

: , ,

•

1.

(vaginal delivery)

(Lafoy & Geden, 1989 ;

Lorenzi, 1991 ; Rochelle, 1995).

2

( , 1991 ; Hill, 1989 ; Kitzinger, 1984 ; Reeder, 1992 ;

Sleep, 1984 ; Thacker & Banta, 1983).

가

, Kegel ,

( , 1988).

가

(Reeder, 1992 ; Snyder, 1992)

가

가

( , 1991 ; , 1991).

(ray lamp)

( , 1991 ; Greener, 1989 ;

Lafoy & Geden, 1989)

(Reeder, 1992).

( , 1990 ; Hill, 1989 ; Plastanga, 1988 ;

Rhode & Barger, 1990).

(

, 1991 ; , 1991 ; Barclay & Martin, 1983 ; Droegemueller, 1980).

가

가

가

**2.**

1)

가?

2)

가?

**3. 가**

1)

2)

**4.**

1)

(Cunningham, 1993).

가 10

가

가

가

가

2)

(Steven, 1987).

Davidson(1974) REEDA (Redness, Edema, Eccymosis, Discharge, Approximation ; REEDA ) 가

3) soddy

(cold)  
(Snyder, 1992).

12cm × 8cm 2.8cm  
× 2.8cm × 2.8cm 10 3 1가 4 0  
20 , 20

1.

1920 Pomeroy Delee가  
( , 1991). 2  
(Cunningham & McDonald, 1993 ; Hill, 1989 ; Reeder, 1992 ; Thacker & Banta, 1983).  
가 (Rochelle, 1995).

가  
, , , , , ,  
( , 1991 ; Kempster, 1987 ; Thacker & Banta, 1983).

(Lorenzi, 1991)  
가 ( , 1991 ; Hlii, 1989).

Histamine Plasmakinin 가 가  
가 ,  
가 가  
(Hill, 1989).  
3 가  
, 가

가

24

가 7-10

. Kitzinger(1984) Lorenzi(1991)

가 가  
가 (1987)

38 가  
10 가 70

(Droegemueller, 1980), Ramler(1984)  
가

2.

19

(Rhode & Barger, 1990).

, 1991)

(ray lamp)  
( , 1991).

( 39 , 1994 ; McCaffery & Beebe, 1989).

36

, 24-72  
1989). Droegemueller(1980) Reeder(1992)

(Bugaj, 1975 ; McMaster,

1978 ; Melzack & Bentley, 1983 ; Waylonis, 1967).

. soddy

가

( 39 ,  
1994 ; Hill, 1989 ; Snyder, 1992).

, Palastanga(1988)  
2-5  
2.5cm 20  
5 가 Snyder(1992)  
2 , Hocutt(1981) 가  
1-3 , 2-7 가 5-12  
12-15  
Hocutt(1981)  
2-3 15-20  
Lehmann, Warren Scham(1974)  
가  
30 Licht(1965)  
20 1 가 25  
20  
Droegemueller(1980) 24  
가 가  
Barclay Martin(1983) , Witch-hazel  
swabs 3-4 가  
Ramler Romler Roberts(1986)  
20 6  
30 가 Hill(1989)  
, 20 2  
가 , Lafoy Geden(1989)  
가 Bolles(1972)  
2 1  
가 (1991)  
가  
30 2 가  
, (1991)  
가 가

가

가

(, 1995 ; , 1995 ; , 1986 ; Melzack & Bentley, 1983)

28-48

(Rhode & Barger, 1990).

1.

(non-equivalent control group) (repeated measures design)

1			2			3			
(E)	E a	X	E b	E a	X	E b	E a	X	E b
(C)	C a		C b	C a		C b	C a		C b

a : , b :

2.

1996 7 28 10 2 K G  
(vaginal delivery)  
(accessible population) 20 ,

20 40  
[ ]

- 1) 20 35
- 2) 38 -42
- 3) cold allergy,
- 4)
- 5)
- 6)

3.

(0-10 ) REEDA REEDA 1970 Davidson REEDA 1971 Carey 1972

Bolles  
5가  
가  
REEDA  
,  
0 15 가 가  
cm

4.

가 가  
REEDA 가  
3 6  
가 6 20 3 3  
가

5.

SAS  
t-test chisquare-test  
(repeated measures ANOVA)  
(repeated measures ANOVA)

1.

1)  
1>, 가 <

< 1> N=40

		No(%)	No(%)	X <sup>2</sup> or t	
( )		28.5	27.75	-0.67	
		3.83	3.26		
		11(55)	13(65)	0.41	
		9(45)	7(35)		
		7(35)	7(35)	0.73	
		5(25)	6(30)		
		5(25)	3(15)		
		3(15)	4(20)		
		5(25)	4(20)	0.14	
		15(75)	16(80)		
		9(45)	12(60)	0.90	
		11(55)	8(40)		
		11(55)	8(40)	0.90	
		9(45)	12(60)		
	2.0-2.99	5(25)	2(10)	3.32	
	3.0-3.99	15(75)	16(80)		
	4.0-4.99	0(0)	2(10)		
2	1	2(10)	1(5)	0.36	
		18(90)	19(95)		
	1	15(75)	10(50)	2.67	
		5(25)	10(50)		
		2.0-2.49	9(45)	7(35)	0.92
		2.5-2.99	7(35)	10(50)	
		3.0-3.49	4(20)	3(15)	
		20(100)	20(100)		
		0(0)	0(0)		
		20(100)	20(100)		
	0(0)	0(0)			

2)

< 2> .

< 2> N=40

		(n=20)		(n=20)		t
		Mean	SD	Mean	SD	
		5.15	1.90	4.85	1.66	-0.53
		0.95	0.69	0.75	0.64	-0.95

5.15 , 4.85 ,  
 REEDA 0.95 ,  
 0.75 가 .



2. 가

1)

1 가 :

가 < 3, 4> .

(repeated measures ANOVA) Greenhouse-Geisser Epsilon  
 0.60, Huynh-Feldt Epsilon 0.68 가  
 0.25 . (df=1.38),  
 F=24.12, p=.0001), (df=5, F=10.32, p=.0001), (df=5,  
 F=38.33, p=.0001)가 < 3 > .

< 3> N=40

			F	Adj	G-G
	39				
+	1	315.10	315.10	24.12***	
	38	496.53	13.07		
++	5	75.39	15.08	10.32***	0.0001
-	195				
-	5	279.92	55.98	38.33***	0.0001
-	190	277.53	1.46		

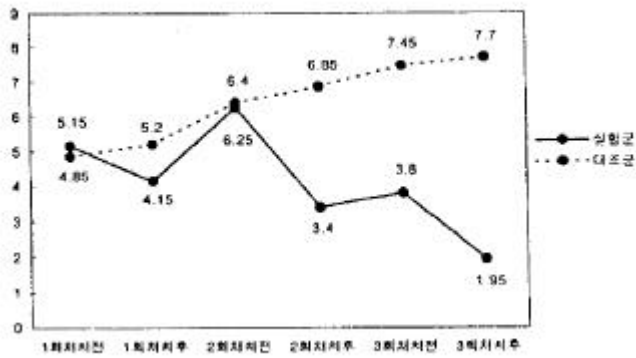
+  
 ++ 3 6  
 \*\*\* p<.001

< 4> N=40

	df	F	Bonferroni
1	1	4.23	4.23
1			2.10
1	1	107.0	107.0
2			37.97***
2	1	37.60	37.60
2			28.99***
2	1	10.0	10.0
3			4.24
3	1	25.60	25.60
3			43.62***

\*\*\* p<.001

가 1 4.85 3 7.70  
 5.15 , 3 1.95  
 < 1 > .



< 1 >

가  
 1 1 가  
 (F=2.10, p=.16, Bonferroni =0.78), 1 2 가  
 (F=37.97, p=.0001, Bonferroni =0.0005), 2 2 가  
 가 (F=28.99, p=.0001, Bonferroni =0.0005). 2 3  
 가 (F=4.24, p=.05, Bonferroni =0.23), 3  
 3 (F=43.62, p=.0001, Bonferroni =0.0005)<  
 1, 4 > 1가 .

2)

2가 :

가 < 5, 6 > .

< 5 >

N=40

				F	Adj	G-G
		39				
+		1	1.20	1.20	0.48*	
		38	96.69	2.52		
++		5	0.77	0.15	4.40**	0.02
-		195				
-		5	0.07	0.01	0.40	0.66
	-	190	6.66	0.04		

+

++ 3                    6  
 \* p < .05    \*\* p < .001

< 6 > N=40

	df			F	Bonferroni
1	1	0.03	0.03	1.0	1.62
1					
1	1	0.10	0.10	2.0	0.83
2					
2	1	0.0	0.0	99999.99***	0.0
2					
2	1	0.23	0.23	3.11	0.43
3					
3	1	0.0	0.0	99999.99***	0.0
3					

\*\*\* p < .001

(repeated measures ANOVA)                    Greenhouse-Geisser Epsilon                    0.39,  
 Huynh-Feldt Epsilon                    0.40                    가                    0.25

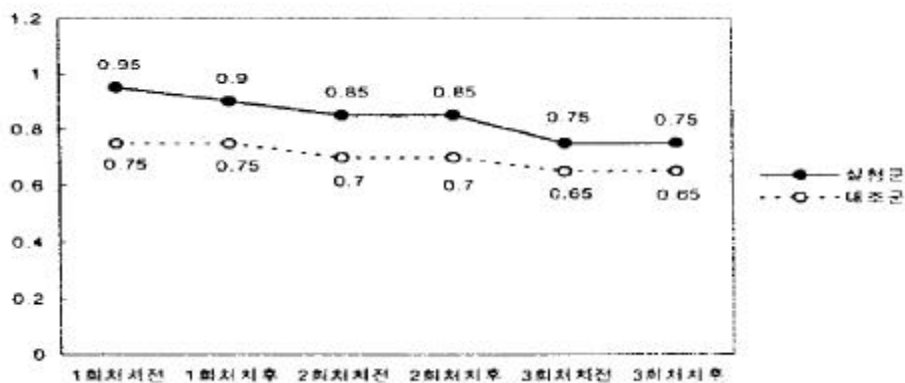
가

(df(1.38), F=0.48, p=.49),

(df=5, F=4.40, p=.0008),

(df=5, F=0.40, p=.85)가 < 5 > .

1                    0.95 , 3                    0.75                    0.2  
 ,                    1                    0.75 , 3  
 0.65                    0.1                    < 2 > .



< 2>

가 1  
 (F=1.0, p=.32, Bonferroni =1.62) 1  
 가 (F=2.0, p=.17, Bonferroni =0.83),  
 가 (F=99999.99, p=0, Bonferroni  
 가 (F=99999.99,  
 =0), 2 3  
 p=0, Bonferroni =0)< 6 > 2가 .

.  
.

1.

< 3, 4, 1 >,  
 6 3 2.85 가  
 6 3.20 ,  
 . (F=24.12m p=.0001). 가  
 (p=.0001, 3 )

(1991) 2 0  
 , 6 10 15  
 (1991) 가  
 , 2 0  
 가 Bolles(1972)  
 가 1.1 가 , (15- 18 ) , 30  
 가 Ramler(1983)  
 가 4 6 (1991),  
 (1991)  
 가 가  
 2 2 가  
 가 ( 2.85 , 0.45 가, F=28.99, p=.0001,  
 4 ), 3 가 .

6 가

.  
,

가

2.

< 5, 6, 2 > ,  
0.2 ,

6 3  
6 0.1

가

(F=0.48, p=.49, 5 ),  
p=.85, 5 )  
가 .

가 (F=0.4,

6 10-15 REEDA  
(1991) , 6 0  
VAS (vaginal analogue scale : ) Lafoy

Geden(1989)

REEAD

Discharge Approximation 가 0  
, 5가

가  
가

Approximation

가  
가  
가

Fleming (1990)

24 ,  
(

3-5  
7 , 1994)

6

24

가

1.

1996 7 28 10 2 , 1  
 (vaginal delivery)  
 20 , 20 , 40  
 10 0-10 가 10cm 1cm  
 Davidson(1974) REEDA  
 1 , 1 , 1 ,  
 3 2 , 2 , 2 , 6  
 3 , 3 , 3 , 1

SAS program t-test, chi-square  
 test , (repeated measures ANOVA)

1. 1가 (df=(1,38), F=24.12, p=.0001)
2. 2가 (df=(1,38), F=0.48, p=.49)

(vaginal delivery)  
 ,  
 2.  
 1)  
 2) 가 가  
 3)

(1990). \_\_\_\_\_ 29(2), 16-23.  
 (1995). \_\_\_\_\_  
 \_\_\_\_\_, 2(2), 147-159.

- (1988). \_\_\_\_\_.
- , (1991). \_\_\_\_\_  
 , 21(1), 27-40.
- , (1991). \_\_\_\_\_ ;  
 (1987). 2 : - \_\_\_\_\_, 26(4),  
 19-25.
- 7 91994). \_\_\_\_\_ ;  
 (1991). \_\_\_\_\_,
- , (1991). \_\_\_\_\_ ;  
 , (1993). \_\_\_\_\_ ;  
 , (1993). \_\_\_\_\_, 23(2),  
 157-169.
- (1984). \_\_\_\_\_
- \_\_\_\_\_
- 39 (1994). \_\_\_\_\_ ;  
 , (1986). \_\_\_\_\_  
 \_\_\_\_\_, 4(2), 121-127.
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- Abstract -

## **The Influence of Cold Therapy on the Perineal Discomfort and the Healing State of the Postpartum Women**

Shin, Hyun Jeong

A quasi-experiment, repeated measures design with non-equivalent control group was used to test the influence of cold therapy on the perineal discomfort and the healing state of the postpartum women undergoing vaginal delivery with episiotomy.

Experiment was carried out from July 28, through October 2, 1996 with 40 postpartum women conveniently sampled from one university hospital located in Seoul. The 40 postpartum women undergoing vaginal delivery with episiotomy were as signed to experimental and control groups evenly(20 each).

The instrument of measurement of perineal discomfort was 0-10 rating scale that was made by researcher and that of perineal healing state was Davidson's REEDA tool.

The perineal discomfort and the healing state level were measured before and after each treatment. The treatment using ice glove that was given for the only experimental group was carried out at three points ; as soon as returning to the recovery room, 3 hours after returning to the recovery room and 6 hours after returning to the recovery room.

The data was analysed by using t-test, chi-square test to determine the similarity between experimental and control groups. The hypotheses were tested using repeated measures ANOVA.

The results of this study are summarized as follows;

1. The first hypothesis that the perineal discomfort level of the experimental group will be significantly lower than that of the control group(df(1,38), F=24.12, p=.0001) was supported.

2. The second hypothesis that the perineal healing state of the experimental group will be better than that of the control group(df(1,38), F=0.48, p=.49) was not supported.

Based on the results of this study, cold therapy was turned out to have significant effect on the perineal discomfort of the postpartum women undergoing vaginal delivery with episiotomy.