

high and euphoria (O'Brien 1995; Moss 1996; Gianoulakis 1996).
 norepinephrine dopamine (O'Brien 1995; Moss 1996; Gianoulakis 1996).
 cathecholamine (Schuckit 1985; Gianoulakis 1996).
 ychiatric Association 1994) 48 가
 29 가
 가 가 - en - (Schuckit 1985; Gianoulakis 1996). - endorphin 33 (68.7%), 가
 15 (31.3%) , 47.0±11.3 , 55.0±11.6 .
 가 가 가 32.0±6.9 .
 - endorphin 가 가
 가 가
 2. 연구방법
 alcohol , endorphin , cortisol 7 9
 0.75gm/kg 45
 9 alcohol , - endorphin , corti - isol , alcohol 0.75gm/kg
 45 SAS t - ANOVA
 - endorphin pituitary gland hypothalamus arcuate nucleus - endor - phin positive reinforcement (Akil 1984). corticotropin releasing hormone hypothalamic pituitary - endorphin peptides 가 (Schuckit 1985). ACTH - endorphin pituitary gland 33 가 15 가 2 : 1 가 47. ACTH cortisol 가 (Schuckit 1985 ; Marchesi 1997). - endorphin corti - sol (Berger Ba - rchas 1983). cortisol - endorphin 가 Cortisol 가 2.74 ± 1.77mg/dl 80.76 ± 35.42mg/dl(1), 가 3.58 ± 1.19mg/dl 86.60 ± 25.74mg/dl(2), 0.57 ± 2.14mg/dl 57.64 ± 28.87 mg/dl 가 (3). 가 (4).
 - en - dorphin 63.07 ± 44.51pg/ml 59.60 ± 57.23 pg/ml (1), 가 63.07 ± 44.51pg/ml 59.60 ± 57.23pg/ml (2), 14.19 ± 4.86

연구방법 및 대상

1. 연구대상

1996 8 1997 7
 DSM - (American Ps -

Table 1. Differences in endorphin, cortisol, alcohol, fasting blood sugar of familial alcoholics(N=33)

	Alcohol consumption		p-value*
	Before	After	
Endorphin(pg/ml)	41.63 ± 41.87	35.60 ± 33.80	NS
Cortisol(μ g/ml)	8.13 ± 3.83	7.84 ± 2.61	NS
Alcohol(mg/dl)	2.74 ± 1.77	80.76 ± 35.42	p<0.05
Fasting blood sugar(mg%)	94.32 ± 14.41	96.68 ± 18.52	NS

*T-test

Table 2. Differences in endorphin, cortisol, alcohol, fasting blood sugar of non-familial alcoholics(N=15)

	Alcohol consumption		p-value*
	Before	After	
Endorphin(pg/ml)	63.07 ± 44.51	59.6 ± 57.2	NS
Cortisol(μ g/ml)	8.93 ± 3.14	8.13 ± 2.15	NS
Alcohol(mg/dl)	3.58 ± 1.19	86.60 ± 25.74	p<0.05
Fasting blood sugar(mg%)	92.12 ± 13.21	97.63 ± 12.63	NS

*T-test

Table 3. Differences in endorphin, cortisol, alcohol of the normal controls(N=29)

	Alcohol consumption		p-value*
	Before	After	
Endorphin(pg/ml)	14.19 ± 4.86	13.45 ± 4.43	NS
Cortisol(μ g/ml)	5.43 ± 3.63	5.16 ± 3.13	NS
Alcohol(mg/dl)	0.57 ± 2.14	57.64 ± 28.87	p<0.05

*T-test

Table 4. Differences between familial alcoholics and normal controls(N=29)

	Changes after alcohol consumption			p-value*
	Control	with family history		
		with family history	without family history	
Endorphin(pg/m)	0.75 ± 2.25	6.0 ± 18.0	3.5 ± 28.3	NS*
Cortisol(μ g/ml)	0.18 ± 3.05	0.29 ± 3.18	0.85 ± 2.59	NS*
Alcohol(mg/dl)	57.1 ± 27.6	78.0 ± 34.3	83.0 ± 26.1	NS*
Fasting blood sugar(mg%)		2.36 ± 1.25	5.51 ± 3.78	NS**

*ANOVA **T-test

pg/ml 13.45 ± 4.43pg/ml

(3).

(4).

가

8.13 ± 3.83 μ g/ml 7.84 ± 2.61 μ g/ml

(1), 가

3.14 μ g/ml 8.13 ± 2.15 μ g/ml

(2),

μ g/ml

5.34 ± 3.64 μ g/ml 5.16 ± 3.13

(3).

가 (4).

가

94.32 ± 14.41mg% 96.68 ± 18.52mg%

(1), 가

92.12 ± 13.

21mg% 97.63 ± 12.63mg%

(2).

가 (4).

고 찰

1970

opioid 가

, endorphin

가

(Be-

rger Barchas 1983).

Verebey Blum(1979)

catecholamine aldehyde

tetra-

hydroisoquinoline(TIQ)

. TIQ

acetaldehyde가

(Davis Walsh 1970 ;

Marshall 1977 ; Myers 1996 ; Ross 1974).

- endorphin

가

GABA, glutamate, dop-

amine, serotonin, opioid peptide

(Koob 1994).

corticotropin releasing factor

가 (arcuate nucleus)

(nucleus accumbens)

(Akil 1984 ; Herz 1997).

Penick (1978) 568

65%가 가

가

15

2 : 1

33

가

가

가

가

47.0 ± 11.3 , 가

55.0 ± 11.6

가

± 6.9

(Frances 1984)

2 가 가 가 가

Gianoulakis (1996b) 가
0.25gm/kg, 0.50gm/kg, 0.75gm/kg
0, 15, 45, 120, 180
45 가
가 가
가 가

endorphin
Gianoulakis (1996b) 9 가
- endorphin

가 Rivier (1984) ACTH
corticosteroid 가
ACTH
(Costa 1996). hypothalamic -
Gianoulakis (1996a) pituitary - adrenal - axis CRF -

- end - ACTH corticosteroid
orphin 가 . Gianoulakis (1996b) 가 (Rivier 1996).
0.25gm/kg, 0.50gm/kg, 0.75 Corticotropin releasing hormone -
gm/kg - endorphin endorphin peptides 가 (Gianoulakis 1996).
0.75gm/kg 가 가 - en -

phin 45 - endor - dorphin cortisol
가 가 - endorphin

- endorphin 0.75gm/kg 45 Schuckit (1988) 가 가
(1.1ml/kg)
가 0.75ml/kg ACTH 가

- endorphin 0, 15, 45, 120, 180 0.75ml/kg ACTH
가 가 가
0 15 - endorphin 가 Gianoulakis (1996b) 0.75gm/kg
0.75gm/kg 45 가 가 cortisol 가 corti -

Volpicelli (1990) 가 가 sol 가 가
opioid가
endirpine 가 . 가 cortisol

가 가 가
- endorphin 가
가
- endorphin (Ivanikov 1992). 가
glucose가 - endorphin
가 가

요 약

orphin 가
 48 alcohol , - endorphin
 , cortisol
 1) 가 가
 2 : 1 .
 2) 가 가
 3) 가 ,
 . 가
 4) 가 ,
 - endorphin
 가 .
 5) 가 ,
 cortisol 가
 .
 6) 가
 가 .
 중심 단어 : . 가 .

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