● 치근활택술후의 지각과민증에 대한 불화나트륨 이온전기도입법의 효과에 관한 연구

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치근활택술 후의 지각과민증에 대한 불화나트륨 이온전기도입법의 제통 효과 및 그 기전을 알아보고자, 부산대학교병원 치과에 내원한 만성 치주염 환자 16명에서의 치은연하소파술 또는 치은박리소파술을 시행한 상·하악 전치 45개를 연구대상으로 하여 이온전기도입법의 제통 효과를 평가하고, 이온전기도입법 전과 후 그리고 과민 치아와 비과민치아에 있어서의 노출된 상아 세관의 갯수와 차이를 주사전자현미경으로 관찰한 결과 다음과 같은 결론을 얻었다.

- 1. 과민 치아 24개 중 이온전기도입법 직후에 과민증이 소실된 치아는 19개(79%)였고, 나머지 5개(21%)의 치아는 1주 후의 재치료에 의해 과민반응이 소실되었다.
- 2. 이온전기도입법 후 상아 세관의 갯수와 직경은 공히 감소되었으며, 통계적으로는 치료 전과 후의 세관의 직경에만 유의한 차이가 있었다(P<0.05).
- 3. 과민 치아 24개 중 21개(88%)에서 그리고 21개의 비과민 치아 중 9개(43%)에서 노출된 세관이 판찰되었다. 과민치아가 비과민 치아보다 세관의 갯수가 많았고 직경이 컸으며, 통계적으로는 세관의 갯수만 유의한 차이가 있었다(P<0.05).
- 분지부 이환 치아의 비외과적 처치에 있어 치주낭내 항균제 세척의 보조적 활용에 관한 연구

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분지부 이환 치아의 비외과적 치주 처치에 있어, Chlorhexidine과 Tetracycline을 이용한 치주 낭내세척의 보조적 효과를 평가해 보고자, P 대학교병원 치과에 내원한 환자 23명의 분지부 이환치아 37개를 연구대상으로 하여, 치면 세균막 관리교육과 치석제거 및 치근화택술을 시행한 후, LS군은 생리 식염수로, CH군은 0.1% Chlorhexidine으로, 그리고 TC군은 5% Tetracycline으로 치주낭세척을 주 1회 4주간 실시하면서, 실험 0, 4, 8주째에 치주낭 심도, 치주조직 부착도, 치은출혈유무, 치태지수, 치은열구액의 양을 측정하고, 치은연하치태의 현미경 검사를 실시하였다.

결과를 종합하여 보면, 각 군에 있어 기간의 경과에 따른 이들 측정 항목의 개선을 관찰할 수 있었으나, 각 군간 통계학적으로 유의한 차이는 없었다.

subjects and 728 sites in the diseased patients. Sublingual temperature was measured to compensate for subject to subject variation in core temperature.

- 1. The sublingual temperature was within physiologic range in both periodontally healthy subjects and diseased patients.
- 2. In the periodontally healthy subjects, the gingival sulcus temperature was  $4.3^{\circ}$ C higher in posterior teeth than anterior(P<0.01) and  $2.0^{\circ}$ C higher in mandibulateeth than maxillary teeth(P<0.01).
- 3. In the periodontally diseased patients, the gingival sulcus temperature was 3.5°C higher in posterior teeth than anterior teeth(P<0.01). The increase of pocket depth and presence of sulcus bleeding and/or suppuration was associated with the higher temperature.
- 4. The gingival sulcus temperature of anterior teeth and maxillary teeth in the periodontally diseased patients was  $1.2^{\circ}(P < 0.01)$  and  $0.9^{\circ}$  higher (P < 0.05) than those in the periodontally healthy subject, respectively.
- 5. The gingival sulcus temperature of periodontally healthy sites(probing depth less than 3mm) was higher in the periodontally diseased patients than in the periodontally healthy subjects.

The results suggest that the elevated sulcus temperature observed in the diseased state, compared to the norm, would reflect the increase of inflammatory activity and its measurement can provide a diagnostic indicator in periodontics.

## A study of the effect of NaF iontophoresis on the dentinal hypersensitivity induced by the root planing

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The aims of this study were to evaluate the efficacy of NaF ionotophoresis in the treatment of dentinal hypersensitivity induced by the root planing to determine whether its effect is mediated through surface occlusion of dentinal tubules and to compare the root surface morphology of hypersensitive and nonsensitive teeth.

The data were obtained from 45 teeth of 16 patients, of which 24 were hypersensitive and 21 were nonsensitive after root planing. The root surfaces were examined by a scanning electron microscopic replica technique.

The following results were obtained:

- 1. After NaF iontophoresis, there was immediate desensitization in 19(79%) of 24 hypersensitive teeth. Five(21%) teeth were desensitized with second iontophoresis; retreatments were spaced one week apart.
- 2. The counts of dentinal tubules were decreased after iontophoresis but this was not statistically significant. The diameters also were decreased, and this was statistically significant (P < 0.05).
- 3. Twenty one(88%) out of the 24 hypersensitive teeth and 9(43%) out of the 21 nonsenstive teeth had exposed tubules. In hypersensitive the counts of tubules were more numerous than

nonsesnitive teeth, and this was statistically significant (P < 0.05). The diameters also were wider in hypersensitive teeth but this was not statistically significant.

Evaluation of the effect of subgingival antimicrobial irrigation as an adjunct to scaling and root planing molar teeth with furcation involvement

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The present investigation evaluated, over a period of 8 weeks, the therapeutic efficacy of subgingival irrigation with chlorhexidine and tetracycline as an adjucnt to scaling and root planing on molar teeth with furcation involvement.

37 teeth with periodontal furcation pockets from 23 subjects were randomly assigned to one of following treatment groups after one episode of scaling and root planing: 1) subgingival irrigation with saline, 2) subgingival irrigation with 0.1% chlorhexidine and 3) subgingival irrigation with 5% tetracycline. Irrigation was repeated every 1 week during the first 3 weeks of the experiment by the professional. Plaque control porgram was instituted at baseline and reinforced throughout the study.

On day 0, 4weeks and 8weeks, evaluation were made of probing pocket depth, probing attachment level, bleeding on probing, amount of gingival fluid, plaque index and phase contrast microscopy of the subgingival microbial flora.

The result demonstrated the improvement of the clinical and microbial parameters in all treatment group, but failed to show any significant differences between groups. It would appear that subgingival irrigation with antimicrobials did not appear to augment the effects of scaling and root planing on molar teeth with furcation involvement.

Clinical study of standard extract of the unsaponifiable fraction of Zea Mays L. on therapeutic effect in incipient periodontitis

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The purpose of this study was to evaluate the therapeutic effect of standard extract of the unsaponifiable fraction of Zea Mays L. when administered alone, or combined with oral hygiene instruction, scaling, and subgingival curettage in incipient periodontitis.

This study was carried out on 691 incipient periodontitis sites which had loss of attachment between