

# "Heterozygous Treatment" Method to Improve the Biased Status of the Damp-Heat Constitution and Symptom Integral: Randomized Controlled Trial

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**Abstract:** Objective: To observe the clinical effect of "heterozygous treatment" intervening the damp-heat constitution. Method: One hundred and six cases with damp-heat constitution were randomly divided into the observation group and control group, fifty-three cases for each group. Lianpu drink was given to the two groups, and the observation group was treated with scraping, acupuncture, cupping, constitution care and popularization of constitution science for "heterozygous treatment" based on the control group. 70 days later, "constitution classification and determination table of traditional Chinese medicine" was used to determine, and statistics was applied to analyze the change of the symptoms of the two groups before and after the intervention. Results: in the observation group, compared to before the intervention, symptoms like dirty and oily complexion, yellow greasy tongue, bitter taste, dullness and scanty dark urine were significantly improved ( $P < 0.05$ ), and improvement of the above symptoms was greater than the control group ( $P < 0.05$ ). Conclusion: There is no significant difference between the two groups ( $P > 0.05$ ). Conclusion: the "heterozygous treatment" method can significantly improve the clinical symptoms of people with damp-heat constitution, with a better role in regulating.

**Keywords:** Damp-Heat constitution; Heterozygous treatment; Efficacy index

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## 1. Introduction

The damp-heat constitution mainly features damp-heat manifestations such as dirty and oily complexion, bitter taste and yellow greasy tongue. Related studies have shown that: influenza, gastritis, eczema, especially gastrointestinal disease, hepatobiliary disease, kidney disease, coronary heart disease and other diseases are related to damp and heat, and has clinical manifestations of damp and heat, with a certain physical characteristics<sup>[1]</sup>. Therefore, early constitution identification, constitution intervention and constitution management can prevent or reduce the incidence of damp-heat diseases to a certain extent. According to the traditional Chinese medicine theories, the characteristics of damp-heat constitution and the specificity of acupuncture and moxibustion, a variety of "heterozygous treatment" methods such as scraping, acupuncture, cupping, constitution care and popularization of constitution science are taken to intervene

the damp-heat constitution to observe the its improvement of the degree status of the damp-heat constitution and clinical efficacy.

## 2. Information and Methods

### 2.1 General Information

One hundred and six cases of subject for constitution identification in the center of "preventive treatment of disease" in Cangzhou Hospital of Integrated Traditional Chinese and Western Medicine, Hebei, China, during January 2015 ~ March 2016 were selected, all in sub-health status, with various degrees of damp-heat manifestations such as dirty and oily complexion, yellow greasy tongue, bitter taste, dullness, scanty dark urine and viscous excrement, identified as damp-heat constitution. They were randomly divided into observation group and control group with the method of random number table, 53 cases in each group.

There was no statistically significant difference between the two groups in terms of sex, age, duration of damp-heat constitution, etc. (both  $P > 0.05$ ), with comparability. The details are shown in Table 1.

**Table 1.** Comparison of the general information of the two groups of subjects

Group	n	Sex (n)		Average age (years old)	Duration of damp-heat constitution (year)
		Male	Female		
Control group	53	15	38	35.6±6.9	2.1±0.6
Observation group	53	17	36	36.3±6.6	1.7±0.8

## 2.2 Diagnostic Criteria

Sub-Health status diagnosis reference: "Sub-Health clinical guidelines for traditional Chinese medicine"<sup>[2]</sup>, patients with clinical manifestations such as discomfort of physical, psychological, social adaptability in any side or significant decrease in adaptability for more than 3 months, and the reason that may cause the above manifestations was excluded through systematic inspection. Constitution was identified cation according to "Constitution classification and determination table of traditional Chinese medicine" issued by China Association of Chinese Medicine in 2009<sup>[3]</sup>: there were 7 items for identification of damp-heat constitution, each taking scoring method from 1~5 points. The original lowest score of each item was 1 point, and the highest score was 5 points; the sixth item was only for women to answer, and the seventh item was only for men to answer. Scoring method: damp-heat constitution conversion points = (total points of each item score -6) / 24 × 100. Criterion: if the damp-heat constitution conversion points ≥ 40 points, it was determined as "yes".

## 2.3 Inclusion Criteria

(1) Meet the diagnostic criteria of sub-health status in "Sub-Health clinical guidelines for traditional Chinese medicine"; (2) Meet the criterion of damp-heat constitution in "Constitution classification and determination table of traditional Chinese medicine"; (3) Volunteer to sign the informed consent and can complete the investigation questionnaire independently or with assistance.

## 2.4 Exclusion Criteria

(1) Mental disorders, behavior disorders; (2) Organic disease patients; (3) Non-damp-heat constitution in constitution investigation; (4) Fail to well understanding of the questionnaire content due to cultural reasons and other reasons; (5) Have not acquired informed consent.

## 2.5 Treatment Methods

1) Control group: give the plus or minus lianpu drink.

Medicine: 10 g of *Coptis chinensis*, 10 g of *Mangnolia officinalis*, 10 g of *Rhizoma Pinellinae Praeparata*, 18 g of *Poria cocos*, 10 g of fermented soybean, 10 g of *Pogostemon cablin*, 12 g of gardenia, 20 g of raw semen coicis. The above traditional Chinese medicine was boiled by the hospital's boiling room. Soak with 300 mL cold water for 30 min, boil with high heat and then simmer for 15 min, filter the liquid, this is the first boiling; then add 300 mL of water and boil, simmer for 15 min, filter the liquid, this is the second boiling. Mix the two liquids up, control the liquid generally at about 300 mL, and pack in 2 bags in vacuum. Take 1 bag respectively in the morning and evening for continuous 30 days, then stop taking for 10 days, and then continue to take for 30 days. If there is adverse reaction during medication, immediately stop the test, and conduct symptomatic treatment.

2) Observation group: give the plus or minus lianpu drink, and the method was the same as the control group, while adding a variety of "heterozygous treatment" methods such as scraping, acupuncture, cupping, constitution care and popularization of constitution science. For specific operation, please refer to the "Regulating program for damp-heat constitution" in the author's paper." The application of "'heterozygous treatment' to constitution regulating in traditional Chinese medicine"<sup>[4]</sup>. Scraping along the channels: scrape from Geshu area of the 7th thoracic vertebra down to Weishu area of the 12th thoracic vertebra along the channel of governor meridian to urinary bladder; once every 3 ~ 7 days. Ordinary acupuncture: the main acupoint Neiguan, Hegu, Zhongwan, Tianshu, Qihai, Zusanli; for damp heat in upper-jiao, add Quchi and Lieque; for damp heat in middle-jiao, add Fenglong and Neiting; for damp heat in lower jiao, add Yinlingquan and Taichong; 1 time / day, 10 times for a course of treatment, continuous treatment for 6 courses, after the end of the 3rd course, rest for 10 days. Pricking and cupping: select Dazhui, Feishu, Geshu, Ganshu, Weishu, Shiqizhui, Weizhong and location with heavy acute filthy disease; 1 time / day, 10 times make a course of treatment. Constitution care: According to the characteristics of damp-heat constitution, conduct overall protection respectively from five aspects of the food, the four seasons, living, emotion and sports. Popularization of constitution science: understand the patients' living habits in detail and help them analyze the pathogenic factors, make patients eliminate or keep away from pathogenic factors, write popularization of science of regulating damp-heat constitution, teach the preparation of medicated food for damp-heat constitution and simple traditional therapy skills, etc., regularly hold on popularization of science of damp-heat constitution.

**Table 2.** Comparison of symptom integrals of the two groups before and after intervention ( $\bar{x} \pm s$ )

Group	n	Time	Dirty and oily complexion	Yellow greasy tongue	Bitter taste	Dullness	Scanty dark urine	Viscous excrement
Control group	53	Before intervention	1.38±0.93	2.15±0.88	1.42±0.59	1.36±0.73	2.25±0.69	1.96±0.78
	53	After intervention	1.11±0.67	1.80±0.92 <sup>#</sup>	1.23±0.75	1.25±0.93	1.72±0.96 <sup>#</sup>	1.85±0.98
Observation group	53	Before intervention	1.46±0.80	2.11±0.90	1.39±0.66	1.38±0.76	2.19±0.71	1.98±0.76
	53	After intervention	0.68±0.56 <sup>#※</sup>	1.30±0.81 <sup>#※</sup>	0.63±0.59 <sup>#※</sup>	0.66±0.61 <sup>#※</sup>	0.99±0.89 <sup>#※</sup>	1.55±0.87

Note: Compared with the same group before intervention, <sup>#</sup>  $P < 0.05$ ; compared with the control group after intervention, <sup>※</sup>  $P < 0.05$ .

## 2.6 Observation of Indicators

Record the clinical manifestations such as dirty and oily complexion, yellow greasy tongue, bitter taste, dullness, scanty dark urine and viscous excrement before and after the intervention, and record as 0 points, 2 points, 3 points according to the degree of no, light, medium and heavy.

## 2.7 Efficacy Criteria

Use the efficacy index for efficacy evaluation, namely: efficacy index = (symptom integral before intervention - symptom integral after intervention) / symptom integral before intervention  $\times 100\%$ . Excellent: clinical symptoms disappear basically or significantly improve, clinical symptom integral reduces  $\geq 70\%$ ; effective: clinical symptoms improve, clinical symptom integral reduces  $< 70\%$  and  $\geq 30\%$ ; non-effective: no significant improvement in clinical symptoms, clinical symptom integral reduces  $< 30\%$ .

## 2.8 Statistical Analysis

Conduct data analysis for each group of data with SPSS17.0, measurement data is shown as mean  $\pm$  standard deviation ( $\pm s$ ). Use  $\chi^2$  test for enumeration data comparison, use  $t$  for measurement data comparison, if  $P < 0.05$ , it means the difference is statistically significant.

## 3. Results

### 3.1 Comparison of Symptom Integral of the Two Groups Before and After Intervention

The symptoms such as dirty and oily complexion, yellow greasy tongue, bitter taste, dullness and scanty dark urine of the observation group was significantly improved after intervention ( $P < 0.05$ ) compared to before intervention; and the improvement of the above symptoms was greater than the control group ( $P < 0.05$ ) (see Table 2).

### 3.2 Comparison of Efficacy of the Two Groups of Patients after Intervention

The overall effective rate of the observation group was 90.57%, higher than the control group, which was 52.83% ( $P < 0.05$ ) (see Table 3).

**Table 3.** Comparison of efficacy of the two groups of patients after intervention [n (%)]

Group	n	Excellent	Effective	Non-effective	Overall effective rate
Control group	53	6(11.32)	22(41.51)	25(47.17)	28(52.83)
Observation group	53	31(58.49)	17(32.08)	5(9.43)	48(90.57) <sup>※</sup>

Note: Compared with the control group, <sup>※</sup>  $P < 0.05$ .

## 4. Conclusion

With the global warming, the improve of society and people's living standards, excessive competitive pressure and fast-paced lifestyle, too fat and greasy food, addiction to alcohol and tobacco, there have been corresponding changes in the constitution of contemporary people, and damp-heat constitution has become one of the common constitution types<sup>[5]</sup>. The survey statistics on damp-heat constitution of our center of "preventive treatment of disease" over the last 3 years shows that it accounts for about 10~12% of the biased population.

Professor Ni Cheng summarizes the formation mechanism of damp-heat constitution as: the damp-heat on the skin is manifested as dirty and oily complexion, easy to have acne; for stagnation and steaming of damp-heat, gallbladder qi overflows, the mouth is dry and bitter; for retention of damp-heat, yang qi is contained, result to dull-

ness; for dampness-heat syndrome with predominant dampness, the excrement is viscous; if damp-heat sinks through the liver channel, the urine is scanty and dark; the tongue nature, the coated tongue is yellow greasy, manifested as pulse condition of damp-heat<sup>[6]</sup>. Therefore, the author combined the clinical experience with sub-health characteristics, and selected 6 items of dirty and oily complexion, yellow greasy tongue, bitter taste, dullness, scanty dark urine and viscous excrement as the important observation indexes of the clinical efficacy of damp-heat constitution.

The idea of "heterozygous treatment" derived from "The Inner Canon of Huangdi -- Yi Fa Fang Yi Lun": "The sages applied 'heterozygous treatment', each in the proper place. Therefore, the disease was cured with different methods because once the symptom was known, the treatment was known", I believe that this is the principle of choosing different methods of acupuncture based on the specificity of the pathogenic factors, the level of disease, the constitution specificity and the specificity of acupuncture and moxibustion. A variety of acupuncture methods have different dredging effect on the meridian, and acupuncture can reach the deep meridian system; the treatment area of scraping is large, which is good at treating the diseases in which the pathogenic factor is on the meridian surface or distributed in large area; the local efficacy of cupping is higher than scraping. Therefore, it can only achieve good efficacy by combining the specificity of the pathogenic factors, the level of disease, the constitution specificity and the specificity of acupuncture and moxibustion to play the role of  $1 + 1 > 2$ <sup>[4]</sup>. This is like what Xunzi said in "Encourage Learning", "the men who use carriages and horses do not walk fast, but they can walk thousands of miles, the men who use boat are not good at swim, but they can cross the river. Gentleman's nature is not different from ordinary people, but they are good at making use of things." Acupuncture, scraping, cupping, constitution care, constitution education, etc. is the "thing" used in clinical acupuncture and moxibustion to dredge the meridians, so they should be reasonably combined based on a variety of different advantages of acupuncture methods.

Wang Qi pointed out that damp-heat constitution is mostly seen in many young people, which may be related to the unhealthy lifestyle of current young people, such as greasy food, hobby of roasting, addiction to tobacco and alcohol, little exercise and so on<sup>[7]</sup>. At present, I have published some papers in the Chinese Medicine, Shanghai Chinese Medicine, Sina microblogging and other media, such as "Invigorating spleen

to eliminate dampness is suitable for health maintenance in summer", "Die recuperating for damp-heat constitution", "On the interpretation and thinking of the diet theory in 'Su Wen - Cang Qi Fa Shi Lun' from the perspective of popularization of science", which have been widely concerned by the readers. Especially, I take "five cereals as staple food, five fruits as complementary food, five animals as tonic and five vegetables as supplement, combine their taste to replenish essence and invigorate qi" as the basic diet; semen coicis, lotus seed, Yam, small red bean, mung bean, etc. It can be properly used when making porridge; wax gourd, cucumber, loofah, Poria cocos, duck and crucian can be properly used when making porridge soup; people who have viscous excrement can rub the bell for 100 times clockwise in the morning and evening, push Ren channel from top to bottom for 100 times. Such simple and easy programs for health maintenance are widely used by the readers, getting good feedback. Therefore, through the scientific popularization of knowledge of health maintenance in constitution care and popularization of constitution science, I can speed up the recovery of biased constitution, prevent recurrence, and play a drastic role.

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