

遊離端局部義齒 使用時 支台齒 動搖에 대한 Splinting의 效果(Ⅱ)

광주보건전문대학 치과기공과

Abstract

Effect of splinting on abutment tooth movement when a distal extension partial denture used()

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The effect of splinting on abutment tooth distal movement was performed in vitro study. An acrylic resin mandibular model with missing 2nd premolars, molars and a removable partial denture framework were constructed.

The roots of the canines, 1st premolars and edentulous ridges were coated with silicone rubber.

A modified Ney Surveyor was used for vertical load application, and abutment tooth distal movement were measured with a dial gauge with four conditions of splinting methods were tested by applying unilateral vertical loadings.

The results are follows;

1. The magnitude of abutment tooth distal movement on the non-load side was less 40~69% than that occurred on the load side.
2. On the load side, reducing effect of splinting on abutment tooth movement in the condition of load side double abutment(30%), non-load side double abutment(10%), double abutments of both sides(40%) was compared with single abutments of both sides.
3. On the non-load side, reducing effect of splinting on abutment tooth movement in the condition of load side double abutment(5%), non-load side double abutment(22%), double abutments of both sides(59%) was compared with single abutments of both sides.
4. The magnitude of abutment tooth distal movement in the condition of double abutments of both sides was less 40~59% than that in the condition of single abutments of both sides.

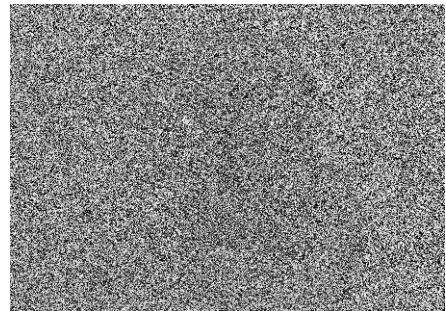
목 차

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- 2.
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- 3) Metal : Regalloy, Ranson & Randolph Co., Div. of Dentsply International, Inc.
- 4) Ney Surveyor : J.M. Ney Co., Bloomfield, Conn., U.S.A.
- 5) 石膏製品 : Plaster, (), KOREA.
- 6) Dial gauge : PEACOCK, U.S.A., 1 10-3mm

2. 실험 모형 제작

2 가 가 acrylic resin 1 silicone rubber 0.3mm 3mm 1 silicone rubber backaction clasp rest seat 10mm wire rod .(1)



1.

I. 서 론

가 Springting 1-6) multiple abutments tipping movement rotating movement abutments single abutment 가 2) 가 가 27) 가 가 1 springting

II. 실험재료 및 방법

1. 재료 및 기구

- 1) Acrylic resin: Premium denture acrylic, Lang Dental MFG. Co., U.S.A.
- 2) Silicone rubber : Xantopren Plus, Bayer Dental.

3. 실험의치 제작

가 metal framework 1 backaction clasp road road table acrylic resin wire rod 25mm .(2)

4. 힘의 작용

Ney surveyor vertical arm

vertical arm

가

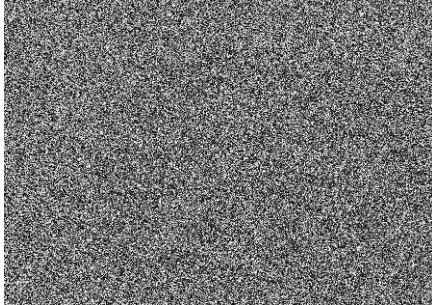
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vertical arm 500gm analyzing rod

(4), 가 ;
1) , . 1 springting

(3).

2) . 1 springting
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4) , . 1 springting



1 가

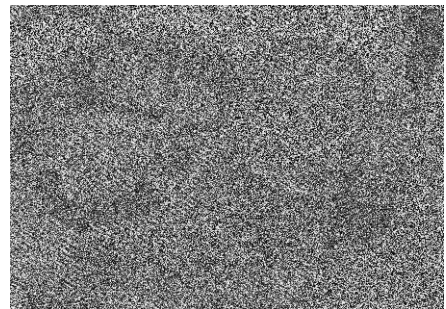
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30

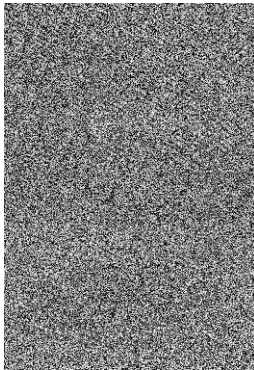
springting

sticky wax

2.



4.



3.

Ney Surveyor

III. 결과 및 고찰

가

가

1

≒

1

Surveyor Base

Block

1

4가

5. 지태치의 동요량 측정

Dial gauge

block

springting

54%가

indexmf

40%,

springting

60%,

Dial gauge pointer

springting

69%가

1

wire rod

2

가

가

, springting

springting

Dial gauge

pointer가

1. Distal component of abutment tooth movement*(mm)

Condition	Load side**	Non load side**
A. Right and left canine·1st premolar without splinted	57.6 ± 2.00	26.5 ± 1.18 (54 %)***
B. Left canine·1st premolar splinted	40.6 ± 1.70	24.3 ± 1.05 (40 %)
C. Right canine·1st premolar splinted	52.1 ± 1.22	20.0 ± 1.84 (62 %)
D. Right and left canine·1st premolar splinted	34.3 ± 1.90	10.5 ± 3.15 (69 %)

* by applying vertical loading on left edentulous ridge.

** Mean ± S.D. (1 × 10⁻³)

*** Reducing percents in comparison with load side are given in parentheses.

2. Distal component of abutment tooth movement*(mm)

Condition	Load side**
A. Right and Left canine·1st premolar without splinted	57.6 ± 2.00 (0 %) ***
B. Left canine·1st premolar splinted	40.6 ± 1.70 (30 %)
C. Right canine·1st premolar splinted	52.1 ± 1.22 (10 %)
D. Right and Left canine·1st premolar splinted	34.3 ± 1.90 (40 %)

* by applying vertical loading on left edentulous ridge.

** Mean ± S.D. (1 × 10⁻³)

*** Reducing percents in comparison with “A” condition are given in parentheses.

springting 30%,
 springting 10%,
 springting 40%
 3
 , springting
 springting
 5%,
 22%, springting 59%
 multipule abutments
 cecconi
 McCartneydml 가
 1 가
 springting
 , springting
 Shohetk springting
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 가
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 가
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 Henderson, Wright
 multipule abutments 가
 가
 가
 single multipule
 serviceability

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