Introduction

Obesity is a complex, multifactorial disorder characterized by an excess of adipose tissue. Although obesity can be looked at simply as an excess calories ingested compared with calories expended, it involves complex interactions between genetics, metabolism, and appetite regulation on one hand and food availability, behavior, physical activity and cultural factors on the other hand ***(Jeffrey and Eleftheria, 2005)***.

Obesity is said to be present when more than 20% of body weight is due to fat in men and more than 25% in women. Normal values of fat are 12-18% for men and 18-24% in women ***(Ganong, 1997)***.

Worldwide, it is estimated that 7% of adults are obese, but two to three times as many are considered overweight ***(Seidell, 1999)***.

Obesity is a major cause of morbidity and mortality in the United States with an estimated 300.000 adults dying each year with causes directly attributed to obesity ***(Flegal et al., 2002)***.

The greater the obesity, the higher the morbidity and mortality figures. For example, men who are 10% overweight have a 13% increased risk of death, whilst the increase in mortality for those 20% overweight is 25%. The rise is less in women. Weight reduction reduces this mortality and therefore should be strongly encouraged ***(Gustafsson et al., 2005)*.**

Obesity is associated with increased risk of morbidity from hypertension, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, gall bladder disease, osteoarthritis, sleep apnea, endometrial, breast, and colon cancers ***(Kumar and Clark, 2005)***.

Successful treatment, defined as the sustained attainment of normal body weight without producing unacceptable treatment-induced morbidity, is rarely achieved in clinical practice. Many approaches produce short-term weight loss, and this has clear benefits for associated morbidities such as hypertension and diabetes. Despite the fact that sustained weight loss is uncommon, enormous resources are expended in pursuit of this goal ***(Farin et al., 2006)***.

There is an agreement that medical treatment of obesity consists of diet control, exercise, behavioral modification. Surgical treatment of obesity is reserved for massively obese individuals. Drug therapy has not been fully documented ***(Lacey et al., 2003)***.

The serious, widespread and refractory nature of obesity makes it ripe for investigations of complementary and alternative approaches ***(Klein, 2001)***.

Although acupuncture is being utilized to treat a variety of important health problems, its usefulness in obesity management has not yet been fully evaluated ***(Lacey et al., 2003)***.

The term "acupuncture" consists of two words from the Latin: acus: needle and puncture: insertion. It is a treatment procedure in which, generally, steel, silver, or gold needles are inserted into specific acupuncture points ***(Cabyoghi et al., 2006)***.

It has been observed that acupuncture application to obese people increases excitability of the satiety center in the ventromedial nuclei of the hypothalamus ***(Lui et al., 2001)***.

Aim of the work

The aim of our study was to explore the therapeutic effect and the mechanism of acupuncture for reduction of body weight.