

● 중증치주염환자의 T 및 B 임파구와 T-subsets의 분포에 관한 연구

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重症齒周炎患者의末梢血液内の各種淋巴球分布狀況에對한變化를觀察하기爲하여慶熙大學校齒科大學附屬病院齒周科에來院한重病齒周炎患者28名을調査群으로하고調査群과同數의同一年齡과性을 가진齒周組織이健康한者를對照群으로하여 이들의末梢血液을採取하여免疫血液學的인檢査를施行하여分析比較한結果 다음과 같은結論을 얻었다.

1. 末梢血液内 T 淋巴球의 分布는 重病齒周炎患者의 平均値가 正常人에 비해 有意하게 減少되었다 ($P < 0.025$).
2. 末梢血液内 B 淋巴球의 分布는 重病齒周炎患者의 平均値가 正常人에 비해 多少 增加되었으나 統計學的인 有意한 差異는 없었다.
3. 末梢血液内 T, M 細胞의 分布는 重病齒周炎患者의 平均値가 正常人에 비해 有意하게 減少되었다 ($P < 0.001$).
4. 末梢血液内 T, G 細胞의 分布는 重病齒周炎患者의 平均値가 正常人에 비해 有意하게 增加되었다 ($P < 0.001$).
5. 末梢血液内的 白血球 總帥와 淋巴球의 分布는 重症齒周炎患者와 正常人 間에 有意한 差異가 없었다.

● 염증치은의 PROSTAGLANDIN E와 F2 α 의 농도에 관한 연구

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염증치은의 prostaglandin E와 prostaglandin F2 α 의 함량변화를 관찰하기 위해 만성치주 질환을 가진 환자 50명에서 sulcus bleeding index, 치주낭의 깊이 및 치조골흡수도를 조사한 다음 염증치은을 국소마취하에 외과적 방법으로 적출하여 액체질소로 냉동시켰다.

치은조직은 균질화하여 ethyl acetate : isopropanol : HCl(3 : 3 : 1 : v/v) 혼합용액으로 prostaglandin을 추출하여 분석에 사용하였다.

Prostaglandin E와 F2 α 는 치은 추출물을 gel tris buffer에 용해하여 PGE와 PGF2 α radioimmunoassay kit를 이용한 radioimmunoassay방법으로 측정하여 다음의 결론을 얻었다.

1. 염증치은의 PGE함량은 sulcus bleeding index가 높아짐에 따라 증가하였으나 PGF2 α 는 큰 차이를 보이지 않았다.
2. 치조골 흡수도가 증가함에 따라 PGE 함량은 증가하였으나 PGF2 α 는 감소하는 경향을 보였다.
3. 치은의 PGE와 PGF2 α 는 치주낭깊이가 증가함에 따라 높은 함량을 나타냈다.
4. 염증치은조직의 prostaglandin은 PGF2 α 가 PGE보다 높은 함량을 가지고 있었다.

Prostaglandin E and F2 α levels in inflamed human gingiva

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This experiment was performed to study changes on the contents of prostaglandin E and F2 α according to the severity of gingival inflammation, the loss of alveolar bone and the depth of periodontal pocket in 50 patients with chronic periodontal disease. Preoperative preparations, consisting of plaque control and scaling, were carried out on all patients.

The clinically evaluated inflamed gingivae were excised under local anesthesia and stored in liquid nitrogen.

Tissue samples were homogenized in the solution of 1.0ml phosphate buffered saline and prostaglandins were extracted by the mixture of 3ml ethyl acetate : isopropanol : HCl(3 : 3 : 1 : v/v).

Organic phases, separated by centrifugation, were transferred to polypropylene tubes and were dried in a 55°C water bath. And then samples were stored at -20°C for analysis.

The concentrations of prostaglandin E and F2 α within the gingival extracts dissolved in gel tris buffer were measured by radioimmunoassay.

The results were analyzed according to sulcus bleeding index (SBI), bone loss and depth of periodontal pocket.

1. The concentration of PGE was increased according to the severity of gingival inflammation, but that of PGF2 α was not changed.
2. The concentration of PGE was increased according to the loss of alveolar bone, but that of PGF2 α showed a tendency to decrease.
3. The concentration of PGE and PGF2 α was increased according to the depth of periodontal pocket.
4. The concentration of PGF2 α was higher than that of PGE in inflamed tissues.

PGE 6.6–102.4pg/mg, total mean : 33.8 ± 3.37 pg/mg

PGF2 α 9.1–220.8pg/mg, total mean : 72.2 ± 5.86 pg/mg

An electron microscopic study on the changes of the oxytalan fibers in periodontium on the effect of trauma from occlusion in dogs

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The purpose of this study was to investigate the electron microscopic changes of the oxytalan fibers in periodontium on the effect of trauma from occlusion.

The experiments were performed in five dogs. One dog was used as control and the other four dogs as experimental groups. According to the experimental periods, the experimental groups were classified into 3day group, 7day group, 15day group and 30day group.

The experimental animals were investigated by histochemical staining method.