

● 국소적 구연산도포가 성견 치주낭 치유에 미치는 효과에 대한 연구

고호경 · 조규성 · 채중규 · 김종관
연세대학교 치과대학 치주과학교실

국소적 구연산도포가 치주조직의 재생 및 재부착에 미치는 영향에 관하여 알아보기 위해 성견 소구치치근에 실험적으로 골내낭을 형성시키고, 치근활택술 및 치은판막술을 시행한 외과치치 실험군과 처치를 하지않은 대조군, 산처리를 동반한 외과적 처치를 한 구연산처리군등 3군으로 나누어 실험적 2, 4, 8, 16주에 조직표본을 제작하여 관찰한 결과 다음과 같은 결론을 얻었다.

1. 상피세포의 근단이동은 대조군에서는 실험기간동안 지속되었으나, 실험군에서는 8주 이후 부터는 근단이동을 볼 수 없었고, 실험군간의 차이점도 없었다.
2. Supracrestal fiber의 부착은 대조군에서는 4주까지 전혀 관찰되지 않았으나 두 실험군에서는 산처리에 관계없이 4주부터 관찰되었다.
3. 두 실험군에서 백악질재생이 산처리에 관계없이 2주부터 관찰되었으나 대조군에서는 전 실험 기간을 통하여 관찰되지 않았다.
4. 골내낭기저부에서의 치조골형성은 대조군은 16주에서, 두 실험군에서는 2주부터 다양하게 관찰되었다.
5. 치주인대에 재생은 대조군에서는 실험 전기간에 걸쳐 관찰되지 않았으나 실험군에서는 산처리유무에 관계없이 8주부터 부분적으로 결합조직섬유의 재부착이 관찰되었으며, 16주에는 치주인대와 같은 기능적인 배열을 보였다.
6. 결합조직내 염증세포침윤을 실험기간이 경과함에 따라 감소되었으며, 대조군보다 실험군에서 미약하게 관찰되었다.

● 치술 및 치약 함유성분이 치태 및 치은염증에 미치는 영향에 대한 연구

구애경 · 채중규 · 김종관
연세대학교 치과대학 치주과학교실

저자는 치술모의 강도와 치약내 함유성분이 치태 및 치은염증에 미치는 영향을 연구하기 위하여, 치과 대학생 42명을 6군으로 나누고, 이들에게 치술모의 강도가 부드러운것, 중등도 그리고 강한것 3종류의 치술과 마모제를 다량 함유한 치약, Urea, Allantoin, Guaiazulene 등을 함유한 치약을 사용하게 하여 처음 1주부터 5주까지 각 주마다 치태 지수와 치은염증 지수를 측정하였고, 실험전 측정치와 비교하여 다음과 같은 결론을 얻었다.

1. 치술모가 부드러운 치술을 사용한 실험군의 경우 마모제를 함유한 치약이나 약제를 함유한 치약이나 모두에서, 치태 지수와 치은염증 지수가 감소하였으며 이는 $P < 0.05$ 수준에서 통계학적으로 유의성이 있었다.
2. 치술모의 강도가 중등도인 치술을 사용한 실험군의 경우 치태 지수가 감소하였으며 이는 $P < 0.05$ 수준에서 통계학적으로 유의성이 있었다.
3. 치술모의 강도가 중등도인 치술을 사용한 실험군에서 치은염증 지수의 변화는 통계학적으로 유의성이 없었다.

5. The factors affecting other complications were surgery type, bone exposure, duration, diagnosis and number of teeth involved.

The study of clinical parameters between rapidly progressive periodontitis and adult periodontitis

Chi Hyang Chung, Man Sup Lee

Dept. of Periodontology, Division of Dentistry Kyung Hee University

The purpose of the present study was to compare the several clinical parameters between the Rapidly progressive periodontitis(R. P. P.) and Adult periodontitis(A. P.).

For this study, 43 patients having R. P. P. and 41 patients having A. P. were selected from the patients who visited Kyung Hee University Hospital. These patients were examined and evaluated the Periodontal Disease Index(P. D. I.), Bone Score, Salivary pH, Caries Susceptibility, Chief Complaints and Aging of patients of both two groups.

The results were as follows :

1. The P. D. I. of R. P. P. was statistically significant than A. P. ($P < 0.005$), but the sexual difference was not significant.
2. The bone destruction of R. P. P. was significantly higher than A. P. ($P < 0.005$) and the bone destruction of both show the symmetrical aspects between the two groups of maxilla & mandible, and right & left.
3. The tooth that having most severely involved alveolar bone destruction R. P. P. was maxillary first molar and maxillary central incisors.
4. The alveolar bone destruction R. P. P. was significantly higher than A. P. in canine and premolar area.
5. The salivary pH of R. P. P. was statistically significant than A. P. ($P < 0.005$).
6. The chief complaints of patients having R. P. P. was mostly gingival swelling and tooth mobility.
7. The rate of caries susceptibility was lowered in both two groups but, their statistical difference was not significant.

The effect of topical citric acid application on the healing of experimental intrabony pocket

Ho Kyung Koh, Kyoo Sung Cho, Jung Kiu Chai, Chong Kwan Kim

Dept. of Periodontology, School of Dentistry, Yonsei University

This study was undertaken to observe histopathologic changes of periodontal tissues in dogs after surgical periodontal therapy with or without acid treatment, and to evaluate the effect of topical

application of citric acid on the pathologically exposed root surfaces.

In this experiment, 8 dogs were used and divided into untreated control, surgical experimental and acid treated experimental groups. After 9 weeks of making intrabony pocket, gingival flap was reopened for surgical and acid demineralizing treatment. Thereafter, the dogs were serially sacrificed each 2 dogs every 2, 4, 8, and 16 weeks. after surgical or acid treatment.

The specimens were obtained in block and made the original slides cut with a thickness of 8 μ m, and stained with hematoxylin and eosin, and Gomori's one-step trichrome method.

The results were as follows :

1. The continuous apical migration of epithelium was observed in untreated control group, however there was no apical migration in two experimental groups from 8 weeks.
2. The supracrestal fiber attachment was lost until 4 weeks., in control group. But it was regained from 4 weeks. in in 2 experimental groups regardless of acid treatment.
3. Throughout the experimental periods, new cementum was observed in 2 experimental groups except control.
4. There was various bone regeneration in the intrabony notch area at 16 weeks. of untreated control and all experimental periods of 2 experimental groups.
5. In the all experimental groups, ligamental fiber adhesion was observed until 4 weeks. and new attachment appeared from 8 weeks. in the inferior notch area. But there was not ligament regeneration in the control group.
6. The infiltration of inflammatory cells decreased according to advance of experiment, and was observed lesser in experimental groups than untreated control.

The study about the effect of the bristle and the content of the dentifrice on the plaque and the gingival inflammation

Kyong Ae Koo, Jung Kui Chai, Chong Kwan Kim

Dept. of Periodontology, School of Dentistry, Yonsei University

The purpose of this study was to investigate if the stiffness of toothbrush bristle and the contents of dentifrice affect the efficacy of plaque removal and gingival inflammation reduction. 42 volunteers were selected for this study from the dental students. 42 students was divided into 6 groups, and plaque index and sulcus bleeding index of their upper and lower teeth were recorded for base-line records. Three type of toothbrushes which and different degree of bristle stiffness and two types of dentifrices, one containing only abrasives and the other containing anti-inflammatory agent, were selected. One type of the toothbrushes and dentifrices couple was given to each group. After 1, 2, 3, 4, 5, weeks experimental periods, the plaque index and the sulcus bleeding index were recorded.

The results of this study were obtained as followed :

1. There was statistically significant ($P < 0.05$) reduction of the plaque index and the sulcus bleeding index in the groups of soft bristle toothbrush.
2. There was statistically significant ($P < 0.05$) reduction of only plaque index in the groups of medium