

더 신빙성 있다고 사료된다.

4. 치주수술전에는 치근의 노출양의 증가에 따른 지각과민이 증가되는 유의한 차이를 갖지 않았으며 치은퇴축양에 관계없이 지각과민의 자연적인 완화경향을 나타내었다.
5. 치주수술후 치태지수는 수술전보다 현저히 감소되었고 수술후 3주에는 치태지수의 증가에 따라 지각과민의 정도가 증가되는 유의한 관계를 나타내었으나 그 외의 관찰기간에는 치태지수와 지각과민정도간에 유의성 있는 관계를 갖지 않았다.
6. 치주수술후 치은열구혈지수는 현저한 감소를 나타내었고 수술전에는 지각과민정도과 유의한 관계를 갖지 않고, 수술후 8주에는 5% 유의수준으로 치은열구출혈지수의 증가에 따라 지각과민정도의 증가를 나타내었다.

● 치술에 따른 치태제거 효과 및 위해 작용에 관한 연구

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건강한 한국인 21세부터 26세까지의 남녀7명을 대상으로 시중에 시판되고 있는 7개 서로 다른 치술의 형태와 규격을 조사하고 강모 끝 형태를 실체현미경으로 관찰한 후, 7주간 스크러빙법에 의해 치술질을 시행하여 치술에 따른 치태제거효과 및 위해작용을 비교, 분석한 결과 다음과 같은 결론을 얻었다.

1. 치술 식모부 형태변화는 치태제거효과에 영향이 없었다.
2. 나일론 치술의 치태제거율은 68.9%로 천연모 치술의 채태제거율 51.5%에 비해 통계학적으로 유의하게 높았다.
3. 강모 끝이 둥근 치술이 전체 제거율 및 인접면 우각부 제거율에 있어서 각각 71.3%와 68.1%로 다른 치술보다 높은 이태제거효과를 나타냈으나 이들 치술간의 통계학적 유의성은 없었다.
4. 스크러빙방법에 의한 치술질시 치태제거율은 평균 66.5%였으며 순협측 부위가 73.8%로 가장 높았고 그 다음 인접면 우각부 순이었으며 설구개측 부위가 57.6%로 가장 낮았다.
5. 둥근 강모 끝을 가지고 있는 치술은 위해작용을 보이지 않았으나, 거칠고 불규칙한 강모 끝을 가지고 있는 치술은 치은 손상 및 출혈등의 위해작용을 나타냈다.

● 성견 치주질환시 치은열구액내의 Arylsulfatase에 관한 실험적 연구

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실험적으로 치주염을 야기한 4마리 성견으로부터 Brill(1960)의 방법에 따라 치은열구 액을 채취하여 효소액을 용출시킨 다음, Griffiths등(1978)의 방법을 변형하여 arylsulfatase 활성을 비색법으로 측정하고, 각 치아의 치주낭 깊이(Pocket depth), 치은열구 액의 양(Periotron units), 치태지수(Plaque index) 및 치은열구 출혈지수(Sulcus bleeding index)와 비교하여 다음의 결론을 얻었다.

Kyung Hee Medical Center, and they were operated by gingivectomy, Modified Widmann flap and osseous surgery. And person correlation method was used to ascertain significant correlation with some factors to root hypersensitivity.

The results were as follows :

1. The exposed root surfaces were significantly increased in the incidence and degree of hypersensitivity at 1 week after periodontal operation. And most of postoperative sensitivity had been naturally desensitized after the elapse of eight weeks.
2. The teeth of the young aged group showed a higher incidence and degree of preoperative and postoperative hypersensitivity than the old aged group. And postoperative hypersensitivity is more improved in the teeth of old aged group at 8 weeks periodontal operation.
3. The stimulus of scratch to teeth, compared to the compressed air blast and cold water, were displayed the lowest sensitivity in incidence and degree during observation period. The method of cold stimulus to teech might be more reliable during the evaluation of improved hypersensitivity.
4. The correlationship between the degree of sensitivity and the width of exposed root surface was recognized before periodontal operation, but at 8 weeks after the periodontal operation there was no correlationship.
5. The correlationship between the degree of sensitivity and the plaque index of the periodontally operated teeth was recognized at 3 weeks after operation, but there was no correlationship during other observation period.
6. The correlationship between the degree of sensitivity and the sulcus bleeding index of the periodontally operated teeth was not recognized before operation, but at 8 weeks after operation there was correlationship.

A study of the plaque-removing ability and harmful effect on different types of toothbrushes

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The purpose of this study was to determine the plaque-removing ability and harmful effect of different type of toothbrushes.

Available seven toothbrushes which could be sold at market were examined its designs and sizes, and bristle end shapes were examined by stereoscope.

Seven individuals(6 males, 2 females : 21 yrs. to 26 yrs) accustomed to scrubbing method were selected for this study.

In the experimental periods, the individual was rotated so that all seven individuals used all seven brushes in different sequences by Latin method.

Thus, the effect of a possible improvement of the brushing technique during the experiment was identical for all seven brushes.

The interval between two subsequent phases was one week.

Following the toothbrushing by scrubbing method during seven weeks, observation for the plaque-removing ability and harmful effect were analyzed statistically.

The results were as follows :

1. The morphologic changes of bristle head had no effect on plaque-removing ability.
2. Nylon bristles were statistically higher than natural bristles in plaque-removing ability.
3. The plaque-removing ability of the toothbrush bristles with rounded ends were higher than those of other toothbrushes, but did not show a statistically significance one another.
4. The average removal rate of plaque by scrubbing method was 66.5% and that was highest(73.8%) at the labio-buccal areca, secondary at the proximal area, lowest(57.6%) at the palato-lingual areca. lowest(57.6%) at the palato-lingual areas.
5. Toothbrushes with round end shape did not show harmful effect, but toothbrushes with rough and irregular end shape showed harmful effect including gingival trauma and bleeding.

An experimental study on arylsulfatase in gingival crevicular fluid of dogs with periodontal disease

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It is diagnostically interesting to measure the enzyme activity as an indicator of the patient's present state of periodontal disease. In addition, it is also useful to consider the relationship between enzyme activity and clinical index. The arylsulfatase activity was measured and compared with volume of gingival crevicular fluid and clinical index. The purpose of this study was to show the diagnostic value of this enzyme.

Experimental periodontitis was induced by ligating the left third and forth premolars of maxilla and mandible with wire from 4 dogs of 13-15kg. Contralateral teeth were brushed 3 times a week as the control site. In two months, the filter paper strip was inserted into the gingival sulcus of the same teeth and gingival crevicular fluid was collected. And then, Periotron units and arylsulfatase activity were measured ; sulcus bleeding index, plaque index, pocket depth, etc were also mesured.

1. Average values of arylsulfatase activity(optical density) were 0.043 ± 0.015 and 0.021 ± 0.006 at the experimental and control areas, respectively.
2. The relationship of periodontal clinical indices and Periotron units was statistically significant when the experimental and control areas, respectively.
2. The relationship of periodontal clinical indices and Periotron units was statistically significant when the experimental and control areas were compared($P < 0.01$).
3. Correlation between arylsulfatase activity and Periotron units was statistically significant($P < 0.01$).
4. As the degree of sulcus bleeding index and the pocket depth increased, Periotron units and enzyme activity also increased.