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# Title: Influence of Emotional Factors on the Efficacy of Acupuncture Treatment for Overweight Complicated with Hyperlipidemia: A Retrospective Cohort Study

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# Author Questionnaire

1. **Microscopy**: Does your protocol require the use of a dissecting or stereomicroscope for performing a complex dissection, microinjection technique, or something similar? **NO**
2. **Software:** Does the part of your protocol being filmed include step-by-step descriptions of software usage? **NO**
3. **Filming location:** Will the filming need to take place in multiple locations? **NO**

4. **Testimonials (optional):** Would you be open to filming two short testimonial statements **live during your JoVE shoot**? These will **not appear in your JoVE video** but may be used in JoVE's promotional materials. **NO**

**Current Protocol Length**
Number of Steps: 06
Number of Shots: 11

# Introduction

***Videographer: Obtain headshots for all authors available at the filming location.***

## INTRODUCTION:

~~What is the scope of your research? What questions are you trying to answer?~~

1.1. **Muang Zhang:** My research investigates the effectiveness of acupuncture in treating overweight and obesity, as well as the factors that influence its therapeutic outcomes.

1.1.1. INTERVIEW: Named talent says the statement above in an interview-style shot, looking slightly off-camera.

## CONCLUSION:

~~What research gap are you addressing with your protocol?~~

1.2. **Muang Zhang:** Although mood and weight are closely related, it remains unclear whether mood influences the effectiveness of acupuncture treatment.

1.2.1. INTERVIEW: Named talent says the statement above in an interview-style shot, looking slightly off-camera.

~~What new scientific questions have your results paved the way for?~~

1.3. **Muang Zhang:** This insight paves the way for developing therapeutic strategies that address both mood regulation and obesity simultaneously.

1.3.1. INTERVIEW: Named talent says the statement above in an interview-style shot, looking slightly off-camera.

***Videographer: Obtain headshots for all authors available at the filming location.***

**Ethics Title Card**

This research has been approved by the Ethics Committee of the Affiliated Hospital of Nanjing University of Chinese Medicine

# Protocol

## 2. Acupuncture Procedure in Overweight and Hyperlipidemia Patients

**Demonstrator:** Muang Zhang

2.1. To begin, prepare the necessary materials, including disposable sterile acupuncture needles, sterile medical cotton swabs, and iodophor swabs **[1]**.

2.1.1. WIDE: Talent placing disposable acupuncture needles, cotton swabs, and iodophor swabs on a sterile preparation tray.

2.2. Position the participants in a supine posture with knees extended and the pelvis aligned in a neutral position **[1]**. Expose the required acupoints adequately for the procedure **[2]**.

2.2.1. Talent helping a participant lie down on the treatment bed with legs extended and pelvis aligned.

2.2.2. Talent exposes the designated acupoints.

2.3. Select acupoints in accordance with World Health Organization standards **[1]**. Include bilateral Tianshu, Zusanli, Fenglong, Sanyinjiao, Quchi, along with Zhongwan and Guanyuan **[2]**.

2.3.1. LAB MEDIA: Table 1

2.3.2. Talent pointing to or marking the selected acupoints on the participant's body.

2.4. Disinfect the local skin at the identified acupoints using iodophor swabs before needling **[1-TXT]**.

2.4.1. Talent wiping each acupoint area on the participant's skin with an iodophor swab. **TXT: Disinfect the practitioner's fingers as well before needling**

2.5. Hold the acupuncture needle handle between the right thumb, index, and middle fingers **[1]**. Insert the needle perpendicularly at a 90-degree angle into the acupoint to a depth of 25 millimeters **[2]**.

2.5.1. Talent positioning the fingers around the handle of the needle.

2.5.2. Talent inserting the needle straight into the skin to the specified depth.

2.6. Manipulate the needle by rotating it 180 degrees clockwise and counterclockwise using a reinforcing-reducing technique **[1]**. Maintain a frequency of approximately 60 rotations per minute for 1 minute **[2]** and repeat this manipulation every 10 minutes to elicit and sustain the characteristic Deqi sensation **[3-TXT]**.

2.6.1. Talent rotating the needle back and forth using the reinforcing-reducing technique.

2.6.2. Close-up of the needle movement showing consistent rhythm and frequency.

2.6.3. Participant reacting slightly to the Deqi sensation as the manipulation continues.
**TXT: Perform 30-min sessions every other day for 3 months following the standard protocol**

# Results

## 3. Results

3.1. Compared to pre-treatment levels, both Group A and Group B showed significant reductions in body weight, body mass index, obesity degree, total cholesterol, triglycerides, and low-density lipoprotein cholesterol **[1],** alongside significantly elevated high-density lipoprotein cholesterol levels **[2]**.

3.1.1. LAB MEDIA: Table 4. *Video editor: Highlight all rows from "Body Weight (kg)" to "LDL-C (mmol/L)" under both Group A and Group B, comparing pre-treatment and post-treatment values.*

3.1.2. LAB MEDIA: Table 4. *Video editor: Highlight the "HDL-C (mmol/L)" row for both Group A and Group B, showing the increase from pre-treatment to post-treatment.*

3.2. Improvements in body weight **[1],** body mass index **[2],** obesity degree **[3],** total cholesterol **[4],** and triglycerides were significantly greater in Group B compared to Group A **[5].**

3.2.1. LAB MEDIA: Figure 1. *Video editor: Highlight the red box plot under "Body Weight (kg)"*

3.2.2. LAB MEDIA: Figure 1. *Video editor: Highlight the red box plots under "BMI (kg/m²)" .*

3.2.3. LAB MEDIA: Figure 1. *Video editor: Highlight the red box plots under "Obesity Degree (A%)"*

3.2.4. LAB MEDIA: Figure 1. *Video editor: Highlight the red box plots under "Total Cholesterol (mmol/L)"*

3.2.5. LAB MEDIA: Figure 1. *Video editor: Highlight the red box plot under "Triglycerides (mmol/L)"*

3.3. No statistically significant difference was observed between Group A and Group B in the change of low-density lipoprotein cholesterol and high-density lipoprotein cholesterol **[1]**.

3.3.1. LAB MEDIA: Figure 1. *Video editor: Highlight the box plots under "LDL-C (mmol/L)" comparing Group A and Group B.*

1. Supine
Pronunciation link: https://www.merriam-webster.com/dictionary/supine
IPA: /suːˈpaɪn/
Phonetic Spelling: soo-PYNE
2. Pelvis
Pronunciation link: https://www.merriam-webster.com/dictionary/pelvis
IPA: /ˈpɛlvɪs/
Phonetic Spelling: PEL-vis
3. Acupoint
Pronunciation link: No confirmed link found
IPA: /ˈækjʊˌpɔɪnt/
Phonetic Spelling: AK-yoo-point
4. Iodophor
Pronunciation link: No confirmed link found
IPA: /ˌaɪəˈdɒfɔːr/
Phonetic Spelling: eye-uh-DOF-or
5. Zusanli (ST 36)
Pronunciation link: No confirmed link found
IPA: /zuːˈzænli/
Phonetic Spelling: zoo-ZAN-lee
6. Tianshu (ST 25)
Pronunciation link: No confirmed link found
IPA: /tiːˈænʃuː/
Phonetic Spelling: tee-AN-shoo
7. Deqi
Pronunciation link: No confirmed link found
IPA: /dəˈtʃiː/
Phonetic Spelling: duh-CHEE
8. Cholesterol
Pronunciation link: https://www.merriam-webster.com/dictionary/cholesterol
IPA: /kəˈlɛstərɒl/
Phonetic Spelling: kuh-LES-tuh-rawl