3. $Al(ClO_3)_3$를 도포한 부착치은과 치조점막에서는 각화도가 증가하였으며 pyknosis의 정도는 변화가 없었다.
4. Na_2PO_3F로 처리한 부착치은 및 치조점막에서는 각화 및 pyknosis의 영향을 미치지 못하였다.

● 염증성 치은조직의 Fusobacterium과 Staphylococcus 항원의 국재성에 대한 면역병리학적 연구

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臨床的으로 齒周疾患으로 診斷된 患者에서 切除한 齒齦組織 50例에 對해서 fusobacterium과 staphylococcus抗原의 局在性을 螢光抗體法을 利用하여 檢索한 結果 다음과 같은 結論을 얻었다.

1. staphylococcus를 抗原으로 하는 螢光抗體液染色液에서 齒周疾患患者 50例中에서 28例(56%)에서 菌體나 菌體生成物을 檢出하였다.
2. fusobacterium을 抗原으로 하는 螢光抗體液染色液에서 齒周疾患患者 50例中에서 22例(44%)에서 菌體나 菌體生成物을 檢出하였다.
3. staphylococcus檢出 28例와 fusobacterium 檢出 22例中 두 種類의 菌體나 菌體生成物이 함께 檢出된 例는 12例(42.9%)이였으며 staphylococcus만의 檢出은 16例(50.7%)이며 fusobacterium만의 檢出은 10例(45.5%)이였다.
4. 特異螢光은 菌體以外에 噬食細胞인 組織球나 中性多核白血球와 또한 淋巴球, 形質細胞 等에서도 發見되었다.
5. 大多數의 螢光陽性의 菌體性分은 上皮의 乳頭部 또는 上皮層 直下部의 結合組織의 組織破壞나 炎症細胞의 浸潤이 甚한 部分에서 檢出되었다.

● 염증성 치은에 있어서 Alkaline 및 Acid Phosphatase의 활성도에 관한 연구

이 만 섭
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저자는 서울대학교 치과대학생에서 얻은 정상치은 7례와 1974년 9월 1일부터 9월 30일까지 서울대학교 치과대학 부속병원 치주병과에 내원하는 환자에서 얻은 염증성 치은 20례에서, Bessy-Lowry씨 방법으로써 alkaline 및 acid phosphatase의 활성도를 측정한 결과 다음과 같은 결론을 얻었다.

1. alkaline phosphatase의 활성도는, 정상치은에서 195.9± 21.3μmoles p-nitrophenol released/hr/g wet tissue, 염증성치은에서는 287.8± 57.7이었다.
2. acid phosphatase의 활성도는, 정상치은에서 70.6± 9.9μmoles p-nitrophenol released/hr/g wet tissue, 염증성치은에서는 105.2± 21.1이었다.
3. 염증성치은은 정상치은보다 alkaline 및 acid phosphatase 활성도가 매우 증가했다.
4. gingival score가 증가할 수록, 즉 염증정도가 심할 수록, alkaline 및 acid phosphatase 활성도가 증가되었다.

Immunopatholgical studies on localization of Fusobacterial and Staphylococcal antigen in the human inflamed gingiva

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This study was performed to detect the localization of celluar component of staphylococcus and fusobacterium by using fluorescent antibody technique. Gingival biopsy specimens were taken from fifty patients diagnosed as clinically periodontal disease. The tissues obtained were immediately put into 95% cold ethanol and passed through cold absolute ethanol and xylene by Sainte-Marie's method. Paraffin embedding and sections were stained with hematoxylin eosin and fluorescent antibody technique by Marshall's method.

Rabbit antiserum to staphylococcus and fusobacterium isolated from the sulcus of inflamed human gingivae was prepared. The specificity of antiserum was confirmed by Ouchterlony micro-double diffusion method. Fluorescein isothiocyanate was conjugated with the globulin fraction of rabbit antiserum.

The results were obtained as following :

1. In fluorescein-labelled staphylococcus antiserum, 27 cases were revealed fluorescence-positive in the gingival tissue.
2. In fluorescein-labelled fusobacterium, 22 cases were revealed fluorescence-positive.
3. Among 28 cases of fluorescein labelled anti-staphylococcus and 22 cases of fluorescence labelled anti-fusobacterium, 12 cases were revealed mixed two kind of bacteria, 16 cases showed only staphylococcus and 10 cases showed only fusobacterium respectively.
4. Specific fluorescence was proved not only in bacteral mass but in histiocytes and polymorphonuclear leukocytes
5. The most fluorescence positive in bacterial mass was revealed in papillary layer of epithelium, and connective tissue of subepitheial layer in which were severely tissue destruction and inflammatory cell infiltration.

Studies on the activities of Alkaline and acid Phosphatase in inflamed gingiva

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The author has obtained the following results after measuring the activites of alkaline and acid phosphatase in the 7 cases of normal gingiva and the 20 cases of inflamed gingiva under the Bessy-Lowry method which took p-nitrophenyl phosphate as the substrate :

1. The activity of alkaline phosphatase indicated a mean of 195. 9μmoles p-nitrophenol released/hr/g wet tissue with a standard deviation of 21.3 in the normal gingiva, against a mean of 287.8± 57.7 in the inflamed gingiva.
2. The activity of acid phosphatase indicated a mean of 70. 6μmoles p-nitrophenol released/hr/g wet