

## KAIM Clinical Report: Evidence Data & Case Studies - (2)

### **Fang-Feng-Tong-Sheng-San (*Divaricate Saposhnikovia Miraculous Powder*) for Obesity**

Obesity causes various diseases. Obesity is absolutely one of causes of metabolic syndrome so that improving obesity is linked to the prevention of diseases that will possibly develop in the future, such as diabetes mellitus, hypertension, hyperuricemia, hyperlipidemia, cerebral apoplexy, coronary artery disease. Diet regimen is most important to improve obesity. There are, however, some herb medicines that have abilities to reduce obesity. In recent years, various studies to treat obesity with herb medicines have actively been conducted, including *Divaricate Saposhnikovia Miraculous Powder* (DSMP). The results of recent studies are outlined below.

**Evidence Data 1:** DSMP reduces obesity.

Akiyama T., Yoshikawa H., Tanaka H., et al. Efficacy of DSMP for a patient worrying about obesity with gene mutation in  $\beta$ -adrenergic receptors. *Digestion and Absorption*, 21(2): 159-162, 1998

A daily dose of 7.5g DSMP was administered for a period of 12 weeks to the obese patient who was resistant to therapy with  $\beta$ 3-AR gene mutation. The waist/hip ratio, an index for the accumulation of visceral fats was greatly reduced and insulin resistance was improved although only a slight action of reducing weight was observed.

**Evidence Data 2:** DSMP reduces weight.

Itoh T.: The Effect of Bofutsushosan (DSMP) on Weight Reduction in Humans  
*Kampo Med.* 56 (6), 933-939, 2005

DSMP was equally given to 27 patients with obesity, of which 33 that completed a more than six months intake were investigated on the effect of weight reduction (weight, BMI [body mass index], and presence or non-presence of loss of appetite). Loss of appetite after the DSMP administration was seen in 16 patients, of which 11 developed loss of appetite one week after the DSMP use. Before the use of DSMP, the weights of the patients with loss of appetite and unchanged appetite were  $67.1 \pm 2.5$ kg and  $75.9 \pm 2.4$ kg respectively, exhibiting stochastically a significant difference. A great variation in weight reductions between the cases of loss of appetite ( $-4.8 \pm 1.0$ kg) and those of unchanged appetite ( $-1.4 \pm 0.7$ kg) was manifested. The values of serum triglycerides (ml/dL) were also lowered significantly from  $161.6 \pm 17.3$  before the administration to  $65.6 \pm 3.1$  at the point of six months of administration ( $< 0.0001$ ).

**Case Report 1:** DSMP eliminates obesity with CRP decreases.

Ishizuka Y.: Obesity treatment with DSMP. *KAIM Vol. 1 No. 3*, 2007

The patient was a 44-year old male. In the medical examination he was pointed out liver function abnormalities and visited the hospital for consultation. Obesity (weight 85kg, BMI 29.4) and moderate fat liver were observed. The doctor administered DSMP to him with a result of no weight reduction at all. After three months, the patient discontinued the treatment on his own judgment. Then, since the weight further by three kg with an increase in ALT to 85 IU/L, the patient returned to the hospital. His height was 170cm, weight 88kg (BMI 30.4), and blood pressure 142/92mmHg. Visceral fat type obesity was observed with the waist circumference of 94cm. A blood test revealed liver function abnormalities with AST 41 IU/L, ALT 85 IU/L,  $\gamma$ GTP 48IU/L and without abnormalities in lipids. High sensitive CRP (hsCRP) was 0.158 mg/dL. DSMP administration was resumed under the usual diets and life style, resulting in no decreases as previously in weight and ALT values for three months after the administration was resumed. In contrast, the levels of hsCRP dropped rapidly. The patient was continually administered DSMP with gradual decreases in weight and ALT values. One year later, improvements were observed in weight (84kg), ALT (31 IU/L), hsCRP (0.039mg/dL). A daily administration of 7.5g DSMP to the patient with visceral fat type obesity decreases the levels of hsCRP first, and then reduces the levels of serum fats and weight. Fluctuations in hsCRP correlate with BMI, waist circumference and visceral fat volume.

**Case Report 2:** DSMP improves obesity together with hyperlipidemia.

Sekine K.: Prog. Med. 21 (7) 1792-1793, 2001

The patient was a 51-year old male that was pointed out hyperlipidemia in the medical examination. Physical findings were height 170cm, weight 73kg, and BMI 25.3, which were listed in Table 1. The patient was administered 7.5g/daily of DSMP in his usual life style. Diet restrictions and exercise therapy were not instructed. Two months after the administration, weight reduced by 3kg. to 69.5kg. The therapeutic process before and after the administration was shown in the Table.

Table: Therapeutic process (after two months use)

Inspection Items	Before use of	After DSMP
Weight (kg)	73.0	69.5
BMI	25.3	24.0
Triglycerides (mg/dL)	102	79
Total cholesterol (mg/dL)	231	218
HDL-C (mg/dL)	48	48
blood glucose (mg/dL)	93	94
AST (IU/L)	28	23
ALT (IU/L)	43	29
$\gamma$ -GTP (IU/L)	47	59