

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

1,200 kcal

(14). 가

1.

가 가

2.

가

500~1,000 kcal

1

가

(-)

0.5~1 kg

(body mass

(4).

index, BMI) 2~3%

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

4,000

. 1

3

10,000

2.

- 1.
2. 2
- 3.
- 4.
- 5.
- 6.
7. ( 3 )

\* > 90 cm ( ), > 80 cm ( )

150 mg/dL

HDL < 40 mg/dL ( ), < 50 mg/dL ( )

130/85 mg/dL

110 mg/dL

\*

30~45

4

2, 20

(18).

3.

(self - monitoring),

가

(4). BMI 30 kg/m<sup>2</sup>

BMI 27

kg/m<sup>2</sup>

1

(

2)

(20).

WHO

25 kg/m<sup>2</sup>

(21), BMI 25 kg/m<sup>2</sup>

BMI 23 kg/m<sup>2</sup>

(

90cm

, 80cm ), 1

(Food and Drug Administration ;

FDA)

12

sibutramine

가

orlistat

1

1/3

가

( 3)(22).

(4).

2

Fluoxetine

(19).

FDA

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/m<sup>2</sup>

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) topira-  
 mate - 가  
 Bupropion( ) . 6 topiramate  
 가 가 . 384 mg (2.6%) 6.3%  
 , 64 mg 5.0%, 96 mg  
 가 . 8 4.8%, 192 mg 6.3% . 6  
 2.3 kg 384 mg 8.5%  
 7% bupropion 1 150 mg 300 mg . Topiramate (binge - eating  
 9%, 15% (31). 50 disorder) 가 (37,  
 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  
 가  
 228 orlistat 360  
 mg 1 (5.4%)  
 8.5% (39). 635  
 orlistat 1 180 mg, 360 mg  
 1 (4.1 kg) 7.1%, 7.9%  
 , 2 orlistat  
 5% (40). 729  
 6 8%  
 orlistat 가  
 1 360 mg 33%  
 가 59%  
 (41). 1 90 mg, 180 mg  
 가 .  
 Orlistat 120 mg 3 ,  
 360 mg  
 30% 가 ) 6 ,  
 (42). (2.6 kg) (5.3 kg)  
 Orlistat (45). 24  
 , ,  
 가 .  
 가 .

caffeine ephedrine  
 FDA  
 . Ephedrine  
 가  
 가  
 ephedrine 1 150 mg  
 , , (43). Ca-  
 ffeine adenosine phosphodiesterase  
 xanthine ephedrine  
 ephedrine  
 가 . Ephedrine caffeine  
 (ephedrine 20 mg/caffeine 200 mg 1 3 )  
 가  
 가  
 . 180  
 ephedrine 60 mg, caffeine 600 mg  
 (13.2%)  
 (16.6% ; P=0.0015) 가  
 (44). 167  
 (ephedra 90 mg/caffeine 192 mg  
 ) 6 ,  
 (2.6 kg) (5.3 kg)  
 (45). 24  
 ephedrine(75~ 150 mg), caffeine(150 mg), aspirin  
 (330 mg) 8 (0.7 kg)  
 (2.2 kg ; P < 0.001)  
 (46). ephedrine  
 . FDA ephedra  
 140 , ,  
 (thermogene- , , , 10 13  
 sis) 가 (47). Ephedrine/caffeine

3.





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3 ( 가 )

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