

## ● 치주질환 환자에서 치근이개부 병변의 발생빈도 및 심도에 관한 연구

노영서 · 이만섭 · 권영혁  
경희대학교 치과대학 치주과학교실

치주질환 환자에 있어서 치근이개부 병변의 발생빈도와 분포에 대해 연구하기 위해 경희대학교 치과대학 부속병원 치주과를 내원한 총 143명의 남녀환자에게 치주탐침을 이용한 임상적 검사로 치근이개부 파괴정도를 측정하여 다음과 같은 결론을 얻었다.

1. 치근이개부 병변의 발생율을 연령증가에 따라 증가하였으며, 남자가 여자보다 높은 발생율을 보였다
2. 하악이 상악보다 이환률이 높았으며 상·하악 공히 제1대구치가 제2대구치에 비해 다소 높은 발생율을 보였다.
3. 감염의 심도는 1급 병소가 가장 많았으며, 상·하악 공히 제1대구치가 제2대구치에 비해 발생율이 다소 높았다.
4. 치아별 호발부위는 상악은 협면, 근심면, 원심면 순였으며, 하악에서는 협면이 설면에 비하여 높은 발생율을 보였다.
5. 치근이개부 병변의 원인으로는 염증성 치주질환이 가장 많았으며, 법랑돌기, 불량 보철물 순이었다.

## ● 치주질환 심도와 치은열구내 $\beta$ -glucuronidase에 관한 연구

문진균 · 김평환 · 김형섭  
전북대학교 치과대학 치주과학교실

치주질환으로 전북대학교 치과병원 치주과에 내원한 27세에서 62세의 환자 101명을 대상으로 하여, Brill의 방법에 따라치은열구액을 채취하여 효소액을 용출시킨다음 Dingle의 사용한 방법을 변형하여  $\beta$ -glucuronidase 활성을 비색법으로 측정하고 각 치아의 치주낭 깊이, 치은 열구액 양 및 치은 열구출혈지수와 비교하여 다음의 결론을 얻었다.

1. 치은열구출혈지수 증가에 따른 효소 활성 및 periotron unit의 증가는 통계적으로 유의한 차이가 있었다( $P < 0.05$ ).
2. 치은열구출혈지수와 효소활성 및 periotron unit사이의 상관관계를 비교해 본 결과 periotron unit과 효소 활성사이에 가장 높은 상관관계가 있었다( $r = 0.34$ ).
3. 치주낭 깊이에 따른 효소 활성 및 periotron unit은 통계적으로 모두 유의한 수준의 차이를 보이지 않았다( $P > 0.05$ ).

## The study of incidence and distribution of furcation involvements in the periodontal diseased patients

Young Seo Rho, Man Sup Lee, Young Hyuk Kwon

Dept. of Periodontology, School of Dentistry, Kyung Hee University

The purpose of this study was to investigate the incidence and distribution of furcation involvements of permanent molars in the periodontal diseased patients.

For this study, 143 patients (90 males, 53 females : 20 yrs. to 73 yrs.) with periodontal disease were selected from the patients who visited Kyung Hee Medical Center.

To detect the furcation involvements, clinical examination with periodontal probe was taken on the maxillary and mandibular permanent molars.

The results were as follows :

1. The average number of furcation involvements increased with age and the furcation involvements occurred more frequently among the males than among the females.
2. The furcation involvements occurred more frequently among the mandibular molars than among the maxillary molars and the first permanent molar exhibits the furcal disease more commonly than the second permanent molar.
3. The degree I furcation involvements are most frequently occurred in the maxillary and mandibular molars.
4. In the maxilla, the buccal aspects of molar furcations are most often denuded as a result of periodontal diseases, followed by the mesial aspects and in the mandible the buccal aspects of molar furcations are most frequently denuded as a result of periodontal diseases.
5. The most common etiology is the inflammatory periodontal disease.

## A study on periodontal disease severity and $\beta$ -glucuronidase in gingival crevicular fluid

Jin Kyun Moon, Pyung Whan Kim, Hyung Sup Kim

Dept. of Periodontology, College of Dentistry, Chonbuk National University

Because traditional clinical measures of human periodontal disease cannot be detected or predicted, the occurrence of clinical attachment loss, new biochemical markers were developed in diagnosis of periodontal disease.

$\beta$ -glucuronidase, for such a marker associated with tissue breakdown, was analysed from gingival crevicular fluid of 101 periodontal patients aged 27–62 years.

The filter paper strip was inserted into the gingival sulcus of the labial surface of the maxillary left central incisor and gingival crevicular fluid collected. By the modification of the method of Dingle (1972),  $\beta$ -glucuronidase was assayed spectrophotometrically from supernatant enzyme preparation, and compared with clinical parameters such as pocket depth or sulcus bleeding index.

1. As the grade of sulcus bleeding index was increased, the periotron units and  $\beta$ -glucuronidase activity were increased significantly ( $P < 0.05$ ).
2. Correlation between SBI and  $\beta$ -glucuronidase, SBI and periotron units, periotron units and  $\beta$ -glucuronidase were relatively low. Those correlation between periotron units and  $\beta$ -glucuronidase was the highest ( $r = 0.34$ ).
3. As the grade of pocket depth was increased, periotron units and  $\beta$ -glucuronidase were not increased significantly ( $P > 0.05$ ).

## An electromyographic study on the change of occlusal force according to periodontal treatment of patients with chronic periodontitis

Gil Jo Suh, Kyung Yoon Han

Dept. of Periodontology, College of Dentistry, Chosun University

The purpose of present study was to identify the effect of periodontal treatment of occlusal force. For the this present study, 15 male patients (32 to 62 years old) with chronic periodontitis were selected, each patient was treated with scaling and periodontal flap operation.

The Bioelectric Processor EM2 (Myotronic Res., Inc., U. S. A.) with surface electrodes was used to record the muscular activity quantitatively.

Bilateral EMG recordings of the masseter and anterior temporal muscles were obtained in the mandibular rest position and the maximal clench in centric occlusion.

the differences of the muscular activities at initial examination, 2 week-after scaling, and 1 and 2 month-after periodontal flap operation were statistically analyzed by Paired t-test of ABSTAT 4.05 program.

The results were as follows :

1. In the mandibular rest position, mean voltage of the masseter and anterior temporal muscles was higher than normal ranges (the masseter muscle : 1.0~2.0mV, the anterior temporal muscle : 1.5~2.5mV) of those before periodontal treatment.
2. In the maximal clench in centric occlusion, mean voltage of the masseter muscle of habitual chewing side was significantly higher than that of nonhabitual side before periodontal treatment ( $P < 0.005$ ).
3. In the mandibular rest position, the tonicity of the masseter muscle of habitual chewing side and the anterior temporal muscle of both habitual chewing and non-chewing side was gradually reduced after periodontal flap operation.
4. In the maximal clench in centric occlusion, the difference of mean voltage between the masseter muscle of habitual chewing side and that of habitual non-chewing was markedly abated after periodontal flap operation.
5. In the maximal clench in centric occlusion, mean voltage of the masseter and anterior temporal muscles was gradually increased after periodontal treatment regardless of habitual chewing side and non-chewing side.