

Observation on the Therapeutic Effects of Wenjing Decoction on Menstrual Disorders

Diancui Zhang¹, Junxia Cui², Shuwen Gai³, Tongzhen Zhao⁴, Liqiang Wu^{5*}

¹Health Management Center, Binzhou Municipal Hospital of Traditional Chinese Medicine, Binzhou 256600, Shandong Province, China;

²Department of Gastroenterology, Binzhou People's Hospital, Binzhou 256600, Shandong Province, China;

³Critical Care Medicine, Laiyang City Hospital of Traditional Chinese Medicine, Yantai 256600, Shandong Province, China;

⁴Department of Oncology, Binzhou Municipal Hospital of Traditional Chinese Medicine, Binzhou 256600, Shandong Province, China;

⁵Department of Emergency medicine, Binzhou Medical University Hospital, Binzhou 256603, Shandong Province, China

Abstract: *Objective:* To treat patients with menstrual disorders with Wenjing Decoction and analyze its therapeutic effects. *Methods:* 80 patients with menstrual disorders were selected as the research subjects, and they were divided into two groups (experimental group and control group), with each group given different treatment methods. The control group was given conventional Western medical treatment while the experimental group was given Wenjing Decoction treatment, and the effects of different treatment methods on the patients were compared. *Results:* The total number of effectively treated patients in the experimental group (39 cases, 97.50%) was more than the that of the control group (25 cases, 62.50%), and the quality of life score of the experimental group (91.56±4.44 points) was higher than that of the control group (81.72±3.19 points), and the number of menstrual recovery cycles (1.11±0.41) was less than that of the control group patients (2.42±1.25 times), $P < 0.05$. *Conclusion:* The application of Wenjing Decoction for patients with menstrual disorders can significantly improve the treatment efficacy and is beneficial to improve the quality of life of the patients and shorten the number of cycles that menstruation starts to return to normal.

Keywords: Wenjing Decoction; Menstrual Disorders; Treatment Efficacy

Publication date: November, 2020

Publication online: 30 November, 2020

***Corresponding author:** Liqiang Wu, byfywlq@sina.com

As the society develops, people's lifestyles are becoming more and more diversified, and at the same time people are becoming more open-minded. Women are eating cold, staying up late, smoking and drinking at increasing frequency, which can easily lead to endocrine and menstrual disorders. After the onset of the disorders, patients can mainly have abnormal menstrual cycles, periods, color, and volume^[1]. Generally speaking, this situation mostly occurs during adolescence, menopause and childbearing age^[2]. In order to effectively improve menstrual disorders, it is recommended that patients be given Wenjing Decoction for treatment. In this study, 80 patients with menstrual disorders were selected as the research subjects, and the therapeutic effects of different treatment methods were analyzed.

1 Information and Methods

1.1 General Information

Research subjects' inclusion criteria: (1) meet the applicable criteria for menstrual disorders; (2) know the purpose, process, and possible results of this research, and have signed an informed consent form; (3) highly conscious and good at expressing; the

exclusion criteria of the research subjects: (1) allergic to the drugs used in the research; (2) incomplete clinical data; (3) suffer from disease of the heart, liver, kidney or other important organs; (4)) suffer from mental illness; (5) failed to follow-up or lack of cooperation in the study. Random number table method was used for grouping, all $P>0.05$.

1.1.1 General Information of Patients in the Experimental Group

A total of 40 patients were admitted to the hospital from January 2019 to February 2020, the age range was 19-52 years, and the average age was 55.2 ± 9.2 years. 19 patients had low menstrual flow, 16 patients had delayed menstruation, and 5 patients had amenorrhea; 14 patients had lower abdominal pain, 13 patients had cold lower abdomen, and 13 patients had dry lips.

1.1.2 General Information of Patients in the Control Group

A total of 40 patients were admitted to the hospital from January 2019 to February 2020, the age range was 18-53 years, and the average age was 56.7 ± 8.9 years. 20 patients had low menstrual flow, 16 patients had delayed menstruation, and 4 patients had amenorrhea; 15 patients had lower abdominal pain, 14 had cold lower abdomen, and 11 had dry lips.

1.2 Treatment Methods

The patients in the control group were given conventional Western medical treatment, which mainly included estrogen therapy, progesterone single therapy and progesterone combined with periodic medication treatment.

Patients in the experimental group were treated with Wenjing Decoction. The medicinal ingredients mainly included Evodia, White Peony, Cassia twig,

pinellia, dong quai, Chuanxiong, monkeygrass, cortex Moutan, Ejiao, ginseng, cinnamon, and ginger; each in dosage of 9g, 20g, 30g, 30g, 30g, 30g, 30g, 30g, 30g, 30g, 30g, and 30g respectively. The herbs were decocted to 3L from one dou (Chinese peck) of water, then left to cool and drank 3 times a day.

During the treatment, patients were required to minimize smoking, avoid staying up late, abstain from alcoholism, and pay attention to personal hygiene.

1.3 Observation Indicators

Therapeutic effect: If the patient's menstrual cycle, period, color, and volume were all in a normal state for 3 consecutive months, and the clinical symptoms have completely disappeared, considered as significantly effective; if the patient's menstrual cycle, period, color, and volume were basically in a normal state for 2 consecutive months, the clinical symptoms have been improved, considered as effective; if the clinical symptoms of the patient have not been significantly improved, considered as ineffective.

Quality of life: SF-36 scale.

The number of cycles at which menstruation began to return to normal.

1.4 Statistics

SPSS 20.0, $P<0.05$, statistically significant.

2 Results

2.1 Comparison of treatment effects between the two groups of patients

The total number of effectively treated patients in the experimental group (39 cases, 97.50%) was more than that of the control group (25 cases, 62.50%), see Table 1.

Table 1. Comparison of Treatment Effects between the Two Groups of Patients n (%)

Group	Significantly Effective	Effective	Ineffective	Overall Efficiency
Experimental(n=40)	37(92.50)	2(5.00)	1(2.50)	39(97.50)*
Control(n=40)	14(35.00)	11(27.50)	15(37.50)	25(62.50)
χ^2				13.275
P				<0.05

Comparison with control group, * $P<0.05$

2.2 Comparison of the Quality of Life and the Number of Cycles before Menstruation Returns to Normal between the Two Groups

Before treatment, the quality of life score of the two groups of patients was $P>0.05$. After treatment,

the quality of life score of the experimental group (91.56 ± 4.44 points) was higher than that of the control group (81.72 ± 3.19 points), and menstruation began to return to normal after (1.11 ± 0.41 times) of cycles, which was less than that of the control group

Table 2. Comparison of the Quality of Life and the Number of Cycles before Menstruation Returns to Normal between the Two Groups ($\bar{x} \pm s$)

Group	Quality of Life before Treatment	Quality of Life after Treatment	No. of Cycles before Menstruation Returns to Normal
Experimental(n=40)	54.13±2.13	91.56±4.44	1.11±0.41*
Control(n=40)	54.15±2.11	81.72±3.19	2.42±1.25
<i>t</i>	2.749	13.173	10.026
<i>P</i>	>0.05	<0.05	<0.05

Comparison with control group, * $P < 0.05$

(2.42±1.25 times), as shown in Table 2.

3 Discussion

The main effect of Wenjing Decoction is to warm the blood of the patient. For irregular menstruation caused by blood congestion, the root cause is the patient's own conditions of phylum fever, blood accumulation due to coldness, and meridian channel coagulation, that is, due to the influence of cold, blood congestion develops in the patient and stay in the meridian channels^[3]. Blood qi loves warm environment, and if it encounters cold qi, it cannot flow smoothly. Therefore, patients should be treated with Wenjing Decoction. Among the ingredients, Evodia acts on the liver, stomach, and kidney meridians, which can effectively resolve the stagnation of qi in the body, and effectively dredge the blood turbidity, so that the cold qi in the blood gradually dissipates in a warm environment^[4]. Cinnamon is warm in nature, which can warm the blood vessels to eliminate cold congeal. The synergistic use of Evodia and cinnamon can achieve the effect of warming the meridians and dispelling coldness, thereby enhancing the effects of blood circulation in patients.

For patients with menstrual disorders, an important indication for the presence of blood congestion symptoms is dry lips. Under normal circumstances, if a patient has symptoms of dry mouth and lips, she should first suspect that she has excessive heat and body fluid. But in fact, the reason for this symptom is not the patient's warm tongue and pulse, but qi stagnation and blood stasis. Due to the difficulty in producing new blood, oral fluid becomes dehydrated, leading to dry mouth^[5]. Therefore, to improve this symptom clinically, drugs that promote blood circulation and dissipate blood stasis can be applied to promote the dissipation of congestion and accelerate the circulation of new blood. During the treatment process, "warm soothing" and "resolving blood stasis" are used as the basis of treatment to remove cold-induced coagulation and blood stasis in the

patients. However, if the focus of the treatment is only on removing blood stasis instead of dispelling cold-induced stasis, then the patient's blood circulation will still be difficult to smoothen, and the coldness in the body difficult to dissipate. Therefore, it is necessary to focus on "warm soothing" and "resolving blood stasis" simultaneously. Consequently, patients with menstrual disorders should be treated with Wenjing Decoction. Although Chuanxiong, dong quai and cortex Moutan are weak in promoting blood circulation, they can play a role in resolving congestion by warm soothing^[6].

All in all, the various medicinal ingredients contained in Wenjing Decoction take into account the deficiency and excess of cold and heat, which can nourish the blood and yin, strengthen qi and calm the stomach, promote blood circulation and remove blood stasis, and warm the blood vessels and meridians. The combined use of the medicinal ingredients can gradually make patients abundant in yang and sufficient in yin and blood, so as to realize the warming of blood vessels and the removal of congestion^[7-8].

This study showed that the total number of effectively treated patients in the experimental group (39 cases, 97.50%) was more than that of the control group (25 cases, 62.50%), and the quality of life score of the experimental group was (91.56±4.44 points) higher than that of the control group (81.72±3.19 points), and the number of cycles when menstruation started to return to normal (1.11±0.41 times) was less than that of the control group (2.42±1.25 times), $P < 0.05$.

In conclusion, the prescription of Wenjing Decoction for patients with menstrual disorders can significantly improve the therapeutic effects, help improve the patient's quality of life and shorten the number of cycles before menstruation returns to normal.

References

- [1] Koch D. Integrative hospital treatment in older patients to

- benchmark and improve outcome and length of stay – the In-Hospi TOOL study[J]. *Bmc Health Services Research*, 2019.
- [2] Fang Z, Dai ZY. Observation on the Treatment Effects of Warm Needle Moxibustion and Wenjing Decoction on Primary Dysmenorrhea [J]. *Chinese Journal of Traditional Medical Science and Technology*, 2012, 19(2):164-166.
- [3] Cui LR. Clinical effects of Jiawei Shoutaiwan on Dysfunctional Uterine Bleeding in Adolescents [J]. *China Health Care Nutrition*, 2016, 26(21):8.
- [4] Zeng XR. Comparative Observation on the Treatment of Dysfunctional Uterine Bleeding in Perimenopausal Period with Traditional Chinese and Western Medicine [J]. *Journal of Yangtze University(Natural Science Edition)*, 2011, 8(2):168-169.
- [5] Tan JT, Zhou HF. A Probe into TCM Clinical Thinking of Menstrual Disorder due to Luteal Insufficiency [J]. *Jiangsu Journal of Traditional Chinese Medicine*, 2018, 54(8):48-50.
- [6] Lu JF, Cheng XM, Su J, et al. Effects of Modified Wenjing Decoction on Serum NO/ET-1 and TF/TFPI of Menopathy Patients with Excess Cold Syndrome [J]. *Chinese Journal of Integrated Traditional and Western Medicine*, 2020, 40(4): 500-501.
- [7] Liang ML, Min Z, Liao WM. Curative Effect of Needle Warming Moxibustion Combined with Decoction for Warming Meridians with Additions and Health Propaganda and Education in Treatment of Primary Dysmenorrhea of Cold-damp Coagulation Type [J]. *Maternal and Child Health Care of China*, 2020, 35(14): 2556-2559.
- [8] Emily, Boersma, Henk, et al. Prevention of Complex Regional Pain Syndrome type 1 after conservative treatment of a distal radius fracture with a home exercise program: A proof-of-concept study[J]. *Acta Orthopaedica Belgica*, 2018.