

● 수종의 표면탈회제가 치은의 조기재부착과 신생백아질 형성에 미치는 영향에 관한 연구

박 증 차

서울대학교 대학원 치의학과 치주과학 전공

수종의 표면탈회제가 치은의 조기재부착과 신생백아질 형성에 미치는 영향을 관찰하고자 8-12kg 무게의 성견을 택하여 인위적인 치주염 유발을 위하여 nembuta sodium(30mg/kg, body weight, I.V.)으로 전신마취하고 상하악 좌우 제1, 2 소구치를 시술 부위로 정하고 시술 부위에 수직 2cm, 수평 5cm로 절개하고 약 5cm정도 절제한 후 0.3mm 굵기의 wire를 치경부에 묶어서 치조골 정상에서 봉합하였다. 이들 동물은 시술후 약 4주간 치주염 유발 유무를 관찰하였고, 그후 치주염이 유발한 해당치아를 세척, 소파술을 행하여 변성된 백아질과 치은조직을 Gray's curette #12로 제거하고, 치은에 닿지 않도록 3가지 약품 45% phenol, citric acid pH 1 및 0.6 N HCl을 면봉에 발라 2-3분간 도포한 후 식염수로 세척하고 4-0 silk로 봉합하였다. 8마리 실험 성견은 실험1주, 2주, 3주 및 4주에 희생시켜 10% neutral buffered formalin에서 고정하고 Van gieson과 H-E(Hematoxylin & Eosin) 염색을 하며 관찰하였던바 다음과 같은 성과를 얻었다.

1. 상피의 전이(migration) 정도는 45% phenol이 가장 적고 citric acid pH 1가 그 다음이고 0.6 N HCl과 대조군은 큰 영향이 없었다.
2. 신생백아질의 형성 및 시기는 4군이 다같이 동일하고 그것은 노화 또는 변성 백아질을 제거하거나 상아세관을 노출시킬 때 시행하는 치근 연마술시에 가한 물리적 힘에 의해서만 영향을 받았다.
3. 대조군과 45% phenol에서는 치근상부의 상아질면에 소함몰된 상아질 흡수가 있었다. 그러나 citric acid pH 1 및 0.6 N HCl에서는 이런 현상이 없었다.
4. 상피전이와 결체조직 조기 형성에 의한 신생치근막 형성은 45% phenol과 citric acid pH 1가 조직학적 소견으로는 양호하게 나타났다.

● 자가 치조골 및 상아질의 피하이식이 경조직 형성에 관한 실험적 연구

장 계 순

서울대학교 대학원 치의학과 치주과학 전공

신선 자가 치조골 및 상아질의 골형성 유도능력에 따라 비교연구를 하고자 2kg 내외의 가토 16마리를 택하여 上顎 치조골 및 치아를 적출하여 치조골에 부착된 결체조직은 제거하고 동시에 발거한 치아도 법랑질을 제거한 순수한 상아질만을 택하고서 同一動物의 점막을 절제한 후 이식 봉합하였다.

실험 대상인 16마리의 가토는 각각 1주, 2주, 3주 및 4주 群으로 나뉘었다. 각 群은 매주마다 1회씩 Lead acetate(3mg/kg/B. W)를 정맥에 주사하였으며 주사후 1주, 2주, 3주, 4주에 각기 희생시켜 이식된 골조직 및 주위 조직을 적출, 10% 중성 formalin에 고정후 0.2% HCl 및 0.4 HCl로 탈회, hydrogen sulfide gas로 탈회부위가 불용성 black lead sulfide가 형성되도록 한 후 10% gelatin에 조직을 포매하고 20 μ 으로 잘라서 0.1% gold chloride 용액에 의해 흑색선이 선명히 나타나도록 한

The effect of surface demineralizing agents on the accelerated reattachment with cementogenesis to dentin

Choong Cha Park

Department of Periodontology, Graduate school, Seoul National University

The accelerated reattachment with cementogenesis to dentin were experimented in this study.

All experimental animals were divided into 4 groups and designed to sacrifice those four groups every-week after experiments serially.

1. On problem about epithelial migration, it must be considered that the chemical effects of citric acid pH 1 and 45% phenol when they applied to the dentin surface would be contributed to the accelerated attachment of connective tissue fibers into dentin surface and its effect should be co-related with the retardation or cessation of epithelial migratoin.
2. The time and amount of new cementum formation were similar in the four groups. But it was only affected by the mechanical force which was required to the root planning to remove old or necrotic cementum and expose dentin tubules.
3. Control groups and 45% phenol-applied specimens showed continuous and dentin resorption, where deep moss-like resorption bay has been formed in their coronal part of root surface but this phenomenon was not found in the citric acid pH 1 and 0.6 N HCl groups
4. In histologic observations, 45% phenol and citric acid pH 1 have some effects on the epithelial migration and early connective tissue formation

The formation of hard tissue by subcutaneous autogenic implantation of fresh alveolar bone and dentin

Gae Soon Chang

Department of Periodontology, Graduate school, Seoul National University

Fresh autogenic alveolar bone and dentin implantation were performed to study the bone and cementum induction capacity of the two kinds of hard tissue.

Experimental animals were divided into 4 groups : 1, 2, 3, 4 weeks.

To observation of quantitative measurement of the rate and mode of bone and cementum deposition. lead acetate as an intravital stain and hematoxylin and eosin stain were performed.

The results were as follows :

1. In 1 week specimens of fresh autogenic alveolar bone implantation, all the grafted marrow were necrosed and osteoclasts were concomitantly appeared. Resorbed bone surface was easily found out. All of these findings were progressively changed and all the resorbed bone was replaced and remodelled completely by new bone in 2 weeks specimens. This new bone remodelling was

The effect of surface demineralizing agents on the accelerated reattachment with cementogenesis to dentin

Choong Cha Park

Department of Periodontology, Graduate school, Seoul National University

The accelerated reattachment with cementogenesis to dentin were experimented in this study.

All experimental animals were divided into 4 groups and designed to sacrifice those four groups every-week after experiments serially.

1. On problem about epithelial migration, it must be considered that the chemical effects of citric acid pH 1 and 45% phenol when they applied to the dentin surface would be contributed to the accelerated attachment of connective tissue fibers into dentin surface and its effect should be co-related with the retardation or cessation of epithelial migratoin.
2. The time and amount of new cementum formation were similar in the four groups. But it was only affected by the mechanical force which was required to the root planning to remove old or necrotic cementum and expose dentin tubules.
3. Control groups and 45% phenol-applied specimens showed continuous and dentin resorption, where deep moss-like resorption bay has been formed in their coronal part of root surface but this phenomenon was not found in the citric acid pH 1 and 0.6 N HCl groups
4. In histologic observations, 45% phenol and citric acid pH 1 have some effects on the epithelial migration and early connective tissue formation

The formation of hard tissue by subcutaneous autogenic implantation of fresh alveolar bone and dentin

Gae Soon Chang

Department of Periodontology, Graduate school, Seoul National University

Fresh autogenic alveolar bone and dentin implantation were performed to study the bone and cementum induction capacity of the two kinds of hard tissue.

Experimental animals were divided into 4 groups : 1, 2, 3, 4 weeks.

To observation of quantitative measurement of the rate and mode of bone and cementum deposition. lead acetate as an intravital stain and hematoxylin and eosin stain were performed.

The results were as follows :

1. In 1 week specimens of fresh autogenic alveolar bone implantation, all the grafted marrow were necrosed and osteoclasts were concomitantly appeared. Resorbed bone surface was easily found out. All of these findings were progressively changed and all the resorbed bone was replaced and remodelled completely by new bone in 2 weeks specimens. This new bone remodelling was