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I. Haskel Esquenasi(1986)
 가 gluconate 가 chlorhexidine
 11), Brownstein(1987)

Socransky Slots 가 가
 1, 12-14). MacAlpine Magnusson(1985)
 chlorhexidine, 2), ,
 3-5), 가 15),
 가 가 , , ,
 가 6-8), 16), ,
 chlorhexidine gluconate, phenols, , 가 ,
 plant extracts, essential oils, fluoride, met-
 alions, quaternary ammonium compounds 가 가
 가 가 ,
 9, 10), .

가 가
17 - 19)

II.

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C31G,

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(1)

(Silness & L e, 1964)

William 's probe

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s probe

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William '

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probe

William's

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(2)

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(L e & Silness, 1963)

William 's probe

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slide glass

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slide glass

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Wright - Giemsa's stain

Slide glass

Wright

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stain solution

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stain solution 3

. Slide

(Muhlemann & Son,

glass

immersion oil

ideal

1971)

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ANOVA

Duncan's

5 :

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multiple range test

1. Probing pocket depth of baseline and day 14(Means \pm S.D.).

Treatment group	Probing pocket depth(mm)	
	baseline	day 14
Normal Saline	5.8 \pm 1.5	4.5 \pm 1.3
C31G *	5.5 \pm 1.2	4.1 \pm 1.2
Benzotonium Chloride *	5.6 \pm 1.1	3.9 \pm 1.5
Tetracycline *	5.7 \pm 0.7	4.4 \pm 1.3

* : There was significant difference between baseline and day 14 by ANOVA ($p < 0.05$)

2. Plaque index of baseline and day 14(Means \pm S.D.).

Treatment group	Plaque index	
	baseline	day 14
Normal Saline *	1.5 \pm 0.9	0.9 \pm 0.3
C31G *	1.7 \pm 0.5	1.1 \pm 0.3
Benzotonium Chloride *	1.7 \pm 0.6	1.1 \pm 0.3
Tetracycline	1.2 \pm 0.4	1.0 \pm 0.0

* : There was significant difference between baseline and day 14 by ANOVA ($p < 0.05$)

3. Sulcular Bleeding index of baseline and day 14(Means \pm S.D.).

Treatment group	Sulcular Bleeding index	
	baseline	day 14
Normal Saline*	2.2 \pm 0.9	1.1 \pm 0.3
C31G*	2.1 \pm 0.3	1.2 \pm 0.4
Benzotonium Chloride*	2.5 \pm 0.7	1.2 \pm 0.6
Tetracycline	2.3 \pm 0.7	1.7 \pm 0.9

* : There was significant difference between baseline and day 14 by ANOVA ($p < 0.05$)

4. Gingival index of baseline and day 14(Means \pm S.D.).

Treatment group	Gingival index	
	baseline	day 14
Normal Saline*	2.0 \pm 0.0	1.7 \pm 0.5
C31G*	1.8 \pm 0.4	1.6 \pm 0.5
Benzotonium Chloride*	2.1 \pm 0.3	1.5 \pm 0.5
Tetracycline	2.1 \pm 0.3	1.9 \pm 0.3

* : There was significant difference between baseline and day 14 by ANOVA ($p < 0.05$)

5. Gingival recession of baseline and day 14 (Means ±S.D.).

Treatment group	Gingival recession(mm)	
	baseline	day 14
Normal Saline	1.9 ± 1.3	2.0 ± 1.6
C31G	1.6 ± 0.9	1.8 ± 1.2
Benzotonium Chloride	0.9 ± 1.2	1.0 ± 1.3
Tetracycline	0.8 ± 0.6	0.8 ± 0.6

There was no significant difference between baseline and day 14 by ANOVA (p<0.05)

III.

가 (p<0.05, 2).

, C31G,

1. , 2.2, 2.1, 2.5, 2.3 2 1.1, 1.2, 1.2, , C31G, 1.7 가 5.8mm, 5.5mm, 5.6mm, 5.7mm 2 (p<0.05, Table 3). 4.5mm, 4.1 mm, 3.9mm, 4.4mm , C31G, 2.0, 1.8, 가 2.1, 2.1 2 1.7, 1.6, 1.5, 1.9 (p<0.05, 1). , C31G, 1.5, 1.7, 가 (p<0.05, 4). 1.7, 1.2 2 0.9, 1.1, 1.1, 1.0 , C31G, 1.9mm,

6. PMNs percentage on leukocytes differential count of baseline and 14 days(Means ±S.D.).

Treatment group	PMNs Percentage(%)	
	baseline	day 14
Normal Saline ^{* b d}	79.0 ± 4.3	71.7 ± 7.7
C31G ^{* a}	74.3 ± 8.4	56.7 ± 14.2
Benzotonium Chloride [*]	75.4 ± 13.8	62.8 ± 17.7
Tetracycline ^{* a}	77.8 ± 3.4	58.7 ± 10.1

* : There was significant difference between baseline and day 14 by ANOVA (p<0.05)

a : There was significant difference compared to normal saline (p<0.005, Duncan's Multiple Range Test)

b : There was significant difference compared to C31G (p<0.005, Duncan's Multiple Range Test)

c : There was significant difference compared to benzotonium chloride (p<0.005, Duncan's Multiple Range Test)

1.6mm, 0.9mm, 0.8mm 2
2.0mm, 1.8mm, 1.0 mm, 0.8mm

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가 가

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(p<0.05, 5).

가

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2.

28,

29),

, C31G,
77.8% 2 79.0%, 74.3%, 75.4%,
58.7% 71.7%, 56.7%, 62.8%,

chlorhexidine, essential oil, stannous fluo -
ride, triclosan, sanguinarine, quaternary
ammonia compounds, oxygenating agents
chlorhexidine, essential oil
ADA Peidex, Listerine

C31G

(p<0.05, 6).

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IV.

30 - 35),

Benney (1992) chlorhexidine ,
가 가 가 .
chlorhexidine

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36, 37),

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C31G,

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Passo(1988)

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38, 39)

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3mm

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69.3%

Macalpine(1985)

76.8%

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62.1%

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C31G,

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3-5

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C31G

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2 3
C31G, ,
가 ,
1. , C31G, ,
(p<0.05).
2. , C31G, , C31G,
C31G가 (p<0.05).

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- Abstract -

Comparative Study on Subgingival Irrigation Using Some Oral Mouth Rinses on Early Healing Process of Periodontal Inflammation

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The purpose of this study was to investigate the comparative effects of subgingival irrigation using some oral mouth rinses on early healing process of periodontal inflammation. The study population consisted of 13 patients with periodontal inflammation and distributed into 4 groups. Oral hygiene instruction, delicate scaling and root planing were done and then irrigated per 3 days during 2 weeks in situ with 1 of 4 solutions ; normal saline, C31G, Benzotonium chloride and tetracycline.

Examination regarding probing pocket depth, plaque index, sulcular bleeding index, gingival index, gingival recession and leukocytes differential count was performed. Evaluation was made at the baseline and 2 weeks after non - surgical periodontal therapy.

The results were as follows :

1. Clinical indices including probing pocket depth, plaque index, sulcular bleeding index, gingival index and gingival recession were significantly improved from baseline to 2 weeks. But there was no significant differences among 4 groups.
2. PMNs percent on leukocytes differential count was significantly decreased from baseline to 2 weeks on all groups. Those of tetracycline and C31G were significantly decreased than those of normal saline group.

These results suggest that clinical indices were not different, but the decrease of inflammation were significantly different among some mouth rinses.