

: , ,

# 가

: 가

: 가

.

(Carnevali, 1966).

( , 1980; , 1984).

가

가 (Healy, 1968; Putt, 1970; , 1972; Selye, 1976; Bell, 1977; , 1981; , 1986).

가

( , 1970; , 1992).

( , 1981; , 1982) ( , 1986) ( , 1994; , 1995; , 1981; , 1982) ( , 1983; Guzzetta, 1989; , 1989) 가

가

가 ( , 1992).

가

(Polivy,

1974)

cortisol

## 1.

1995 10 1 12 31

가

35-55

가

46 ( 20 , 26 ) .

2.

1)

(quasi-experimental design)

(Nonequivalent control group pretest-posttest design)

2

(20 ),

(26) 가

cortisol

2)

가

30

가

가 : 가 , 가, 가, td가, 가, 147, 가,

2

: Feeling, Yesterday, Sailing, My way, Love me thnder.

3)

(STAI)

cortisol,

(1)

(State-Trait Anxiert Inventory)

Spielberger(1970)가

(1978)

20 4 80

20 가

Cronbach's alpha .79

.98

Cronbach's

alpha .74

Cronbach's alphas .96

(2)

cortisol ,

cortisol

6 ,

7

5ml

RIA

가

GOD(Glucose Oxidase)

(3)

hook cuff type

( : ALP- )

2



Preference music style	Classic	6 (13.04)	8 (17.39)	0.51	0.53
	Popular song	6 (13.04)	3 ( 6.52)		
	Old popular song	3 ( 6.52)	6 (13.04)		
	Gospel song	2 ( 4.35)	2 ( 4.35)		
	Foreign pop	2 ( 4.35)	2 ( 4.35)		
Self-perception for Helath	Healthy	8 (17.39)	8 (17.39)	0.20	0.24
	Moderate	9 (19.57)	7 (15.22)		
	Poor	3 ( 6.52)	9 (19,57)		
	Sick	0	2 ( 4.35)		
Cause of anxiety	Possibility of recovery	12 (26.09)	14 (30.43)	0.46	0.58
	Cost & Care	2 ( 4.35)	1 ( 2.17)		
	Severity of disease	5 (10.87)	5 (10.87)		
	Disabled sexual function	0	2 ( 4.35)		
	Sence of distances from her husband	1 ( 2.17)	4 ( 8.70)		
Perception of uterus	Symbol of feminine	6 (13.04)	6 (13.04)	0.35	0.40
	Organ of pregnancy	6 (13.04)	10 (21.74)		
	Hormone secreting organ	7 (15.22)	5 (10.87)		
	Other	1 ( 2.17)	5 (10.87)		
Responce of husband	Postive	14 (35.00)	17 (42.50)	0.37	0.47
	Negative	2 ( 5.00)	4 (10.00)		
	No responce	1 ( 2.50)	2 ( 5.00)		
Diagnosis	Myoma	14 (30.43)	18 (39.13)	0.94	1.00
	Endometriosis	2 ( 4.35)	2 ( 4.35)		
	Ut. Ca & CIS	2 ( 4.35)	4 ( 8.70)		
	Ocary cyst	2 ( 4.35)	2 ( 4.35)		

$$*Weight(\%) = \frac{\text{body weight of patient}}{(\text{height}(cm) - 100) \times 0.9} \times 100$$

3.

46.75 ± 13.38 , 47.50 ± 15.67 가  
 < 2>. 43.85 ± 10.30wja, 46.38 ± 13.68  
 가 , 2.90 ± 11.21 , 1.11 ± 13.21  
 < 3>.

4. cortisol

cortisol 6,17 ± 3.60 µ g/dl, 5.80 ± 2.73 µ g/dl 가  
 < 2>. cortisol 15.04 ± 7.16 µ g/dl, 17.85 ± 4.51 µ g/dl  
 가 , cortisol - 8.87 ± 5.48 µ g/dl,  
 - 12.05 ± 4.45 µ g/dl 가 (P=0.03)< 3>.

5.

93.21 ± 10.16m g/dl, 92.00 ± 8.45.mg/ dl  
 가 < 2>. 89.70 ± 3.39mg/ dl, 96.65

$\pm 11.31\text{mg/dl}$  (P=0.03),  
 $3.73 \pm 10.84\text{mg/dl}$ ,  $-4.65 \geq 11.41\text{mg/dl}$  가  
(P=0.01) < 3 > .

Table 2. Preexperimental anxiety score and physiologic data between two group.

Category	Experimental	Control	t	P
	Group(N=20) Mean $\pm$ SD	Group(N=26) Mean $\pm$ SD		
Trait- Anxiety (score)	44.60 $\pm$ 11.49	46.46 $\pm$ 10.64	0.55	0.58
State- Anxiety (score)	46.75 $\pm$ 13.78	47.50 $\pm$ 15.67	0.16	0.86
Corisol( $\mu\text{g/dl}$ )	6.17 $\pm$ 3.60	5.80 $\pm$ 2.73	-0.39	0.69
Fasting blood pressure(mmHg)	93.21 $\pm$ 10.16	92.00 $\pm$ 8.45	-0.43	0.66
Systolic blood pressure(mmHg)	116.20 $\pm$ 15.88	112.69 $\pm$ 15.37	-0.76	0.44
Distolic blood pressure(mmHg)	72.75 $\pm$ 10.57	74.61 $\pm$ 14.27	0.48	0.62

Table 3. Changes of anxiety score and physiologic data after applying Musical Listening

Category		Experimental	Control	t	P
		Group(N=20) Mean $\pm$ SD	Group(N=26) Mean $\pm$ SD		
State- Anxiety (score)	post	43.85 $\pm$ 10.30	46.38 $\pm$ 13.68	0.69	0.49
	diff. <sup>†</sup>	2.90 $\pm$ 11.21	1.11 $\pm$ 13.21	-0.48	0.63
Scortisol( $\mu\text{g/dl}$ )	post	15.04 $\pm$ 7.16	17.85 $\pm$ 4.51	1.53	0.13
	diff.	-8.87 $\pm$ 5.48	-12.05 $\pm$ 4.54	-2.14	0.038*
Fasting blood sugar(mg/dl)	post	88.70 $\pm$ 9.39	96.65 $\pm$ 11.31	2.22	0.03*
	diff	3.73 $\pm$ 10.84	-4.65 $\pm$ 11.41	-2.48	0.01*
Systolic blood pressure(mmHg)	post	114.50 $\pm$ 14.59	120.96 $\pm$ 14.42	1.49	0.14
	diff	1.75 $\pm$ 10.67	-8.26 $\pm$ 16.54	-2.35	0.02*
Diastolic blood pressure(mmHg)	post	71.75 $\pm$ 12.27	78.46 $\pm$ 11.72	1.88	0.06
	diff	1.00 $\pm$ 10.83	-3.84 $\pm$ 17.04	-1.17	0.27

\*:Significantly different at P<0.05

<sup>†</sup> diff:dirrerence=per - post

## 6.

$116.20 \pm 15.88\text{mmHg}$ ,  $112.69 \pm 15.37\text{mmHg}$   
가 < 2 > .  
 $120.96 \pm 14.42\text{mmHg}$  가  
 $1.75 \pm 10.67\text{mmHg}$ ,  $-8.26 \pm 16.54\text{mmHg}$  가 (P=0.02) <  
3 > .

$78.46 \pm 11.72\text{mmHg}$  가 < 2>.  $72.75 \pm 10.57\text{mmHg}$ ,  $74.61 \pm 14.27\text{mmHg}$   
 $1.00 \pm 10.83\text{mmHg}$ ,  $-3.84 \pm 17.04\text{mmHg}$  가 ,  $71.75 \pm 12.27\text{mmHg}$ ,  
 가 < 3>.

•

가 가 ( ,  
 1994).  
 Johbson (1970) 가  
 (1975), (1975)  
 . (1975) 가 .  
 가  
 (Graham. 1971; , 1972; polivy, 1974; , 1979; , 1982),  
 , , .  
 (Cook, 1981; 1986; Stoudenmire, 1975). 가  
 가 .

(Herth, 1978; Guzzetta, 1986).

‘ , ’ ,  
 ( , 1992). ‘  
 ’( , 1983), ‘ ’( , 1989), ‘  
 ’( , 1992), ‘  
 ’) , 1993) .

( , 1992).

( , 1992).  
 5 (25%), 가 8 (40%), 6 (30%), 1 (5%) 가  
 가 .

46 44.65 44.00  
 ( , 1978) 가 .  
 47.50 , 46.75 (1979) 45.5  
 , (1982) 43.8 , (1986) 43.5  
 가 .  
 , glycogenolysis 가

( , 1992). ACTH  
cortisol 가 가 . Cook(1981)  
( , 1993).  
cortisol  
(1944)  
가  
가  
가  
1995 10 1 12  
31 , 가 35  
55  
20 , 26  
cortisol , 30  
1.  
2. cortisol 가  
(P=0.03).  
3. (P=0.01).  
4. 가 ,  
가 가 (P=0.02).  
가  
가  
1. , , (1992). ; , :  
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**- Abstract -**

**Key word : Hysteretomy, Music listening, Anxiety**

## **Effects of Music Listening on Anxiety in Patients before Undergoing Hysterectomy**

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The purpose of this study was to elucidate the effects of musical listening on anxiety in patients undergoing abdominal hysterectomy. On the basis of the research criterias, 46 patients were recruited from Kang-Nam St. Mary's Hospital in Seoul from October 1 to December 31, 1995. 20 patients of them were participated as the experimental group who received musical listening session with self-selected music tapes, while 26 patients as the control group who didn't receive that session. The musical listening sessions composed of 3 periods, the pre-operation evening, just before sleeping, the operation morning. There were no differences between two groups, in terms of age education, religion, the experience of operation, the perception of uterus, and the weight(%). The State-Trait Anxiety Inventory(STAI) was used to measure anxiety on all patients. And serum cortisol levels, fasting blood sugar levels, systolic and diastolic blood pressure were collected at the day before surgery and the operation day. The results were as follows :

1. There were no significant differences in State-Anxiety between the two groups.
2. The differences of serum cortisol level between the day before surgery and the operative day were significantly lower in experimental group than in control group(P=0.03).
3. The level of fasting blood sugar was significantly decreased in experimental group(P=0.01).
4. Systolic blood pressure level was significantly decreased in experimental group(P=0.02). While Diastolic blood pressure level was not significant between two groups.

It is suggested imply that the musical listening during the perioperative period may alleviate the perioperative anxiety levels in patients undergoing abdominal hysterectomy.