



## Symptoms of Uterine Dystemperament in Abnormal Uterine Bleeding from Perspective of Persian Medicine

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### Abstract

Abnormal Uterine Bleeding (AUB) is the most common reason for women's medical referral in the reproductive age. In Persian Medicine, one of the major causes of this disorder is known as uterine dystemperament (Su-e-Mizaj). AUB is known as "Kesrat-e Tams" in this medical school. We aimed to investigate the frequency of positive symptoms of uterine dystemperament in patients with AUB from the perspective of Persian Medicine. This cross-sectional study was conducted from October 2009 to September 2010 in Tehran, Iran. It comprised 70 patients with abnormal uterine bleeding who were 15-45 years old. Data were collected by a questionnaire prepared based on the textbooks of Persian Medicine. The frequency of each symptom of uterine dystemperament was obtained. Among the four uterine dystemperaments, the "dry" and "warm" uterine types had the highest rankings. In patients with excess uterine hemorrhage, the symptoms of warm uterine is more frequent than cold uterine. Meanwhile, the warm uterine dystemperament interference was also observed in excess uterine hemorrhage.

**Keywords:** Abnormal uterine bleeding; Dystemperament; Mizaj; Persian medicine

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## Introduction

Abnormal uterine bleeding (AUB) is the most common reason for medical referrals in women in the reproductive age and may have significantly impact on quality of life and impose financial burden [1,2]. Chronic AUB is defined as “bleeding from the uterine corpus that is abnormal in volume, regularity, and/or timing. It has been present for the majority of the past 6 months” [3]. Dysfunctional uterine bleeding (DUB) refers to patients without organic pathology. They constitute 50% of the cases. These women are subject to many diseases such as: anemia, bleeding during pregnancy, and puerperium bleeding. Therefore, accurate diagnosis and management can reduce the complications and unnecessary surgical interventions [4,5]. Treatment of these patients should be individualized and include Hormonal Therapies (Progestins, levonorgestrel-releasing intrauterine system, Oral contraceptives), Nonhormonal Therapies (nonsteroidal anti-inflammatory or anti-fibrinolytic medications) and surgery. Some of these therapies, especially in the long term, can have adverse effects which is not tolerated by patients [1,6].

On the other hand, many diseases especially chronic disorders, have been untreated or partially-treated, regardless of the increasing development in conventional medicine. “Complementary and alternative Medicine” (CAM) enables patients to select their own health [7].

“Persian Medicine” (PM) is among the oldest and richest schools of CAM. In the literatures of PM, “Temperament” or “Mizaj” is the basis of diagnosis and treatment. It is called to the quality which is

obtained from the fusion of quadruple-elements (fire, water, air, and soil). “Dystemperament” or “Su-e-Mizaj” is defined as the overcoming of one of the quadruplet-qualities (warmth, coldness, wetness, and drought) on the original temperament of the body or a member of the body, so, that member is not able to perform its functions [8-13]. Dystemperament impairs the original function of the uterine (fertility). One of the most important symptoms of fertility in a woman is her normal menstrual cycle. The PM physicians considered normal menstruation in women as their full fitness. This indicates that her body is clean and out of any harmful substances. In PM texts, Abnormal Uterine Bleeding is almost equivalent to “Kesrat/ Efrat-e Tams” that includes the increasing of the volume or duration of bleeding or bleeding beyond the usual times of menstrual cycles which can causes plenty of other diseases. Uterine dystemperament is one the main causes of AUB. The treatment will be on the basis of diagnosis (by reviewing the patient’s history in Persian Medicine) [13-19]. We aimed to investigate the frequency of the symptoms of uterine Dystemperament in patients with AUB, in order to provide more appropriate and safe treatment.

## Methods

### *Data collection tool*

Data were collected by a questionnaire designed for the current study. PM references were used for preparing the questionnaire [8-13]. Uterine dystemperaments consist of four general types of warm, cold, wet and dry. The numbers of symptoms in each

dystemperament are as follows: warm uterine dystemperament with 7 symptoms, cold with 6 symptoms, wet with 4 symptoms, and dry with 2 symptoms. These symptoms were considered for designing the questionnaire; So that the patient can understand and answer these questions without the presence of the researcher (subjective or patient-based questions). To assess the face validity, the developed questionnaire was reviewed by the faculty advisors and experts of PM. For determining the reliability, the test- retest method was used. So that the questionnaire was completed by a number of patients and with an interval of at least two weeks, the initial samples were given the questionnaires again. A satisfactory coefficient of reproducibility was obtained by analyzing the results of the first time and the second inquiry. For each symptom, a score was assigned for scoring the answers. Obviously, some of the symptoms of uterine dystemperament have greater value than the others; but because this study is among the one of the first studies conducted on the uterine dystemperament and there were no criteria for scoring some of the symptoms in the Persian medical books, the quantitative rating was not possible in this questionnaire.

#### *Study protocol*

This case series included 70 patients in the reproductive age of 15 to 45 years, who had AUB. Those individuals aged over 45 years, having menopause or systemic diseases, as diabetes or high blood pressure, were not recruited. In total, 78 questionnaires were filled. 8 women, suspected of impending menopause, were excluded. The

samples were selected from the patients who referred to the gynecological clinics and traditional medicine clinics (Mostafa Khomeini Hospital, Hazrat Zainab, Imam Khomeini, and the girls' dormitory of the Shahed University) in the time interval of one year from October 2009 to September 2010. The details required to complete the questionnaires were presented to the participants. The questionnaires were completed after their satisfaction. Patients' personal information was retained confidential. Answering the questions about traditional medicine and their temperament has been performed up to the researcher's level of knowledge and information.

#### *Statistical analysis*

After extraction, the data were analyzed by SPSS software, version 11.5 (SPSS Inc., Chicago, Illinois, USA). The central and dispersion parameters as rates, percentages, frequency tables and diagrams, were used to describe the collected data.

## **Results**

The age (mean  $\pm$  SD) of the participants with AUB was  $31.6 \pm 9.5$  years. The maximum age of the participants was 29.5 years. The youngest one was 15 years old and the oldest was 45 years old. 44 (62.9%) women were single and the others were married. 56% had bachelor's degree and higher, 30% diploma and associate degree, and 17% had lower educations. 43% of the samples were housewives, 37% students, 7% teachers, 7% health personnel and 6% were employed. Based on the aims of the study, the symptoms of each uterine dystemperament were found separately. Their relative frequencies were given in tables 1 to 4, respectively.

**Table 1:** Frequency distribution of warm uterine dystemperament symptoms in 70 patients with excess uterine hemorrhage

7 symptoms of warm uterine dystemperament	Absolute frequency	Relative frequency
Consistency of concentrated uterine blood	47	67
Red color of uterine blood	42	60
Too much pubic hair	30	42
Yellow color of uterine blood	14	20
Black color of uterine blood	11	16
Irritating odor of uterine blood	4	6
Low uterine blood	2	3

**Table 2:** Frequency distribution of cold uterine dystemperament symptoms in 70 patients with excess uterine hemorrhage

6 symptoms of cold uterine dystemperament	Absolute frequency	Relative frequency
Black color of uterine blood	11	16
Prolonged no bleeding	7	10
Consistency of diluted uterine blood	3	4
Pale color of uterine blood	3	4
Low pubic hair	3	4
Low uterine blood	2	3

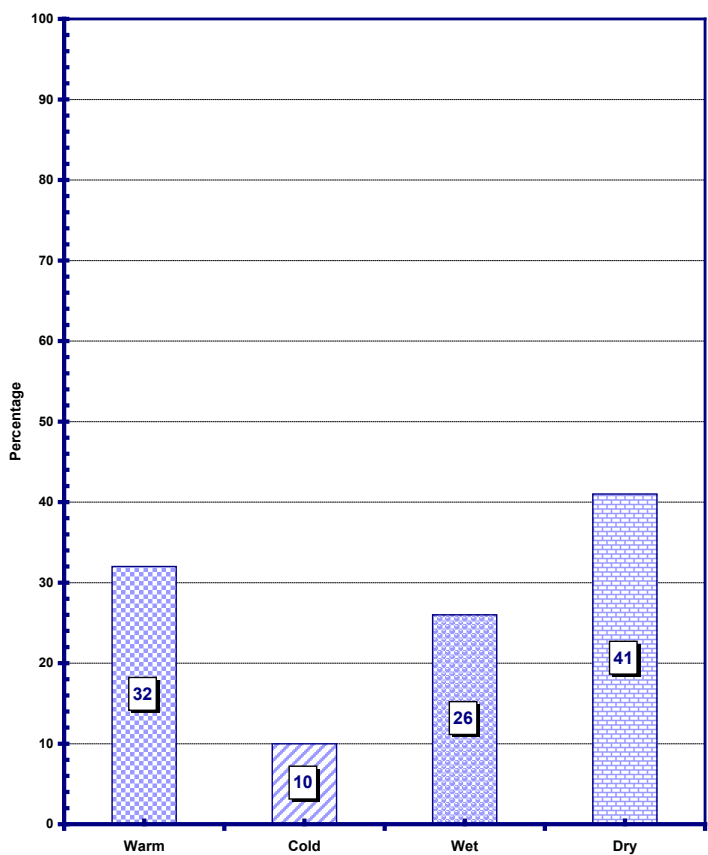
**Table 3:** Frequency distribution of wet uterine dystemperament symptoms in 70 patients with excess uterine hemorrhage

4 symptoms of wet uterine dystemperament	Absolute frequency	Relative frequency
Too much uterine blood	44	63
Excessive uterine secretions	18	26
First trimester abortion	8	12
Consistency of diluted uterine blood	3	4

**Table 4:** Frequency distribution of dry uterine dystemperament symptoms in 70 patients of excess uterine hemorrhage

2 symptoms of dry uterine dystemperament	Absolute frequency	Relative frequency
Low uterine secretions	9	13
Low uterine blood	2	3

The most frequent symptoms in any of the uterine dystemperament were including: the consistency of concentrated blood in warm uterine dystemperament, the black color of blood in cold uterine dystemperament, too much blood in the wet uterine dystemperament and low secretions in the dry uterine dystemperament. In order to compare the number of the symptoms and because the differences in the total number of the symptoms in each uterine dystemperament, the ratio of the average number of positive symptoms to overall number of dystemperament symptoms, were obtained. Then their percentage was calculated. For instance, the average number of positive symptoms of warm uterine dystemperament (the number of 2.3) to the total number (the number of 7) was divided. Consequently, the result was about 32%. Namely, in the 70 patients with AUB, 32 percent of the symptoms of warm uterine have been positive. The symptoms average ratio of each dystemperament to the total number of them has been shown in Figure 1. “Dry” and “warm uterine dystemperament” achieved the higher ranks. The cold uterine dystemperament with a high margin had the lowest rank comparing with the warm uterine dystemperament.



**Figure 1.** The symptoms average ratio of each dystemperaments to the total number of them in 70 samples of excess uterine hemorrhage

## Discussion

As PM is based on its specific semiotics, this study aimed to determine the frequency of positive symptoms of uterine dystemperament in patients with AUB from the perspective of Persian Medicine. In our literature review in 2009, we did not find any study on this subject or even a study with a similar subject.

It seems that the symptoms with more reproducibility, which can be observed in most of the patients, are the most important ones, and can be one of the pathognomonic symptoms in dystemperament. Considering the symptoms frequency of “warm” uterine dystemperament, it can be assumed that the four symptoms of the consistency of concentrated uterine blood, redness of the uterine blood, excess of perineal area hair, yellowness of uterine blood, were more frequent among the seven symptoms of the warm uterine dystemperament. Therefore, they may have higher importance. Among the six symptoms of the “cold” uterine dystemperament, blackness of the uterine blood had the highest frequency. Thus, it is more likely to be the main criteria in determining this kind of dystemperament. Excess uterine blood was more among the four symptoms of the “wet” uterine dystemperament and probably more important. In the two symptoms of “dry” uterine dystemperament, low uterine secretion was more frequent than the second symptom and it seems to be more important in history taking from patients. By summing up the symptoms with most frequency of response, it can be assumed that among the four colors of uterine blood, i.e. redness, yellowness, blackness and light color, the

redness and yellowish existing only in the warm uterine had the highest frequency. Meanwhile, the consistency of the concentrated uterine blood and excess of perineal area hair, i.e. symptoms of warm uterine dystemperament, had a higher frequency than thinning consistency of blood and low hair in perineal area, i.e. symptoms of cold uterine dystemperament. Therefore, it may be concluded that the warm uterine in AUB is more frequent than the cold one. Assessment of the average number of uterine symptoms in the four uterine dystemperaments may suggest that the dry and warm uterine dystemperaments have been allocated the highest ranks to themselves and the cold uterine dystemperament has been placed in the lowest rank. The high rating of the dry uterine is probably due to the low number of symptoms. The difference between the warm and cold uterine is much more than the difference between the dry and wet uterine. Thus, it can be said that the warm uterine dystemperament is the most important type involved in the AUB. It is noteworthy to mention that the temperament of the uterine is the same as the temperament of the nerves [8,12]. However, it has lower coldness and drought than the nerves probably due to the proximity of the muscles. Moreover, the temperament of the uterine may vary during a cycle, as it undergoes numerous changes and is quickly affected by mental illness. It is supposed that other organ’s dystemperaments such as stomach, brain, heart etc. mostly could affect uterine.

Persian Medicine sources indicate that warm, dry and damp uterine dystemperaments respectively are the main reasons of

AUB [14-17]. In this study the most interference of warm uterine dystemperament was observed in AUB.

### Limitations and Suggestions

We should acknowledge that our study had many limitations and could not find and realize a clear relationship between the uterine dystemperament and AUB. Other limitations of our study were lack of a similar work in the field of traditional medicine and entering various assumptions were the deficiencies and limitations of the present study. The novelty of this study is that it was among the first academic and scientific studies in the field of dystemperament and could be the source of future comprehensive studies in this field [20-23].

We suggest that designing a standardized questionnaire to determine the temperament and dystemperament of the whole body and major organs is necessary for the unity of the procedures and generalization of the results, although from 2009 to the present, several brief questionnaires have been designed [24,25]

Performing studies on the prevalence forms of dystemperament and temperament of the body and also body organs in apparently healthy populations would be helpful. Conducting extensive studies on the prevalence of dystemperament in a variety of diseases for determining any possible correlation between the diseases and the dystemperament will be useful.

According to the strong emphasis on the dystemperament in Persian Medicine, as the main cause of many diseases, it is recommended to investigate about other associated factors.

### Conflict of Interest

None.

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