

비만의 치료지침

Clinical Guidelines of Treatment of Obesity in Adults

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Abstract

Obesity increases the risk of serious medical conditions such as type 2 diabetes and coronary heart disease. The risks associated with comorbidities can be reduced with a modest weight loss. Obesity should be recognized and treated as a chronic, progressive, and relapsing disease. The management of obesity requires a long - term approach that is tailored to an individual's lifestyle and needs. Initial treatment should focus on lifestyle changes, i.e., reduced calorie intake and increased physical activity, with behavior modification strategies. Medications may be used adjunctively. Most of FDA - approved anti - obesity drugs should be prescribed for short - term weight loss. Recently, sibutramine and orlistat were approved for long - term weight loss and maintenance. In addition to weight reduction, sibutramine and orlistat provided beneficial effects on cardiovascular risk factors in clinical trials. Several drugs, such as fluoxetine, bupropion and topiramate, approved for other uses, have shown weight loss in some clinical trials. Surgical treatment should be reserved for severely obese patients with significant medical comorbidities or physical conditions.

Keywords : Obesity; Guideline; Anti - obesity drug

: ; ;

가

(WHO)

12

2000

64.5%

(1),

가

(2).

가

, 2 ,

, , (,)

가

(3).

가

가

가

(4).

5 ~ 10%

(5~7). 가

		1. NIH (1998)	
1996 ~ 1998	가	1. 가	
		1) : 6	10%
		2) : 0.5~1 kg	
	가	2. 1) : 1 500~1,000 kcal	
		2) 1 800 kcal	
		3. 30~45 , 3~5	
가 (8), 90	2.5%가	4. (self - monitoring), (stimulus control), (cognitive restructuring),	
	가	5. 6	
		6. BMI 40 kg/m ² , 35 kg/m ²	
	“phen - fen(phentermine fenfluramine)”		
1997 (9)			
가 (National 가 ,			
Institute of Health, NIH) 가			
1998			
(1)(4).			
3		가,	
가		가	
6			
6			
10%		0.5~1 kg	
가			
		가	
가 (10, 가 .		가	
11)			

1,200 kcal
(14). 가

1.

2.

가 가

가

500~1,000 kcal 1 가 (-)
0.5~1 kg (body mass index, BMI) 2~3%
(4). 가

1,000~1,200 kcal, 1,200~1,600 kcal 가
800 kcal
(Very - low - calorie diet, VLCD) 가 ,
VLCD (lean ,
body mass) , , (15, 16).
가

(12). 가 VLCD
1 (17).
(4, 12).

, ,
, ,
30 , 5
가 가
(13). 가

가
. 1 3 10,000 4,000

<p>2. , 20</p> <p>3.</p> <p>(self - monitoring),</p> <p>가</p> <p>1</p> <p>(4).</p> <p>2</p> <p>(19).</p>	<p>2.</p> <hr/> <p>1.</p> <p>2. 2</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p> <p>7. (3)</p> <p>* > 90 cm (), > 80 cm ()</p> <p>150 mg/dL</p> <p>HDL < 40 mg/dL (), < 50 mg/dL ()</p> <p>130/85 mg/dL</p> <p>110 mg/dL</p> <hr/> <p>*</p>
<p>가</p> <p>1</p> <p>(4).</p> <p>2</p> <p>(19).</p>	<p>(4). BMI 30 kg/m² BMI 27</p> <p>kg/m² 1 (</p> <p>2) (20).</p> <p>WHO</p> <p>25 kg/m²</p> <p>(21), BMI 25 kg/m²</p> <p>BMI 23 kg/m² (</p> <p>90cm , 80cm), 1</p> <p>(Food and Drug Administration ;</p> <p>FDA) 12</p> <p>sibutramine</p> <p>orlistat</p> <p>(3)(22).</p> <p>Fluoxetine</p> <p>FDA</p>

3. FDA

Benzphetamine		25~50 mg × 1~3 /
Phendimetrazine		17.5~70 mg × 2~3 /
Phentermine		18.75~37.5 mg/
Diethylpropion		25 mg × 3 /
Mazindol		1~2 mg × 1~3 /
Sibutramine		5~15 mg/
Orlistat	lipase	120 mg × 3 /

* Sibutramine Orlistat

(12)

가 bupropion topiramate

가

가

FDA

(24).

가 3

가

Sibutramine()

1.

. BMI 27 kg/m² 485

sibutramine 10mg, 15mg 1

(phentermine, benz-

(1.6kg) 4.4 kg, 6.4 kg

phetamine, phendimetrazine, diethylpropion),

(25).

(mazindol), 가

4 VLCD 6 kg

1 sibutra-

-

mine 10mg

sibutramine

. 가

5.2 kg

,

phentermine 36

0.5 kg 가 (26). STORM(Sibutramine Trial of

(23)

phen-

Obesity Reduction and Maintenance) 1

termine 1 30 mg

(4

600 kcal

sibutramine 10 mg

4

(4.8 kg)

5%

18

sibu-

12.2 kg,

13 kg

tramine

80%

phentermine

9%

sibutramine

43%

(27).

Sibutramine

1 10 mg 1

phendimetrazine()

. 4

2 kg

	15 mg	.	12.5 kg	74%가
20 mg	.	,	(32).	327
,	,		bupropion 300 mg, 400 mg	6
1~3 mmHg,	4~5 /		300 mg	7.2%, 400 mg
가 . Phen - fen	가		10.1%	(5.0%)
(28),		(33). 48	bupropion 300 mg, 400 mg	7.5%, 8.6%
.				
SSRI(Selective				
Serotonin Reuptake Inhibitors)	MAO		bupropion 300 mg	26
.		(1.7 kg)		(4.4 kg)
Fluoxetine() SSRI		(34).	bupropion	
serotonin		FDA		
, 1	0.5 kg			
12~20	. Fluoxetine 60 mg	655	Topiramate()	1996
가 8	4 kg			가
(29).	fluoxetine	1		
가	(30).		가	가
20	20 가		(35). 2002	American Diabetes Associa-
.	,	,	tion	Bray (36)
,	,	,	mate	- 가
Bupropion()			. 6	topiramate
가			384 mg	(2.6%) 6.3%
			,	64 mg 5.0%, 96 mg
가		8	4.8%, 192 mg	6.3%
2.3 kg				384 mg 8.5%
7%	bupropion	1 150 mg 300 mg	. Topiramate	(binge - eating
9%, 15%	(31).	50	disorder)	가
8	bupropion 100 mg	38)	가	가
(400 mg)	(1.4 kg)		. Topiramate가	가
(4.9 kg)	(32). Bupropion			
14	24		가	가

2.

Orlistat() lipase FDA . Ephedrine
가 . 가
가 . 가
228 orlistat 360 . ephedrine 1 150 mg
mg 1 (5.4%) , , (43). Ca-
8.5% (39). 635 ffeine adenosine phosphodiesterase
orlistat 1 180 mg, 360 mg xanthine ephedrine
1 (4.1 kg) 7.1%, 7.9% ephedrine
, 2 orlistat 가 . Ephedrine caffeine
5% (40). 729 (ephedrine 20 mg/cafeine 200 mg 1 3)
6 8%
orlistat 가
1 360 mg 33% . 180
가 59% ephedrine 60 mg, caffeine 600 mg
(41). 1 90 mg, 180 mg (13.2%)
가 . (16.6% ; P=0.0015) 가
Orlistat 120 mg 3 , (44). 167
360 mg (ephedra 90 mg/cafeine 192 mg
30% 가) 6 ,
(42). (2.6 kg) (5.3 kg)
Orlistat (45). 24
ephedrine(75~150 mg), caffeine(150 mg), aspirin
(330 mg) 8 (0.7 kg)
가 . (2.2 kg ; P < 0.001)
가 . (46). ephedrine
3. . FDA ephedra
140 , ,
(thermogene- , , 10 13
sis) 가 (47). Ephedrine/cafeine

Orlistat
 . Sibutramine
 FDA .
 (55).
 . Ephedrine(25 mg), caffeine(25 mg),
 aspirin(100 mg) OTC (가)
 3
 가 , ephedrine 5 ~ 10%
 drine 가 . 가
 . 가
 .
 , 가 . 2 FDA sibutramine orlistat
 sibutramine orlistat . Bupropion topiramate
 HbA1c, (48 ~ 50). 가
 Sibutramine 12 . Ephedrine/cafeine
 HDL 가 feine 가
 (51, 52). 가 3,277 가
 4 XENDOS .
 (Xenical in the prevention of Diabetes in Obese Subjects) orlistat 가 .
 , LDL , 4 2 kg
 가 HDL .
 (53). Orlistat
 .
 .
 535 2 1 orlistat 가
 , LDL . 가
 (54).

BMI 35 kg/m²

(4).

가

BMI 16.4 kg/m²

1

 13.3 kg/m^2

(56). Gastric bypass vertical banded gastroplas-

ty

gastric bypass

18 ~ 24

35%

3~4

10%

가

가

(57).

가

가

1. (www.kosso.or.kr)

2. 가 (www.kosfm.org)

3. NIH, National Heart Lung and Blood Institute
(www.nhlbi.nih.gov)

4. Get Up. Get Out. President's Council on Physical Fitness and Sports (www.fitness.gov)

5. American Dietetic Association (www.eatright.org)

6. American Heart Association (www.americanheart.org)

7. Consumer oriented nutrition site of American Heart Association
(www.deliciousdecisions.org)

8. Shape Up America! (www.shapeup.org)

9. US Food and Nutrition Information Center
(www.nal.usda.gov/fnic)

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| 1.) | 6.) |
| 2.) | 7.) |
| 3.) | 8.) |
| 4.) | 9. 가) |
| 5.) | 10.) |