후 지각과민도의 개선 효과가 현저하였다.

3. 각 시점에서의 세 군 간의 처치효과 비교시 처치전의 세 군 간에는 유의한 차이는 없었고, 처치 30분 후에는 dentin bonding agent군이 Naf paste군 보다 유의성있게($P<0.05$) 처치효과가 높았으나, 1주 후에는 세 군 간에 차이가 없었다.
4. 주사전자현미경 하에서 무증상 비처치군은 개방된 상아세관을 거의 관찰할 수 없었으나, 과민 비처군에선 처치 실험군보다 상아세관의 수가 더 많았으며, 그 직경도 더 컸다. 세 군의 처치군에서 처치 1주 후 상아세관의 수와 직경의 감소는 비슷하였으며, 세 군 모두에서 거친 표면양상을 보였다.

이상의 결과에서, 상아질 지각과민도에 대한 임상평가방법으로서 VAS가 매우 유용하며, 과민성 상아질에 대한 처치제로서 dentin bonding agents를 적극적으로 임상에 이용할 수 있으리라 생각된다.

● 외과적 치주치료에 따른 치은열액의 삼출량과 치아동요도의 변화에 관한 연구

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외과적 치주치료후 치유경과에 따른 치은열구액 삼출량과 치아동요도의 변화를 평가하기 위하여, 상, 하악 4전치부위에 외과적 치주치료가 요구되는 만성치주질환에 이환된 47명의 환자(28－52세의 남자 27명, 여자 20명)를 연구대상으로 선별하였다.

치은열구액의 삼출량은 Periotron® (Harco Electronics, Canada)을 이용하고, 치아동요도는 Periotest® (Siemens, Germeny)를 이요하여, 초진시, 치석제거술 1주후, 치은판막술후 1주, 2주, 4주, 6주, 8주, 12주에 각각 측정하였다.

치유경과에 따른 치은열구액 삼출량과 치아동요도 각각의 변화를 Paired t-test로써 통계학적으로 분석하여 다음과 같은 결론을 얻었다.

1. 치석제거술 1주후에 치은열구액의 삼출량은 감소되었고($P<0.005$), 치아동요는 증가되었다($P<0.05$).
2. 외과적 치주치료후 치은열구액의 삼출량은 치유경과에 따라 술후 1주에 최고치를 보였으며($P<0.005$), 점차 감소되어 술후 6주이후부터는 안정된 수준으로 감소되었다.
3. 치아동요도는 외과적 치주치료후 2주에 최고치를 보였으며($P<0.005$), 전차 감소되어 술후 12주에 초진시보다 더 낮게 감소하였다($P<0.05$).
4. 치주치료후 치유경과에 따라 각 시기의 치은열구액의 삼출량과 치아동요도는 상관관계가 있었다($P<0.05$).

● 치은열구액의 삼출량과 치아동요도와의 관계에 대한 연구

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치은열구액 삼출량과 치아동요도와의 관계를 규명하기 위하여 만성치주염에 이환된 남자환자

Effect of dentin bonding agents on dentinal hypersensitivity

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The purpose of this clinical trial to compare the desensitizing eff of 33.3 percent NaF paste and two dentin bonding agents applied to dentin, and to observe the changes of dentinal tubules under scanning electron miroscopy. This study included 14 subjects and 45 vital teeth, of which 36 were experimentally treated group and 9 were non-sensitive group, 4 of non-treated hypersensitive group).

To evaluate dentin sensitivity, three clinical tests(tactile, compressed air, cold water) and a subjective patient assessment were done using 100mm horizontal visual analogue scales before and 30mir one week after treatment. The replicas prepared with epoxy resin at baseline and one week late were compared under SEM on the changes of dentinal tubules.

The results were as follows :

1. Burnishing of NaF evoked the moderate discomfort due to burnishing forces on hypersensitive dnentin.
2. There was significant difference between baseline and one week BAS scores in all treated groups ($P<0.01$).
3. There was significantly desensitizing effect in sentin bonding agent groups compared with NaF paste group at 30min. after treatment($P<0.05$), but one week later, there was no significant difference among the desensitizing effect of three groups.
4. Under SEM using the replica technique, there was few open dentinal tubules in non-sensitive group, and the number of the tubules was higher and the diameters larger in non-treated hypersensitive group than experimentally treated group.
5. The surface on NaF paste group exhibited partial occlusion of the tubular orifices with thin smear-like layer. The surfaces of dentin bonding agent groups were irregularly covered by films of dentin bonding agent.

These results suggest that VAS might to be useful method to assess the level of dentinal hypersensitivity and the dentin bonding agents as desensitizing modalities could be positively employed in clinical situation.

A study on the changes of gingival crevicular fluid flow and tooth mobility following surgical periodontal treatment

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To determine the changes of gingival crevicular fluid flow and tooth mobility following surgical periodontal treatment, 47 patients(27 men and 20 women : 28 to 52 years old) with generalized chronic periodontits were selected.

Gingival crevicular fluid flow was measured by Periotron® (Harco Electronics, Canada), and tooth mobility was checked by Periotest® (Siemens, Germany) at the initial examination, 1 week-after scaling, 1, 2, 4, 6, 8 and 12 weeks following modified Widman flap operation.

The changes of gingival crevicular fluid flow and tooth mobility according to healing process was statistically analyzed by paired t-test.

The results were as follows :

1. At 1 week-after scaling, gingival crevicular fluid flow was decreased($P<0.05$) but tooth mobility was increased($P<0.05$).
2. Gingival crevicular fluid flow was gradually decreased according to healing process following surgical periodontal treatment($P<0.05$), and from 6 week-after surgery it was reduced to stable level.
3. Toth mobility showed maximum level at 2 week-after surgery($P<0.05$), and thereafter it was decreased gradually until that at 12 week-after surgery was lower than baseline level($P<0.05$).
4. There was a correlation between gingival crevicular fluid and tooth mobility following surgical periodontal treament with each period($P<0.05$).

A study on the relationship between gingival crevicular fluid flow and tooth mobility

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To determine the relationship between gingival crevicular fluid flow and tooth mobility, 40 male patients with generalized chronic periodontitis and 10 male dental students with the good general and oral health were selected.

At initial examinatin, gingival crevicular fluid flow and tooth mobility on upper and lower anterior teeth were measured by Periotron(Harco Electronics, Canada) and Periotest(Siemens Co., Germany), respectively. And then probing depth and loss of attachment were sequentially measured.

The difference of gingival crevicular fluid flow and tooth mobility among 3 groups according to probing depth and loss of attachment was analyzed by unpaired t-test, and the correlations among gingival crevicular fluid flow, tooth mobility, probing depth and loss of attachment were analyzed by multiple regression of ABSTAT program.

The results were as follows :

1. Gingival crevicular fluid flow had a positive relationship with both probing depth($Y=10.0832X+1.8114$, $P<0.001$) and loss of attachment($Y=8.1075X+4.0589$, $P<0.001$).
2. Tooth mobility had a positive relationship with both probing depth($Y=2.8496X+1.7117$, $P<0.001$) and loss of attachment($Y=3.3821X+1.2801$, $P<0.001$).
3. There was a significant correlation between gingival crevicular fluid flow and tooth mobility.(Correlation coefficient : 0.5973, $Y=1.4884X+14.7544$, $P<0.001$).
4. It was suggested that both gingival crevicular fluid flow and tooth mobility were affected by probing depth rather than loss of attachment.