● Madecassol이 창상치은조직의 치유에 미치는 영향에 관한 조직학적 연구

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Madecassol이 full and partial thickness flap후 창상치은조직의 치유에 미치는 영향을 조직화학적으로 연구하기 위해 8마리의 성견을 선택하여, 대조군으로 각기 나누었다. 시술후 4, 7, 14, 21일에 희생하여, 광학현미경하에서 상피의 분아상인 madecassol을 투여한 군과 대조군을 비교하고저 H-E 염색을 하였던 바 다음과 같은 결과를 얻었다.

1. 실험군에서 빠르고 현저한 상피화가 partial and full thickness flap 모두에서 나타났다.
2. 결체조직의 생성은 대조군과 비교하였을 때 염증세포의 침윤이 적은 동시에 현저하였고 섬유아세포의 증식이 뚜렷하였다.
3. 치조골의 치유반응에 있어서는 4일과 7일 표본의 비교결과 골파괴가 7일까지 나타났다가 서서히 감소되는 반면 골생성이 같이 나타나면서 현저해지고 있었다. 대조군과의 비교해서 파골세포의 수가 조기에 감소되는 경향이 뚜렷하였다.

● 테트라싸이클린의 경구투여가 백서의 치주염에 미치는 영향에 관한 조직학적 연구

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테트라싸이클린의 경구투여가 백서(Sprague-Dawley)의 치주염에 미치는 영향을 관찰하기 위하여 25마리(숫놈)의 백서를 정상군(5마리), 대조군(10마리), 실험군(10마리)으로 나누었다. 실험군과 대조군은 인위적으로 치주염을 야기하기 위하여, 0.008inch의 stainless steel ligature wire를 하악전치부위에 결찰하고, 33% sucrose를 혼합한 사료를 주었다.

실험군에서는 대조군과 달리 테트라싸이클린을 하루에 21mg씩 음료수에 용해시켜 투여하였다. 한달후 육안적 및 현미경적소견에서 실험군은 정산군과 비슷한 미세한 염증세포의 출현과 정상치조골을 보인 반대 대조군은 심한 염증세포침윤과 치조골흡수를 보였다. 본 실험은 테트라싸이클린의 경구투여가 치주염발생의 예방뿐만 아니라 치주질환 처치에 있어서 치료와 병행하여 사용될 수 있는 가능성을 보여주었다.

1. In the progesterone-treated group, there was a prominent opening at the intercellular junctions of the endothelial cells during the whole periods of this experiment and increased pinocytotic vesicles in the endothelial cytoplasm in porportion to the duration of the treated terms. After 10 days cytoplasmic fenestration and proliferation of endothelial cells was observed. After 24 days endothelial cells were characterized by well developed rough endoplasmic reticulum(RER) associated with increased mitochondria and deep folded nucleus but glycogen granules in the cytoplasm disappeared.
2. In estrogn-treated group, after 1 day numerous cytoplasmic processes toward the lumen of the small blood vessels and well developed RER observed. This typical appearance did not disappear and became more prominent.

Histologic study on the effects of madecassol on gingival wound healing

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The effects of madecassol on wound healing following partial and full thickness flap were evaluated histochemically in 8 adult mongrel dogs. They were divided into control and experimental group, and each group consisted of 4 dogs.

After surgical treatment, intramuscular injection of extracts of Centella asiatica immediately was performed. Biopsies were taken immediately before sacrifices, which were performed 4. 7, 14, 21 days after surgical procedure.

For staining, H-E stain technique was used. Within the limits of experiment, the results were as follows.

1. In the experimental group prominent and rapid epithelization was observed in both procedure.
2. New connective tissue cells, and proliferation of fibroblasts were accelerated wit less in flammatory infiltration, to compared with those of the control group.
3. The response of the alveolar bone in the experimental animal revealed that osteoclastic activity at the alveolar crest was prominent and rapidly ceased in both procedures.

A histologic study of the effect tetracycline dominstered orally on periodontitis in the rat

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A histological study was done to observe the influence of tetracycline administered orally on periodontitis in Sprague-Dawley rats. Twenty-five male rats were arranged into two groups, one group recieved 21 mg of tetracycline hydrochloride each day for 30 days in drinking water. Periodontitis ws induced

in the lower incisors with 0.008inch stainless steel ligature wiresand by modifying the normal diet with 33% sucrose.

In the macroscopic and distologic findings, tetracycline-treated group showed a few inflammatory cells and intact alveolar bone, and control group appeared severe inflammatory cell infiltration and bone loss. Whithin the limit of this study, it was suggested that tetracycline given orally may be recommended for the prevention of periodontal disease or as adjunct to periodontal treatment. However, long-term study will be necessary to better define its effectiveness on the prevention of periodontal disease.

A scanning electron microscopic study of rat gingiva and alveolar mucosa treated with chlorhexidine gluconate

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Following treatment with 2% chlorhexidine gluconate solution for 4 weeks, the surface of the gingiva and alveolar mucosa from the male albino rats was examined by the scanning electron microscope to attempt to determine the surface features whehter there were any noticeable changes. The appearances were as follows.

1. Pitted and reticular microridge pattern in the surface of the gingiva and alveolar nucosa was show in both the chlorhexidine-treated group and the control group.
2. Pitted pattern was tend to diminished and reticular microrides thinned as to the treated term beign longer.
3. Epithelial exfoliation was on the decrease.

Histologic study on the accelerated reattachment by the chemical agents in laterally repositioned flap

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Laterally repositioned flap procedure for covering of denuded root surfaces associated with root demineralization for accelerated reattachment with cementogenesis to dentin using defatting agent and acids were performed in 8 mongrel dogs.

The animals were sacrified at 1, 2, 3 and 4 weeks interral after surgery. Then the specimens were prepared and evaluated histologically.

1. The surgically exposed tooth root surface was approximately 8 mm in average length, 4 weeks after surgery, control and citric acid groups the coverage of root surface was 6 mm chloroformmeta-