

## ● 齒齦搔把術後 Madecassol이 創傷齒齦組織의 治癒에 미치는 영향에 관한 組織學的研究

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齒齦搔把術後 Madecassol이 창상치은조직의 치유에 미치는 영향을 조직화학적으로 연구하기 위해 뚜렷한 전신질환이 없는, 齒齦剝離術을 要하는 성인환자 8명을 선택하여, 軟膏塗布群, 錠製服用群, 軟膏塗布 및 錠製服用群, 對照群으로 나누었다. 소파술 시행후 연고도포 및 수술직전에 상악전치 또는 소구치의 순면 또는 협면 치은조직을 生檢하였다.

H-E stain, PAS stain, Van Gieson stain, Gomoris reticulin stain法을 이용했으며, 그 결과는 다음과 같다.

1. 錠製服用群은 다른 實驗群이나 對照群보다 섬유아세포의 증식이 촉진 되었고, 염증성 침윤도 적었으며, 열구상피의 상피화는 對照群보다 현저했다.
2. 軟膏塗布群은 열구상피의 증식이 다른 실험군에 비해 현저하고, 不全角化層을 보였으나 섬유아세포의 증식은 뚜렷하지 않았다.
3. 軟膏塗布 및 錠製服用群은 열구상피의 대조군에 비해 뚜렷하고, 不全角化層을 보이나, 섬유아세포의 증식은 錠製服用群보다는 뚜렷하지 않았다.

## ● 단순성 치주염 환자에서 치석제거 전후의 경계 상피 주위의 다형핵 백혈구의 침윤정도에 관한 조직 화학적 연구

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단순성 치주염 환자들을 치석제거군과 비치석제거군의 2군으로 나누어 치석제거군은 치석제거 1週후에 경계상피를 포함한 치은을 절제하고 비치석제거군은 절제하고자 하는 부위만을 남기고 타부위는 모두 치석제거를 하여 1週日 후에 경계상피를 포함한 치은조직을 절제하여 곧 10% saline formalin에 2日間 고정한 후 10~15 $\mu$  두께로 냉동상태에서 절편을 만들어 diaminobenzidine을 이용한 peroxidase staining을 실시하여 현미경에서 dark-green color로 나타나는 부위를 positive反應을 보고 관찰하였으며 對照 염색으로 Hematoxylin과 Eosin염색을 실시하여 관찰하였든 바 다음과 같은 결론을 얻었다.

1. 치석제거群이 비치석제거群에 비하여 경계상피(junctional epithelium) 주위 결체조직內 peroxidase-positive staining PMNL의 침윤이 현저히 감소됐음을 관찰할 수 있다.
2. 치석제거군 및 비치석제거군 共히 free marginal gingiva 직하부, junctional epithelium 上部가 junctional epithelium 주위보다 더 peroxidase positive staining PMNL의 침윤이 적음을 관찰할 수 있다.
3. peroxidase-positive staining PMNL은 pocket epithelium 직하부의 dermal papilla와 rete peg 주위의 결체조직에 특히 심하게 분포되어 있으며 free marginal gingiva의 표면에도 유주하여 붙어 있는 것을 쉽게 관찰할 수 있다. 또한 free marginal gingiva의 상피內에서도 유주하는 PMNL의 양상을 관찰할 수 있다.

## The comparable study of sodium fluoride treatment with and without iontophoresis on root hypersensitivity

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The purpose of this investigation was to compare the effects of NaF treatment with and without iontophoresis on root hypersensitivity.

21 patients aged 30 to 55 years, were chosen and divided into 3 groups(A. B. C.).

Topical applications of NaF were carried out twice a week for 6 weeks. The measurements of pain score degree were carried out 0 day(before first application), after 1 week, 2, 3, 4, 5, 6 weeks, 2 months and 3 months.

The apparatus used in this experiment were Ionator and Desensitron. The conclusions drawn from this study were :

1. In Group A, Experimental group(Ionator) Showed marked reduction of hypersensitivity through the whole experimental period.

Control group showed statistically significant rate of decrease of hypersensitivity after 4 weeks.

2. In Group B, Experimental group(Desensitron) showed statistically significant rate of decrease after 2 weeks.

3. In Group C, Ionator showed slightly more effective than Desensitron, but statistically, there was no significance.

## Histologic effects of madecassol on human gingival wound healing following subgingival curettage

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The effects of Madecassol on human gingival wound healing following subgingival curettage were evaluated histochemically in 8 adult patients who required flap operations. They were divided into four groups. Each experimental group received the ointment, the tablet, and both, respectively, immediately after curettage. Biopsies were taken immediately before flap operation, which were performed 3, 7 and 14 days after curettage. For staining, H & E stain, PAS stain, Van Gieson stain and Gomori's reticulin stain techniques were used. The results were as follows.

1. The tablet group specimens showed that epithelialization of the crevices and proliferation of fibroblasts were accelerated with less inflammatory infiltration, compared with the other group specimens.
2. In the ointment group, prominent apical migration and proliferation of the crevicular epithelium were noted with parakeratosis. However, proliferation of fibroblasts was mild in the ointment rather than in the tablet and the ointment-tablet.

3. In the ointment-tablet group, epithelial migration and proliferation of the crevices, which displayed parakeratosis, were improved more than in control group. However, proliferation of fibroblasts was less prominent than in the tablet group.

### **A histochemical comparative study on the extent of PMNL accumulation adjacent to the pocket lining epithelium before and after scaling in generalized simple periodontitis**

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To study on the extent of PMNL accumulation adjacent to the junctional and pocket epithelium before and after scaling, the author selected 6 patients who were suffered from generalized simple periodontitis. Those 6 patients were divided into 2 groups ; one was scaling group and the other was nonscaling group. The former was removed of plaque and calculus completely 1 week before biopsy and the latter was also removed of all the plaque and calculus 1 week before biopsy except the area to be excised for biopsy specimens. All the specimens were fixed in 10% saline formalin for 2 days and sectioned with cryocut in 10-15 $\mu$  thickness. The peroxidase staining was performed with Drows and Engel's method. Counter staining was also performed with Hematoxylin and Eosin. The results were as follows ;

1. Peroxidase-positive stained PMNL was extensively infiltrated in non-scaling group to compare with scaling group.
2. Peroxidase-positive stained PMNL was more severely accumulated just beneath or around the junctional epithelium than upper part of scaling and non-scaling group.
3. Peroxidase-positive stained PMNL was more heavily infiltrated in the dermal papilla than any other place of connective tissue. Furthermore, PMNL migration was also easily found out within epithelium of free marginal gingiva and also showed accumulation of peroxidase positive stained PMNL on the epithelial surface of free marginal gingiva.