

正常對照群에서 가장 낮았다.

3. 血清內 IgM 濃度의 分布는 齒周症 患者群에서 가장 높았고($P < 0.0005$), 다음이 齒周炎 患者群이며($P < 0.05$), 正常對照群에서 가장 낮았다.
4. 血清內 補體 C_3 와 C_4 의 分布에서는 齒周炎 患者群과 齒周症 患者群의 濃度가 正常對照群의 濃度와 有意한 差異가 없었다.
5. 따라서 齒周炎 患者에서는 IgA와 IgM의 血清價가 正常對照群에 비해 有意하게 增加 되었으며, 齒周症 患者에서는 IgG와 IgM의 血清價가 正常對照群에 비해 有意하게 增加되었다.

● Progesterone이 백서치은 결합조직에 미치는 영향에 관한 전자현미경적 연구

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저자는 백서에 고당사료를 주고 progesterone을 근육주사하여 1, 2, 3주 간격으로 치은 결합조직을 전자현미경으로 관찰하여 다음과 같은 결론을 얻었다.

1. 대조군에서는 정상적으로 긴 방추형의 섬유세포를 관찰할 수 있었으며 세포내 긴 타원형의 핵과 미토콘드리아 cristae, RER lamellae가 선명히 관찰되었고, 교원섬유의 형태에 있어서도 전체적으로 정상적인 조직 소견을 관찰할 수 있었다.
2. 고당사료를 준 실험군과 progesterone을 근육주사한 실험군에 있어서는 1주에서는 뚜렷할 만한 변화를 관찰할 수 없었으나 2, 3주에 있어서 염증반응으로 간주 되는 변화를 관찰할 수 있었다. 즉 섬유세포가 둥그스름한 형태를 보이며 세포질내 미토콘드리아의 파괴를 관찰할 수 있었다. 또 혈관벽 주위에 비만세포와 조직구를 많이 관찰할 수 있었다. 또 혈관벽 주위에 비만세포와 조직구를 많이 관찰할 수 있었다. 교원섬유는 비교적 손상되지 않은 상태임을 관찰할 수 있었다.
3. Progesterone과 고당사료를 함께 투여한 실험군에 있어서는 실험기간이 경과함에 따라 상당히 둥근 섬유세포 내에 심한 세포질의 변화가 보이며 교원섬유 내에 심한 세포질의 변화가 보이며 교원섬유의 파괴가 관찰되었다. 특히 염증시 결합조직내에 나타나는 특징적인 변화인 임파구와 섬유세포의 결합을 관찰할 수 있었고 세포충실성의 증가와 치은열구상피 하방에 다형핵백혈구와 임파구의 밀집을 관찰할 수 있었다.

● 치주조직의 환경과 치은열구삼출액과의 관계에 대한 연구

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臨床的으로 齒周狀態가 健康한 20歲에서 28歲에 이르는 男子 25名을 選擇하여 아침(8時 30分), 낮(1時 30分) 그리고 늦은 牛後(4時 30分)의 測定時間에 따른 齒齦裂溝滲出液의 量的變化를 觀察하고, 또 길이 40mm, 幅 20mm, 두께 3mm의 Paraffin wax를 10分間 咀嚼한 直後에 齒齦裂溝滲出液을 測定하여 咀嚼으로 招來된 量的變化를 比較調査한 結果 다음과 같은 結論을 얻었다.

Serum concentrations of immunoglobulins and complement were assayed by Laser Nephelometer (Hyland Co., U. S. A.).

The results were as follows :

1. The mean of serum Ig G levels of periodontosis patients was significantly higher than those of periodontitis patients was significantly higher than those of periodontitis patients and controls ($P < 0.05$, $P < 0.025$).
2. In the case of serum Ig A levels, the mean value of periodontitis patients was significantly higher than that of controls ($P < 0.05$). And the mean value of periodontosis patients was higher than that of controls but the difference was not significant.
3. In the matter of serum Ig M Levels, the mean values of periodontosis patients and periodontitis patients were significantly higher than that of controls ($P < 0.005$, $P < 0.05$).
4. In the subjects of serum C_3 and C_4 complement levels, the mean values of periodontitis patients, periodontosis patients and controls did not show significant differences.
5. Thus, Serum Ig A and Ig M concentrations were significantly increased in periodontitis patients when compared with the normal controls. And then serum Ig G and Ig M concentrations were significantly increased in periodontosis patients when compared with the normal controls.

Electron imicroscopic study of the gingival connective tissue in white rats treated with progesterone

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The purpose of this study was to observe the electron microscopic change of the gingival connective tissue treated with progesterone.

Thirty six nonpregnant female white rats were used for this study and the white rats were divided into 4 groups ((1) control group (2) high sucrose diet group (3) progesterone group (4) progesterone+high sucrose diet group) for periods of 1, 2, and 3 weeks.

At the end of each experimental week, the white rats were sacrificed and the molar teeth with surrounding soft and hard tissue were removed and prefixed with 3% Glutaraldehyde in Phosphate buffer solution for 24 hours.

The tissue and teeth were decalcified with 0.125M EDTA for 1 week and post fixed in 1% Osmium Tetroxide. After dehydration with graded ethanol series, they were embedded in Epon.

They were sectioned 500Å in thickness by means of ultramicrotome, doubly stained with Uranyl Acetate and Lead Citrate and examined with Hitachi Hu-500 electron microscope.

The results were as follows.

1. In the control group, author could observe that normal fibroblasts and collagen fibers. The shapes of fibroblasts were elongated and mitochondria cristae were orientated transversely.
2. The groups treated with progesterone alone and the groups fed by high sucrose diet only showed more round fibroblasts in shape than normal, destruction of mitochondria cristae and normal

collagen fibers. Mast cells and histiocytes were observed around capillary walls.

3. In the group received of the progesterone and high sucrose diet, author could observe that lymphocyte-fibroblast interaction, round fibroblasts, destruction of mitochondria and collagen fibers, RER dilation, increased cellularity, and RMNL subjacent to the sulcular epithelium.

A study on the relationship between periodontal environment and gingival crevicular fluid flow

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Fifty subjects(25 males and 25 females)aged 20 to 28 with clinically healthy gingiva were selected for determining the amount of gingival crevicular fluid by Periotron.

The gingival crevicular fluid was checked at eight thirty in the morning, at one thirty and four thirty in the afternoon.

For determining the influence of chewing on the gingival crevicular fuid flow, the same method was carried out after chewing paraffin wax(40mm in length, 20 mm in width and 3mm in thickness)for 10 minutes.

The results were as follows :

1. The amount of gingival crevicular fluid was more in the morning than in the afternoon.
2. The amount of gingival crevicular fluid was increased by chewing.
3. The quantifative changes of gingival crevicular fluid was more remarkable in posterior teeth than anterior teeth, and in molar teeth than premolar teeth.
4. In the quantitative changes of gingival crevicular fluid, there was no statistical singnificance according to sex($P > 0.1$).

A clinical study of relationship between position and trauma from occlusion

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Thirsty-five randomly selected subjects of both sexes, aged twenty-five to thirty-five with anterior malalignment and malocclusion were examined to inspect the clinical changes no periodontium. After taking intraoral standard radiography on the area of anterior tooth of both jaws, films were interpreted as compared with changes inspected in intraoral examination.

The following results were obtained :

1. In the guoup with normal gingiva, sings of trauma from occlusion were prominent on the lamina dura and periodontal space in intraoral standard radiography.(36.74 percent).