乳頭部에서 좋은 결과를 보였다.

4. 正中頰舌部보다 齒間乳頭部에서 殘存齒周囊上皮가 더욱 빈번히 발견되었다.
5. 각 절개방법에 있어서 염증의 정도가 심할 수록, 齒周囊 깊이가 깊을 수록 齒周囊上皮의 잔존 정도가 증가되는 경향을 보였다.

● 치은열구삼출액내 Alkaline phosphatsed활성도와 치주질환 진단과의 관계

서조영 · 변종수 · 박준봉
경북대학교 치과대학 치주과학교실

치은열구삼출액내 Alkaline phosphatase 활성도 측정이 치주질환을 진단하는데 이용될 수 있는지 알아보기 위하여 경북대학병원 치주과에 내원한 환자들을 대상으로 상악 전치부의 치간부 치은열구에서 치은열구삼출액을 채취하여 Alkaline phosphatase 활성도를 측정한 후 치은지수, 치석지수및 치주낭깊이와의 상호관계를 비교한 결과는 다음과 같았다.

치은열구 삼출액내 Alkaline phosphatase 활성도와 치석지수의 상관계수는 0.77, $P<0.01$이었으며 상관관계는 높았다.

중회귀분석결과 치은열구삼출액내 Alkaline phosphatase활성도는 2개의 변수 즉 치주낭 깊이와 치은지수로 약 70% 설명할 수 있었고($R^2=0.70$, $P<0.01$), 이중 치주낭깊이의 편상관계수는 0.82, $P<0.01$로서 치은열구삼출액내 Alkaline phosphatase활성도와의 상관관계가 미약하였다.

치은지수와 치주낭깊이와의 상관계수는 0.81, $P<0.01$이었으며 상관관계는 높았다.

이 결과로 미루어보아 치은열구삼출액내 Alkaline phosphatase 활성도 측정이 치주질환을 진단하는데 도움이 될 것으로 사료된다.

● 성견치은열구내 치아표면의 치태형성에 대한 주사전자현미경적 연구

손창인 · 채중규 · 김종관
연세대학교 치과대학 치주과학교실

저자는 치은열구내 치아표면의 치태형성에 대한 시간적 변화를 조사하기 위하여 성견 6마리를 치석제거와 치면세마를 시행한 후 구강위생술식을 중단하고 각 0, 1, 3, 7, 14, 18일 후에 희생시켜서 주사전자현미경으로 관찰한 바, 다음과 같은 결론을 얻었다.

1. 치태의 주성분이 세균이라는 사실이 재확인되었다.
2. 치아면의 pellicle의 형성은 수시간 경과 후 확연히 관찰되었다.
3. 1일째의 표본에서 이미 세균출현이 있었으며 pellicle의 형성은 수시간 경과 후 확연히 관찰되었다.
4. 3일째 표본에서 구형균과 간상균이 여러 층으로 pellicle에 부착되었으며 휠라멘트도 나타나기 시작하였다.
5. 7일째 표본에서 휠라멘트는 단층 및 여러 층으로 나타나며 휠라멘트 주위에 구형균들이 붙어서 corn-cob 형태를 이룬 것도 관찰되었다.

sed on Day 7 and gradually increased in progress of time.

4. In conclusion, the data from each group did not show the evidence that the status of oral hygiene was affected by sugar & aspartame.

Effect of incision methods on removal of pocket epithelium in periodontal therapy

Choong Ho Park, Sun Yul Ryu
Department of Dentistry, Graduate School, Chonnam National University.

This study was undertaken to evaluate the effect of the incision methods on the extent of removal of pocket epithelium in relation to degrees of gingival inflammation, sites and pocket depths.

Eighteen adult patients received scaling, root planing and oral hygiene instruction before periodontal surgery. Seven days after, Sulcus Bleeding Index and pocket depths were recorded at the mid-facial, mid-lingual and interproximal sites of premolars and molars, then the scalloped internal bevel incisions as described in the ENAP, modified ENAP and modified Widman flap procedure were performed.

One hundred and seven gingival biopsies were obtained from the mid-facial, mid-lingual and interproximal sites of the teeth and were evaluated the extent of residual pocket epithelium by light microscope with calibrated eyepiece.

The results were as follows :

1. None of the ENAP, modified ENAP and modified Widman flap incision could completely remove all pocket epithelium.
2. The ENAP incision did not effectively remove all pocket epithelium.
3. The modified Widman flap incision is more effective for pocket epithelium removal than the other procedures, especially in the interproximal regions.
4. Residual pocket epithelium was more frequently observed in interproximal regions than mid-facial and mid-lingual sites.
5. Frequency and amount of residual pocket epithelium appeared to be proportioned to the severity of inflammation and the depth of the pocket in all incision method applied.

Relationship between the diagnosis of the periodontal disease and alkaline phosphatase activity in human gingival fluid

Jo Young Suh, Chong Soo Byun, Joon Bong Park
Department of Dentistry, Graduate School, Kyungpook National University.

This study was undertaken to evaluate the relationship between the clinical indicies used in the diagnosis of the periodontal disease and the alkaline phosphatase activity in human gingival fluid.

In the experiment, interdental sites of upper incisor and canine regions were evaluated in 29 subjects having varying degrees of preiodontal inflamatory disease. After collecting of gingival fluid with filter paper strip, G. I. score(by Löe and Silness) and C. I. score(by Björby and Löe) were recorded and pocket depths was measured. Thereafter, alkaline phosphatase activity in human gingival fluid was measured by the colormetric technique originally described Bessey, Lowry and Brock.

The results were as follows :

In the correlation between the activity of alkaline phosphatase in human gingival fluid and calculus index, correlation coefficient is 0.77, $P<0.01$. The correlation between the activity of alkaline phosphatase in human gingival fluid and calculus index is statistically significant.

In the multiple regression of the periodontal pocket depth and gingival index to the alkaline phosphatase activity in human gingival fluid, partial correlation coefficient of the periodpntal pocket depth is 0.82, $P<0.01$, and partial correlation coefficient of gingival index is 0.28, $P<0.05$.

In the correlation between gingival index and the periodontal pocket depth, correlation coefficient is 0.81, $P<0.01$. There is statistically significant correlation between gingival index and the periodontal pocket depth.

Therefore, measured alkaline phosphatase acitivity in gingival fluid may be used of diagnosing the periodontal disease.

Scanning electron imcroscopic study of the dental plaque formation on the tooth surface in the gingival sulcus, in dogs

Chang Ihn Son, Jung Kiu Chai, Chong Kwan Kim
Dept. of periodontology, School of Dentistry, Yonsei University.

The pupose of the present study was to investigate the morphologic features of the dental plaque by scanning electron microscope with time. Experiment was performed using 6 adult dogs.

A week before experiment, author scaled and polished the teeth of subjects, and made the gingival health established through a week daily tooth brushing. Oral hygiene was withdrawn with the initiation of experiment.

After experiment of 0, 1, 3, 7, 14, 28days, each subject was sacrificed. Each specimen was prepared of scanning electron microscopic observation.

Results were as follows :

1. It was re-identified that major component of the dental plaque was microorganism.
2. At the first, pellicle was initially formed on the tooth surface on 0 day sample, in several hours after experiment.
3. A monolayer of microorganism adhered to pellicle was appeared. A major composition of microorganisms was cocci and rod shape on the 1st day sample.
4. Multilayer of cocci and rod shape was observed, filaments came into sight on the 3rd day sample.
5. Mono or multilayer of filaments was visible.

The "Corn-cob" formation in which cocci adhered to filaments was very spectacular on the 7th