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Acupuncture Enhances Effects of Diet and Exercise in Treating Obesity

Editorial Staff

In the United States, obesity has been described by some researchers as "a worrisome epidemic." According to the Centers for Disease Control and Prevention, the percentage of people who meet the definition of obesity has more than doubled over the past two decades. At present, approximately 31 percent of the U.S. adult population has a body mass index of 30 or higher. Based on statistics provided by the U.S. Census Bureau, this would translate into approximately 65 million American adults who could be considered clinically obese; additional evidence suggests that this figure will continue to increase in the foreseeable future.[1,2]

To combat the growing problem of obesity, researchers worldwide have examined a variety of weight loss methods, including acupuncture. Previously published studies, however, have offered conflicting results. A 1995 trial of 24 obese patients found that stimulation of auricular acupuncture points was ineffective in reducing weight loss compared to a control group.[3] Another trial published in 2003 contradicted these results, and found that weekly ear acupuncture at specific points helped women lose more weight compared to a group of women who did not receive acupuncture.[4]

A small Australian trial has added credibility to the notion that acupuncture can help in the fight against obesity. The results of the trial, published in a recent issue of *Medical Acupuncture*, suggest that acupuncture can be an effective intervention when used in conjunction with a diet and exercise program in helping obese people lose weight, and that it produces benefits beyond those experienced by diet and exercise alone.

The study involved 30 adult patients (23 female) who were recruited from a general practice clinic in Australia. All of the patients had a body mass index of 30 or higher, were not suffering from any type of debilitating diseases, and weighed between 78 kilograms and 120 kilograms (172 pounds and 265 pounds) at baseline.

In the control group, patients were instructed to follow a restricted diet that required them to consume two-thirds of their usual dietary intake and to limit fat intake to a maximum of 50 grams per day for five weeks. They were also given a book to help them measure fat and cholesterol levels

in food, and were asked to follow an aerobic exercise program that required between 20 minutes and 30 minutes of walking, cycling or swimming three times per week for the study's duration.

Patients in the acupuncture group were asked to follow the same diet and exercise regimen as the control group, but also received acupuncture twice per week for five weeks. Points PC 6 and ST 36 were needled bilaterally using a 0.25 mm-gauge needle, with each acupuncture session lasting 20 minutes. In addition, a small patch containing a stainless steel pellet was taped over the hunger point of each ear, just in front of the tragus, and worn for the duration of the study. Patients were asked to press on the pellets for one minute upon waking, before each meal or snack, and at other times in the morning and afternoon.

Weight and BMI levels of each patient were measured at baseline, and again at the study's conclusion. In addition, all patients were contacted once per week regarding their adherence to the diet and exercise routine, and were encouraged to discuss any issues or concerns about the program.

Analysis of measurements taken pre- and post-study revealed "a trend toward greater weight loss" in the patients who received acupuncture compared to those who did not. Patients in the acupuncture group lost an average of 4.8 kilograms (10.6 pounds) per person from baseline to study conclusion. Patients who followed the diet and exercise program, meanwhile, but who were not treated with acupuncture, lost an average of 2.4 kilograms (5.3 pounds) over the same period of time. Nine acupuncture patients lost at least 5 kilograms during the course of treatment; only three control patients experienced the same type of weight loss.

In addition, average BMI scores taken at the end of the study period were more than half a point lower among acupuncture patients (33.66) than those for the control patients (34.33). In fact, four acupuncture patients had BMI scores below 30 at the study's conclusion. In the control group, just two patients ended up with BMI scores below 30.

Promoting weight loss is an important issue for a variety of reasons. Not only does it reduce the incidence of obesity, it also reduces the incidence of related diseases such as type 2 diabetes, metabolic syndrome and high blood pressure. Combined, these conditions take a tremendous toll on the American public, accounting for upwards of $117 billion in direct and indirect health care costs each year.[6]

Fortunately, there are several safe, relatively inexpensive ways that obese patients can lose weight and improve their health. Chief among these are reducing caloric intake and increasing energy expenditure - in other words, diet and exercise. The results of the *Medical Acupuncture* study show that acupuncture can be an effective adjunct to regular exercise and a sensible diet in the promotion of weight loss, which can also aid the ongoing fight against obesity. As the study's author noted:

"The weight loss achieved in patients following a regimen of reduced energy intake and increased energy expenditure is further enhanced by the administration of acupuncture treatment. Further large-scale studies are required to confirm this preliminary finding."

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