

총의치교합면의 사용재료에 따른 마모도 측정에 관한 실험적 연구

晉州保健專門大學 齒科技工科

Abstract

An Experimental Study on the Abrasion Tests as a Result of using Materials of Full Denture Occlusal Surface.

Sung Soo, Cha

Dept. of Dental Laboratory Technology Jin Ju Health College, Jin Ju, Korea

I got a conclusion as a result of that in case of constructing a full denture using acrylic resin teeth, porcelain teeth, and forming posterior occlusal surface of the artificial teeth by Type Gold and Nickel chrome alloy thus constructing a full denture and therefore comparing the above case with abrasion of Natural teeth.

The result were as follows :

1. The abrasion of Natural teeth and the abrasion of full denture constructed by Type gold has a close resemblance.
2. The one that has the highest degree of abrasion is full denture that 's using, with acrylic resin teeth, maxillary and mandibular And the lowest abrasion is natural teeth-natural teeth.
3. In case of single denture, that 's opposing to natural teeth, the one that has the highest degree of abrasion is a full denture that 's using Acrylic resin teeth and the lowest abrasion is a full denture that 's forming occlusal surface by Type gold.
4. The single denture, which is opposing to type gold teeth, was abraded above everything by full denture which is constructed by porcelain teeth.
5. In the same teeth, the abrasion of mandibular teeth was greater than that of mandibular teeth was greater than that of maxillary teeth.
6. The abrasion degree of Acrylic resin teeth has no direct mutual connection with material hardness which is opposing to.

목 차

· 實驗成績

I. 서론

가 가
 機能差 縮小
 便安感
 檢討가
 가
 Acrylic resin
 Porcelain 齒
 磨耗度 1931
 獨逸 Geier가 Bridge
 Acrylic resin 1938 Selbach
 Wilson Bridge, Crown, Inlay
 Acrylic resin
 1951 Sexon Phillips가
 Denture Cleanser 가 Acrylic resin
 Terry
 Harrington Selfcuring acrylic Heat-cu-
 ring acrylic hand brushing abrasion test
 machine 가
 Wallace Acrylic resin teeth
 Acrylic resin
 Schultz, Wood Ward, Koehne

著者

Acrylic resin teeth
 porcelain teeth
 Type
 gold Nickel chrome alloy teeth

II. 실험재료 및 측정방법

1. 실험재료

對象材料 1
 Natural teeth Acrylic resin
 teeth, Type gold teeth, Nickel chrome alloy
 teeth, porcelain teeth 12mm,
 7.3mm (7.3mm
 Out side micrometer Emble
 Spindle 7.3mm)
 Natural teeth Disc
 Dentin
 Enamel質
 Acrylic resin
 teeth Porcelain teeth
 Direct resin
 natural teeth 形態
 Stone wheel Stone point
 Nickel chrome alloy teeth Type
 gold teeth Natural
 teeth Wax

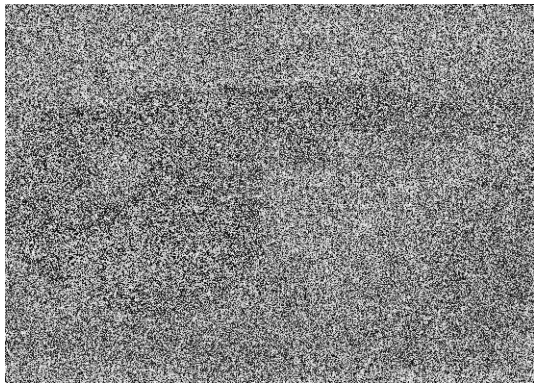
1. Tested Materials

Code Letter	Materials	Brands	Manufacturer
A	Natural Teeth		
B	Acrylic Resin Teeth	Resin Tiger Teeth	Dae Sung Dental Industrial Co., LTD (韓)
C	Type III Gold Teeth	Casting Pall a Alloy (Type A)	三信商會 (韓)
D	Nickel Chrome Alloy Teeth	Washiloy	Kememizu Chemical Industry Co., LTD (日)
E	Porcelain Teeth	New Vilux	G-C Dental Ind Corporation (美)

File
 Sand paper
 micrometer(規格:0-25mm)
 0.01mm
 Drill Bice
 研磨
 0.001mm Out side
 Natural teeth 4
 7 35
 機具 High speedmotor, Balance,
 Timer Direct resin,
 Abrasive instrument

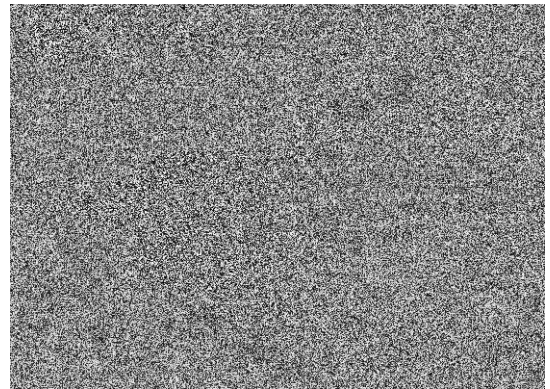
2. 측정방법

teeth 條件
 2
 13mm, 7mm Arbor band
 1/2 7mm
 Stone point 가 Arbor band
 Stone point
 .(Arbor band Arbo
 band meandrel Arbor
 band

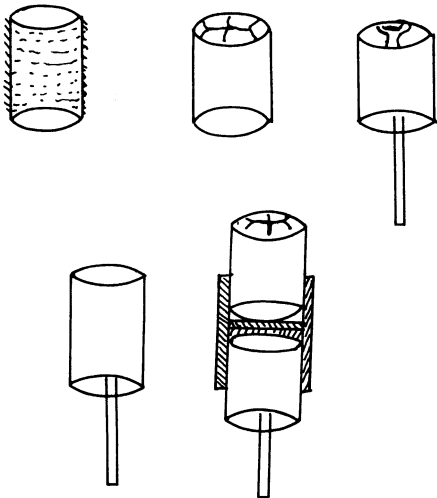


1. Out side micrometer
 A. Emble B. Spindle

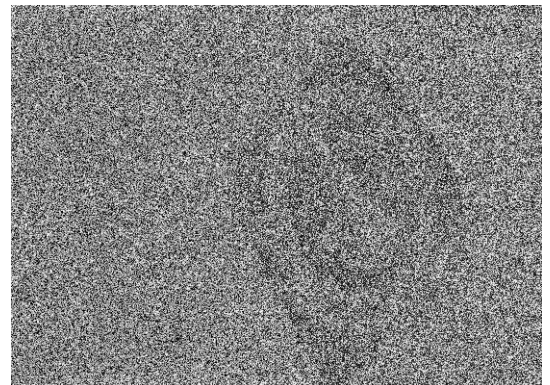
) 3 가
 Arbor band meandrel(口腔常態
) 3500 RPM High speedmotor



3. Teeth
 High Speedmotor 附着方法

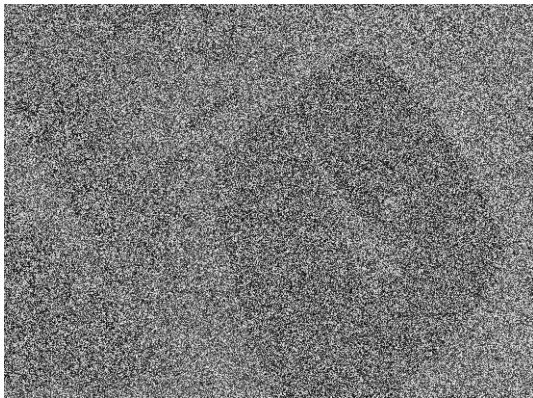


2. A. Arbor band B. Tooth
 C. Arbor band mandrel D: Stone point
 E : Arbor band

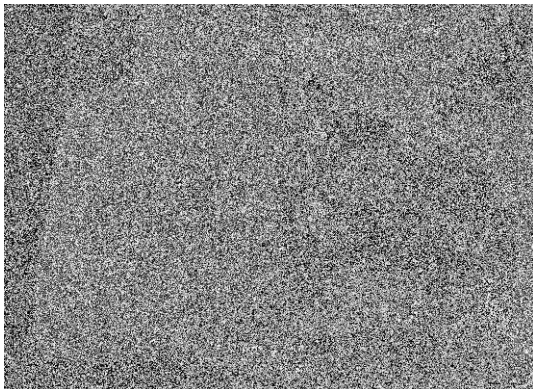


4. Balance

4, 5
 1kg
 가
 1/2 周圍 Boxing Arbor band Direct resin
 가 가 接觸
 High speedmotor
 High speedmotor 가 荷重 400g
 가
 Timer 3 3
 100 합 5
 High Speedmotor
 0.01mm Out side micrometer



5. Tooth Balance



6.

III. 實驗成績

가 Natural teeth
 Acrylic resin teeth, Type gold teeth,
 Nickel chrome alloy teeth, porcelain teeth

2 . 各個
 Acrylic resin teeth, Nickel chrome alloy
 teeth, porcelain teeth, Type gold teeth,
 Natural teeth 가 가
 Acrylic resin teeth Acrylic resin teeth
 가 가 Natural teeth
 Natural teeth 3

Natural teeth Acrylic resin
 teeth, Type gold teeth, Nickel chrome alloy
 teeth, Porcelain teeth Natural
 teeth Acrylic resin teeth Type gold
 teeth Nickel chrome alloy
 teeth Porcelain teeth Natural teeth
 가 Acrylic resin
 teeth , 가 가 Type
 gold teeth . Acrylic resin teeth Type
 gold teeth, Natural teeth, Nickel chrome
 alloy teeth, porcelain teeth

Table 4. Acrylic resin
 teeth Porcelain
 Teeth, Natural teeth, Nickel chrome alloy teeth,
 Type gold teeth Acrylic resin teeth
 porcelain teeth 가 가 甚
 가 가 Type gold
 teeth .

Type gold teeth Acrylic resin teeth,
 Natural teeth, Nickel chrome alloy teeth,
 porcelain teeth 5
 Acrylic resin teeth Type gold
 teeth 가 가
 Porcelain teeth, Nickel chrome alloy teeth,
 Natural teeth Type gold teeth

Nickel chrome alloy teeth Acrylic resin
 teeth, Type gold teeth, Natural teeth,
 porcelain teeth 6
 Acrylic resin teeth, type gold teeth, Natural
 teeth porcelain teeth

Nickel chrome alloy teeth가

Porcelain teeth Acrylic resin teeth, Type gold teeth, Natural teeth, Nickel alloy teeth 7 5 (2 7 算出)

2. (: mm)

分 類	Natural teeth	Acrylic Resin Teeth	Type III gold Teeth	Nickel chrome Alloy Teeth	Porcelain Teeth
回轉齒牙磨耗度	0.02	2.42	0.03	0.06	0.04
固定齒牙磨耗度	0.01	3.28	0.02	0.04	0.02

3. Natural Teeth 對 Acrylic Resin Teeth, Type gold Teeth, Nickel chrome Alloy Teeth, Porcelain Teeth (: mm)

分 類	區 分	磨 耗 度			
Natural Teeth	回 轉	0	0	0.04	0.07
Acrylic Resin Teeth	固 定	8			
Type III Gold Teeth	固 定		0.01		
Nickel chrome Alloy Teeth	固 定			0	
Porcelain Teeth	固 定				0

4. Acrylic Resin Teeth 對 Type gold Teeth, Natural Teeth, Nickel chrome Alloy Teeth, Porcelain Teeth (: mm)

分 類	區 分	磨 耗 度			
Acrylic Resin Teeth	回 轉	0.2	6	0.3	7
Type III Gold Teeth	固 定	0			
Natural Teeth	固 定		0		
Nickel chrome Alloy Teeth	固 定			0	
Porcelain Teeth	固 定				0

5. Type gold Teeth 對 Acrylic Resin Teeth, Natural Teeth, Nickel chrome Alloy Teeth, Porcelain Teeth (: mm)

分 類	區 分	磨 耗 度			
Type III Gold Teeth	回 轉	0	0.02	0.04	0.06
Acrylic Resin Teeth	固 定	0.3			
Natural Teeth	固 定		0		
Nickel Chrome Alloy Teeth	固 定			0	
Porcelain Teeth	固 定				0

6. Nickel chrome Alloy Teeth 對 Acrylic Resin Teeth, Type gold Teeth, Natural Teeth, Porcelain Teeth (: mm)

分 類	區 分	磨 耗 度			
Nickel chrome Alloy Teeth	回 轉	0	0	0	0.03
Acrylic Resin Teeth	固 定	0.4			
Type III Gold Teeth	固 定		0.03		
Natural Teeth	固 定			0.02	
Porcelain Teeth	固 定				0

7. Porcelain Teeth 對 Acrylic Resin Teeth, Type gold Teeth, Natural Teeth, Nickel chrome Alloy Teeth (: mm)

分 類	區 分	磨 耗 度			
Porcelain Teeth	回 轉	0	0	0	0
Acrylic Resin Teeth	固 定	9			
Type III Gold Teeth	固 定		0.05		
Natural Teeth	固 定			0.04	
Nickel chrome Alloy Teeth	固 定				0.02

IV. 총괄 및 고찰

(5參照)

High speedmotor Balance
 Natural teeth Acrylic resin Resin
 teeth
 A, C D, E 가
 摩擦力 가
 (1 2參照)
 比較考察
 Vieira Phillips 2 Acrylic K.H.N.16
 Veneering resin material
 curing cycles 硬度 가
 溫成過程 resin 年齡 가
 resin , 實際 resin 硬度 resin 抵抗力 機能 가
 plasticizer 가
 Acrylic resin teeth
 境遇 Type gold Acrylic resin teeth
 teeth Nickel chrome alloy teeth 果
 境遇 가 porcelain teeth
 Natural teeth

Woelfel; paffenbarger

Sweeney가
 가

影響

檢査
 著者

Skinner

Acrylic resin

自家溫成 及水硬溫度

resin

嚼壓

適合

年齡 가

老人星萎縮

減退

Single denture Nickel chrome alloy
 가 甚 space
 移動

, Porcelain teeth
 破切 憂慮性

가 恰似 Type gold
 가 가

V. 결 론

Acrylic resin teeth porcelain teeth
 Type gold Nickel
 chrome alloy

1. Natural teeth 가
 Type gold

2. 가
 Acrylic resin teeth

3. Natural teeth Natural teeth
 對抗 Single denture
 가 Acrylic
 resin teeth

Type gold

4. Type gold Single denture
 Porcelain teeth

5.

가

6. Acrylic resin teeth

直接的 相關關係

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