingivalis(P.g.)*, *Actinobacillus actinomycetem-comitans(A.a.)*, *Tanerella forsythensis(T.f.)* and *Prevotella intermedia(P.i.)*). Microbiological examinations are used on the PCR(polymerase chain reaction) methods.

We also measured with clinical parameters, plaque index(PII), gingival index(GI), probing depth(PD), bleeding on probing(BOP) and clinical attachment level(CAL).

Under the permission of the Ethics Committee, we started on our research programs.

### Results

- 1. Standard values of lactate dehydrogenase(LDH) showed on the range 150-450u/l, alkaline phosphatase(ALP) 8.5-10u/l and free hemoglobin(F-Hb) 0.18-1.0mg/dl.
- 2. Standard values of periodontopathogens was decided as follows, accounted for *P.g.* 0.1%-0.2%, *A.a.* 0.5%, *P.i.* 0.1%-0.2% and *T.f.* 0.1% of total amount of oral bacteria.

Our data suggest that saliva detection will be available in the oral health screening and periodontal condition in the procedures of treatment.

## Education

1957-1963 The Nippon Dental University(D.D.S.)

1963-1967 Graduate School of dentistry at Tokyo, The Nippon Dental University(PhD in

Restorative Dentistry)

1967-1972 Graduate School of Medicine, Kanazawa university(PhD in Radiological Medicine)

## Brief Research and Professional Experience

1972-1979 Associate Professor(The N.D.U.)

1979-Present Chief Professor of Periodontology(The N.D.U.)

1996-2001 Director of Hospital (The N.D.U.)

2001-Present Director of Graduate School, Dentistry Research at Tokyo(The N.D.U.)

2003-Present President of Japanese Society of Periodontology

· Clinical research: Periodontal plastic surgery

· Periodontal research: Periodontal ligament fibroblast for localization of adhesion molecules.

· Detection of saliva.