

50.2초)였다.

3. 주사 전자 현미경 관찰에 의하면, 치근면은 두 군 모두 비교적 평활했으나, 실험 2군에서 curette에 의한 찰과면이 관찰되었고, 상아세관은 실험 2군에서 더 많이 관찰되었으며, 치태 및 치석의 잔사는 관찰되지 않았다.

● 치주질환의 진행시 치은열구내 Interleukin-1 β 및 Tumor necrosis factor- α 의 정량변화에 관한 연구

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서울대학교 치과병원 치주과에 내원한 환자중 급속진행형 10명, 성인병 8명, 난치성치주염환자 10명을 각각 선정하여 치주낭깊이, 부착치은상실도, 치조골파괴의 정도를 관찰하고 이들환자의 치주낭중 6mm이상의 부위를 병소부위로 하고 동시에 3mm이내의 건강한 치주조직 치주낭을 가진 부위를 비병소부위로 선정하여 치은열구액을 채취한 한 micro-ELISA kit를 이용하여 cytokine을 정량분석한 후 치조골흡수정도와 IL-1 β 및 TNF- α 의 상관관계를 조사하여 다음과 같은 결론을 얻었다.

1. 급속진행형 치주염에서 병소부위와 비병소부위 사이의 Interleukin-1 β 양적 변화(213 \pm 24pg/ml)가 유의성이 있었다. (P<0.01)
2. 성인성 치주염에서 병소부위와 비병소부위 사이의 Tumor necrosis factor- α 양적 변화(19pg/ml)가 유의성이 있었다. (P<0.01)
3. 골파괴도와 Interleukin-1 β 양 변화와의 상관관계는 난치성 치주염(P<0.05) 및 급속진행형 치주염 (P<0.01)에서 유의성이 있었다.
4. 골파괴도와 Tumor necrosis factor- α 양 변화와의 상관관계는 유의성이 없었다.
5. 병소부위에서 골파괴정도가 심한 경우에 Interleukin-1 β 양은 비례하여 유의성있게 증가하였다. (P<0.05)

● 한국인 청소년의 치아동요도에 관한 연구

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위의 연구를 통해 다음과 같은 결론을 얻었다.

1. Periotest로 측정한 개개 치아의 평균 동요도는, 각각 상악중절치 8.4258, 측절치 6.5987, 견치 1.8845, 제1소구치 3.8877, 제2소구치 3.6911, 제1대구치 2.1276, 제2대구치 4.2230이었고, 하악 중절치 7.2393, 측절치 5.5216, 견치 0.3984, 제1소구치 0.1632, 제2소구치 1.1228, 제1대구치 -0.4514, 제2소구치 1.2033으로 나타났으며, 하악 제1대구치의 동요도가 가장 작았고, 상악 중절치의 동요도가 가장 컸다.

Quantitative assay of interleukin-1 β and tumor necrosis factor- α in crevicular fluid of periodontal disease progression

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Recent studies have indicated that cytokines of various origins are involved in the initiation and progression of chronic localized inflammatory disease such as periodontitis. The purpose of this study was to investigate the correlations of cytokines in gingival crevicular fluid with various periodontal diseases. For this study, 8 of Adult periodontitis, 10 of refractory periodontitis, 10 of rapidly progressive periodontitis patients were selected. The quantitative assay of cytokines was tested by micro-ELISA kit which prepared monoclonal antibody of IL-1 β and TNF- α . The pattern and amount of alveolar bone resorption was observed with quantitative digital subtraction image processing radiography. The amount of IL-1 β and TNF- α was significantly increased in disease site and there was an correlation with degree of bone loss and quantitative change of interleukin-1 β in periodontal patients. These findings suggest that IL-1 β may be increased in disease site prior to clinically observable alveolar bone loss and therefore may prove to be a suitable indicator for periodontal disease.

A study on physiological tooth mobility in Korean Adolescents with periodontally healthy conditions

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The purpose of study was to investigate the physiological tooth mobility in Korean adolescents with periodontally healthy conditions. In this study, 201 adolescents (94 males, 107 females) with periodontally healthy conditions were selected. They had a mean age of 15.6 years in males and 15.9 years in females. Tooth mobility for all types of teeth except third molar was measured with Periotest. The subjects were requested to open the mouth in rest position during the measurement.

The measurements were made once a tooth.

From this study, the following conclusions were made :

1. The mean mobility for all types of teeth differed one another and the mean mobility was lowest in lower first molar and highest in upper central incisor.
2. The mean mobilities of lower incisors, canines, premolars and molars were significantly lower than those of upper same teeth ($P < 0.05$).
3. In comparison mobility of males with that of females, mobilities of upper left and right lateral incisor and lower right lateral incisor were significantly lower in females than those of males, but mobilities of lower left and right, first and second molar and lower left second premolar were significantly lower in males than those of females ($P < 0.05$).
4. In maxilla, mobility of canine was lowest than any other teeth and mobility got higher according