

I.

5-9)

5-9)

1).

17%

69%

가

2).

3),
가

II.

(1)

67

가

24

1,2

84

4),

Gracey curette

17%

69%

4

가

14%

24%

가

(2) 1 3 III.

8 1/3

Gracey curette

가 가

4 가 0.915

(P<.01)(1).

1 - 3mm 7.2% , 4 - 6mm 7mm

1. Correlation between residual calculus and initial pocket depth for all sites

Initial Pocket Depth(mm)	1	2	3	4	5	6	7	8	9	10
% Sites with Residual Calculus	0	5.6	7.6	9.7	10.4	23.0	15.2	21.0	18.8	31.1

Spearman's rank correlation : 0.915(P< .01)

2. The sites with residual calculus related to initial pocket depth

Initial Pocket Depth (mm)	1 - 3	4 - 6	7 -
N	194	398	288
Sites with Residual Calculus(N)	14	55	57
% Sites with Residual Calculus	7.2	13.8	19.8

Significantly different at P< .005 (Chi - square)

3. The sites with residual calculus related to type of teeth

Tooth	Single - Rooted Teeth			Multi - Rooted Teeth		
	1 - 3	4 - 6	7 -	1 - 3	4 - 6	7 -
Initial Pocket Depth(mm)						
% Sites with Residual Calculus	0	4.3	15.7	9.9	16.2	21.6

4. The sites with residual calculus related to individual root surfaces

Initial Pocket Depth(mm)	Buccal/Lingual Surfaces			Approximal Surfaces		
	1 - 3	4 - 6	7 -	1 - 3	4 - 6	7 -
% Sites with Residual Calculus	7.6	8.8	13.0	4.5	24.8	39.7

5. The sites with residual calculus related to flat and furcation sites

Initial Pocket Depth(mm)	Flat Sites			Furcation Sites		
	1 - 3	4 - 6	7 -	1 - 3	4 - 6	7 -
% Sites with Residual Calculus	13.0	11.2	7.1	2.4	26.7	50.0

13.8% 19.8%

가

(P<.005)(2).

가

가

(3). /

가

, 1 - 3mm

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가

(4).

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, 1 - 3mm

(5).

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5-9).

IV.

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5-9).

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10, 11),

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가 V.

가 , 가

가 , 가 1

1. 가 가

0.915 (P <

.01).

1 - 3mm 7.2% , 4 - 6mm 7mm 13.8%

가 19.8% (P < .005).

가 2. 가

3. , 가,

가

가가 VI.

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- Abstract -

The Effectiveness of Subgingival Scaling and Root Planing via Closed Approach in Calculus Removal

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This study presents an evaluation of the effectiveness of nonsurgical subgingival scaling and root planing related to initial pocket depth, type of teeth, and individual root surfaces. A total of 110 teeth designated for periodontal surgery in 67 patients with marginal periodontitis were selected and received thorough scaling and root planing with standard rigid Gracey curettes. After a healing period of 4 to 8 weeks, residual calculus was assessed at the time of periodontal surgery following the reflection of mucoperiosteal flap. The results demonstrated a high correlation between the percentage of residual calculus and initial pocket depth. It was further noted that tooth type and involved root surface also influenced the rate of calculus remnant. The results of this study suggest that complete removal of subgingival calculus utilizing conventional instrumentation via closed approach is rare.
