

# DFDB

# Dura Mater

. . . . .

## I.

가 ,

가

2

1986 Gottlow<sup>4)</sup>  
(Guided Tissue Regeneration)

Teflon

Polytetrafluoroethylene(PTFE) membrane

1976 Melcher<sup>1)</sup>가

가

(GTR) 가

, GTR

가

Collagen membrane

1982 Nyman<sup>2, 3)</sup>

Milipore filter

Dura mater

1954 Sewell<sup>5)</sup>

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\* (1996 )

Dural defect

		1973	가	
Filicori <sup>6)</sup>				
Dura mater가 tissue	host		II	
	Collagen membrane	1.		
가	1976			
Ellegaard <sup>7)</sup>			1	15kg
가 Dura mater			2	
가 free palatal graft				
mater	Dura			
1987	Dura mater(Tutoplast)*			
Garett <sup>8, 9)</sup>	(Decalcified			
가	freezed dried bone, DFDB)			
mater		2.		
가		(1)		
	(DFDB)		4 x 4mm	
가 Urist				
DFDB				
<sup>10)</sup>				Dura mater
Shallhorn <sup>11)</sup>			1	Dura
가	mater			
, 3		2		
		(2)		
		Entobar** (30mg/Kg)		
	Dura mater			
		2% Lidocain HCl		

\* Tutoplast, Biodynamics international, Germany  
 \*\* Entobar, sodium pentobarbital 100mg/2ml, Hanlim Pharm, Co., Korea  
 \*\*\* Chlorhexamed  
 \*\*\*\* Ampicillin

4 × 4mm  
( 1).  
curette

( 3, 4, 5, 6).

1/4 high speed round bur notch  
가

2. 1 (Dura mater )

( 2).

2 0.12% \*\*\*  
1 2 , 1 1  
500mg ampicillin\*\*\*\*  
2 8

Dura mater가

( 7, 8, 9, 10).

(3)

vital perfusion

3. 2 (Dura mater DFDB )

10% Formalin

10 , Formic acid 1

가 ,

Paraffin

5mm hema -  
toxylineosin Leitz - laborlux II

Dura mater가

- 1)
- 2)
- 3)
- 4)
- 5)

11, 12).

IV.

III.

1.

가

bone morphogenic protein

(Growth factor)

Regeneration) ePTFE 가  
 . 1986 Gottlow<sup>4)</sup> , 1997 <sup>12)</sup> Calcium sulfate  
 (Guided Tissue Teflon  
 1992 Yukna<sup>14)</sup> 2  
 Polytetrafluoroeth - Gore - Tex Dura Mater  
 ylene(PTFE) membrane , 1996 <sup>15)</sup> Dura mater가 3  
 , , mesh , Galgut<sup>16)</sup> oxidized cellulose  
 가 , Blumenthal<sup>17, 18)</sup> Dura mater  
 Fontana<sup>19)</sup> Dura mater  
 2 가  
 polyglycolic acid polylactic acid 가 , 8 가  
 ester 가  
 collagen  
 collagen membrane, cal - 가 , ,  
 cium sulfate . polylactic acid가 , 가  
 가 , ,  
 Bostman<sup>13)</sup> polylactic acid가 , 1965 Urist<sup>20, 21)</sup>  
 multinucleated giant cell , ,  
 , collagen  
 membrane 가  
 Dura mater 8 “ Bone Morpho - genetic pro -

tein(BMP) ” , BMP 1996 35)  
 PDGF - BB IGF - I  
 . Mellonig<sup>22)</sup> 가

guinea pig (DFDB) 가 . , 1997 36)  
 Guidor PDGF - BB IGF - I  
 가 ,

가 Sanders  
 23) 가 , Shallhorn<sup>10)</sup> PTFE 가  
 , Blumenthal<sup>17)</sup>  
 , 가 가 collagen ,  
 osteoconductive 가 Lekovic<sup>37)</sup> hydroxyapatite  
 . DFDB PTFE

. Bower Dura mater  
 24 - 26), Libin 27), Pearson 28) Quintero 29),  
 Sepe<sup>30)</sup> , DFDB  
 , 가 ,  
 DFDB 가  
 , BMP 가 Dura mater 가  
 . Hakaras 31) DFDB가

. DFDB BMP DFDB  
 가 7  
 32). Dura mater가

DFDB BMP가

BMP DFDB  
 33) BMP , . Mellonig<sup>22)</sup> Shallhorn<sup>11)</sup>  
 DFDB가

human recombinant BMP 34).  
 (growth factor) 가 ,

Dura mater  
가 8

Dura mater

DFDB

Dura mater

VI.

V.

Dura mater 1  
DFDB Dura mater  
2  
가 8

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2. Dura mater

2. Dura mater DFDB
- 3.

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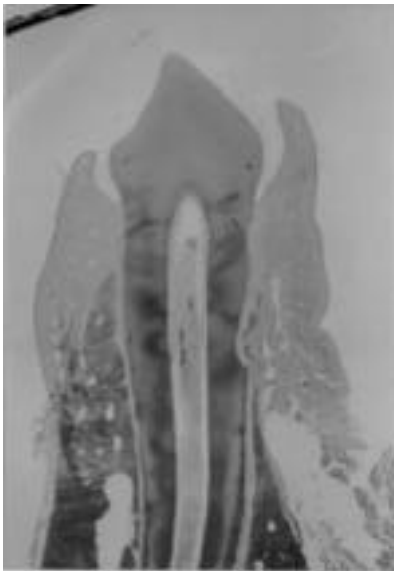
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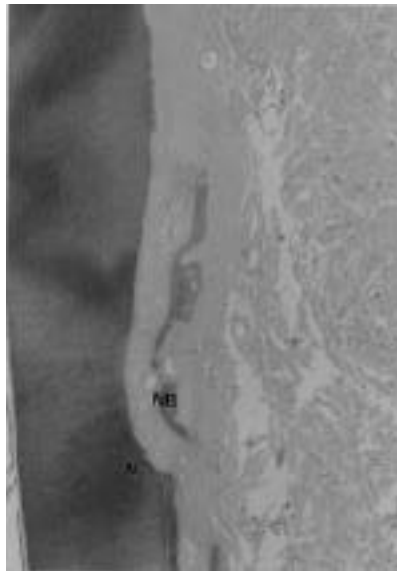
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3



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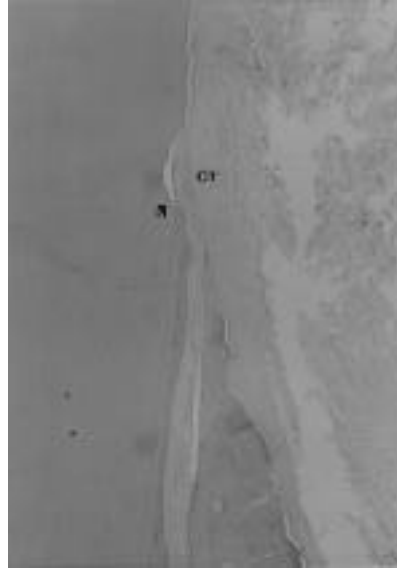
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4 × 4mm

( II )



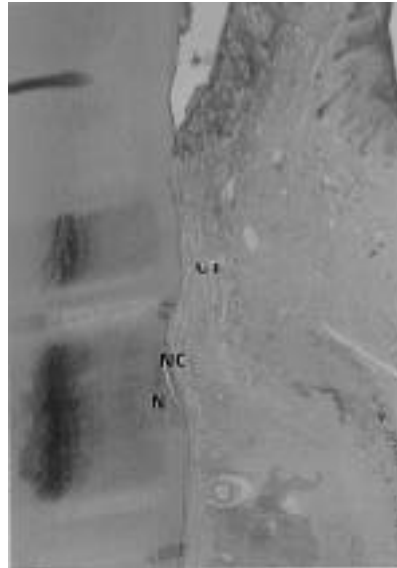
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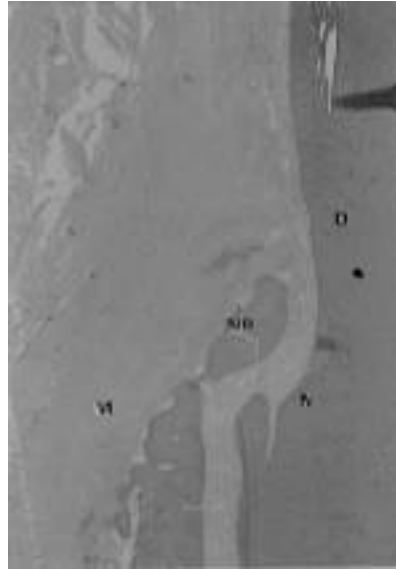
8

2 DFDB Dura mater

( III )



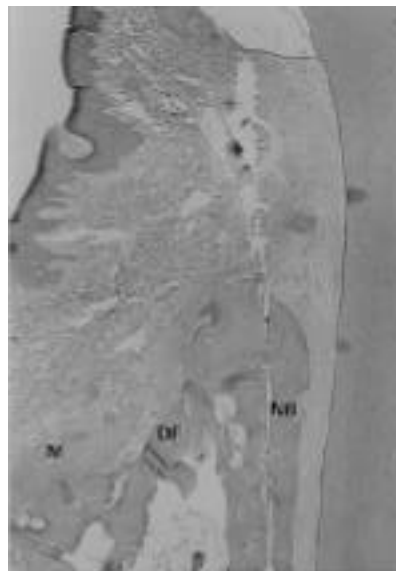
9



10



11



12

3 (H - E, x10)

- 4 (H - E, ×40)  
notch
- 5 (H - E, ×10)
- 6 (H - E, ×40)  
notch
- 7 1 (H - E, ×10)  
Dura mater가 가
- 8 1 (H - E, ×40)  
notch
- 9 1 (H - E, ×10)  
Dura mater가
- 10 1 (H - E, ×40)  
notch
- 11 2 (H - E, ×10)
- 12 2 (H - E, ×40)  
Dura mater가 ,  
DFDB particle

N : Reference Notch, NC : , NB : , CT :  
M : Dura mater , D : , DF : DFDB particle





- Abstract -

## The Effects of DFDB combined with Dura mater on the Periodontal Wound Healing of Dehiscence Defects in Dogs

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Regeneration

The present study investigates the effects of root planing only(control group) , DFDBA alone(test group 1) and combined use of DFDB and Dura mater(test group 2) in dehiscence defects in dogs.

The results of 8weeks post - surgery by histological comparison between the three groups are as follows.

1. The control group showed minimum regeneration of new cementum and new bone with limited migration of epithelial cells, and healed by connective tissue attachment.
2. The test group 1 showed minimum regeneration of new cementum and new bone with limited migration of epithelial cells, and healed by connective tissue attachment.
3. The test group 2 showed significant

amount of the new cementum and new bone.

4. Both control and test groups healed without any observable root resorption and ankylosis.

The above the results suggest that the use of resorbable Dura mater only does not improve the regeneration of new bone and periodontal ligament due to difficulties of space making, but the combined use with DFDB may be more effective.

Key words : Dura mater, DFDB, Regeneration of periodontium., Dehiscence defect.