

The Treatment of Chinese Herbal Prescription in a 43 Year-old Woman with Sjogren Syndrome: A Case Report

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Funding: Traditional Chinese Medicine—Guangxi first-class discipline (No. Gui Jiao Ke Yan[2018]12); Development Program of High-level Talent Team under Qihuang Project of Guangxi University of Chinese Medicine (No.2018005).

Abstract: Background: Sjögren syndrome(SS) is a long-term autoimmune disease that affects the body's moisture-producing glands. It can occur independently of other health problems (primary disease) or as a result of another connective tissue disorder(secondary disease). Medication is directed at the person's symptoms. Recently, it is reported that prescription of Chinese medicine has a great effect on SS and reduce adverse drugs reaction, which can provide a more safer treatment to SS. **Case presentation:** We here report a 43 year-old Chinese patient with continuous immune thrombocytopenia diagnosed as Sjögren syndrome, who was not response to routine medication such as Methylprednisolone and acyclovir. After that, the patient was treated by prescription of Chinese medicine, and the symptoms were improved apparently. We suppose that prescription of Chinese medicine has an unexpected effect on SS, which can alleviate patient's symptoms. **Conclusion:** The clinical efficacy of Sjogren syndrome(SS) is effective in the treatment of prescription of Chinese medicine. It can improve patient's symptoms and reduce adverse drug reactions.

Keywords: Sjogren syndrome; Sjogren syndrome; Prescription of Chinese medicine; Immune thrombocytopenia

Publication date: September, 2020

Publication online: 30 September, 2020

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Abbreviations:

CBC Test: complete bleed count;
PLT: Platelets;
WBC:White Blood Cells;
RBC: Red Blood Cell;
NEUT:Neutrophile;
MONO:monocyte;
LYMPH:lymphocyte;
EO:EOSINOPHIL GRANULOCYTE;
PDW:Platelet Distribution Width;
PCT:Platelet specific product;
MPV:MEAN PLATELET VOLUME;
HGB:Hemoglobin;
PT:PROTHROMBIN;
APTT:Partial Thrombin;
FIB:Fibrinogen;
TT:Thrombin;
TTR:Thrombin rate;

1 Introduction

Sjogren syndrome(SS) is a chronic autoimmune disease

without exact cause. It mainly involves lacrimal gland, salivary glands and other exocrine glands. The pathological features are characterized by lymphocyte infiltrative lesions, and most patients have syndrome of eyes and mouth drying. It is believed to involve a combination of genetics and an environmental trigger such as exposure to a virus or bacteria. Diagnosis is by biopsy of moisture-producing glands and blood tests looking for specific antibodies. Neither a cure for SS nor a specific treatment is known to permanently restore gland secretion. Instead, treatment is generally symptomatic and supportive. Recently, it is reported that fatigue, one of the common symptom in the patients with Pss, can affect their feeling, lead to early retirement and lower people's job prospects, even aggravate their symptoms. In this case report, we describe a 43-year-old Chinese patient diagnosed as Sjogren syndrome who presented with ecchymosis and immune thrombocytopenia, who was successfully treated with prescription of Chinese medicine.

2 Case presentation

A 43 year-old woman with one year history of thrombocytopenia was admitted to the local hospital for the duration of 10 days on April 19th, 2017. On admission, her general condition was acceptable. She underwent complete blood count test(CBC) and coagulation test. The results were presented in Table 1. Also, the bone marrow examination revealed a low level of erythroid marrow, megakaryocytes and thrombocytopenia. During the admission, she was treated with recombinant human haemopoietin(15000U, once/day), lansorazole injection(once/day), and carbazochrome sodium sulfonate sodium chloride injection(twice/day) to prevent and treat bleeding disorders. After treatments, CBC test was repeated and the results were also shown in Table 1. The patient discharged from hospital on April 28th, 2017.

After about two months, the patient was admitted to another different hospital due to ecchymosis and slight nosebleed. She underwent hemocyte analysis and ANA spectrum. The results were presented in Table 2. Medication including Gamma Globulin(10g/3days), Methylprednisolone(200mg/5days), Thrombopoietin, Acyclovir, tacrolimus capsules and other routine drugs were given. However, the patient was insensitive to the treatment. The tests were repeated, which illustrated that laboratory index were abnormal, especially with a much

lower level of platelets(PLT). The results were displayed in Table 2. Therefore, the patient chose to transfer to The first affiliated hospital of Guangxi University of Traditional Chinese Medicine. She also underwent CBC test at the time of admission and the results were shown in Table 3. The treatment of PLT transfusion was given, however, the test demonstrated that laboratory index was low as before and the symptoms were not improved.

In order to improve patient's symptoms and lessen adverse reaction, the patient accepted the treatment of prescription of Chinese medicine. There were four prescriptions of Chinese medicine given to the patient, according to her condition of low level of PLT and other index. The first prescription was consist of "cortex dictamni 15g, SCUTELLARIA BAICALENSIS 15g, Dandelion 15g, Chinese Wolfberry 30g, Angelica DAHURICA 15g, ATRACTYLODES macrocephala 20g, Radix ASTRAGALI 30g, PINELLIA TERNATA 15g, Tuckahoe 20g, ATRACTYLODES rhizome 20g, Mulberry 20g, Peony Bark 15g, Hive 15g, Coix seed 30g, ACORUS TATARINOWII SCHOTT 20g, ACHYRANTHES BIDENTATA 20g, Raw Ginseng 10g", for seven doses(1 dose/day). The second prescription was based on the first one but added Arisaema 15g and EUCOMMIA ULMOIDES 20g for seven doses. The third prescription was about "Chinese Wolfberry 15g, RED GINSENG tablet 15g, ATRACTYLODES MACROCEPHALA KOIDZ 30g, Astragalus 60g, Chinese Yam 30g, ATRACTYLODES rhizome 20g, ALISMA Orientale 15g, EUCOMMIA ULMOIDES 20g, CINNAMON 10g, Elderberry 20g, Dried Tangerine Peel 15g, Turmeric 15g, Lonesome 15g, PORIA COCOS 15g, Black CIS 10g, COPTIS CHINENSIS 5g", also for seven doses(1 dose/day). The forth prescription was based on the third one but added Ledebouriella seseloides Wolff 15g and Mulberry Parasitism 20g. After the treatment, the patient underwent HEMOCYTE ANALYSIS and the results were shown in Table 4. According to the theory of treatment based on syndrome differentiation of traditional Chinese medicine, these prescriptions can improve patient's constitution, relieve the symptoms of drying, reduce the side effects of Western medicine, improve the level of laboratory indicators, and finally patients can obtain a great quality of life.

Table 1. Laboratory index of the First hospital of Harbin Medical University

On Admission		Discharge	
CBC Test		CBC Test	
WBC(/L)	3.86x10*9	WBC(/L)	4.22x10*9
RBC(/L)	4.49x10*12	RBC(/L)	4.38x10*12
HGB(g/L)	136	HGB(g/L)	134.2
PLT(/L)	28.4x10*9	PLT(/L)	101.5x10*9
Coagulation Test		HCT(%)	39.98
PT(sec)	11.4		
PT%	93.00		
PTINR	1.04		
FIB(g/L)	1.91		
APTT(sec)	26.9		
APTTR	0.99		
TT(sec)	22.3		
TTR	1.23		
D-DIMER(mg/L)	0.17		

Table 2. Laboratory index of the First affiliated of Heilongjiang University of TCM

On Admission		Discharge	
HEMOCYTE ANALYSIS			
PLT(/L)	1x10*9		10.00x10*9
NEUT%	85.0		79.70
LYMPH%	14		13.70
MONO%	0.80		5.90
NEUT(/L)	5.30x10*9		10.51x10*9
EO(/L)	0.00		0.00
PCT%	0.00		0.00
P-LCT%	0.00		0.00
MONO(/L)	0.05x10*9		0.78x10*9
PDW(fL)	0.00		0.00
MPV(fL)	0.00		0.00
ANA Spectrum		WBC(/L)	13.19x10*9
SS-A	+++		
RO-52	+++		

Table 3. Laboratory index of the Second Affiliated hospital of Harbin Medical University

HEMOCYTE ANALYSIS	
PLT(/L)	2.00x10*9
NEUT%	0.00
LYMPH%	4.1
MONO%	0.0
NEUT(/L)	0.00
EO(/L)	0.04x10*9
PCT%	0.00
HGB(g/L)	91
MONO(/L)	0.00
PDW(fL)	10.14
MPV(fL)	0.00
WBC(/L)	9.2x10*9
RBC(/L)	2.90x10*12

Table 4. Laboratory index after the treatment of prescription of Chinese medicine

HEMOCYTE ANALYSIS	
WBC(/L)	11.10x10*9
NEUT%	92.20
LYMPH%	5.00
MONO%	1.60
EO%	0.90
NEUT(/L)	10.23x10*9
EO(/L)	0.10x10*9
RBC(/L)	3.66x10*12
HGB(g/L)	108
PLT(/L)	126x10*9
PDW(fL)	12.40
MPV(fL)	10.30
PCT%	0.13

3 Discussion

In general, as an immune system disease, primary Sjögren's syndrome leads to multiple system lesions of outside glands easily, not only the structure and function of the superficial secretion glands would decline, but

also involves organs damage. And now, based on the theory of traditional Chinese medicine and its clinical characteristics, Sjögren's syndrome is classified as "Zao Zheng"(as Dryness Syndrome).From the view of traditional Chinese medicine,It is widely accepted that deficiency of Yin is the fundamental reason that would cause dryness.As "Su Wen Zhi Zhen Yao Da Lun"(a part of "Yellow Emperor's classic of internal medicine) says,"Dryness should be moistened ". Therefore, moistening has become the core idea in the treatment of Sjögren's syndrome in TCM.

In this case report, we describe a 43 year-old Chinese patient with immune thrombocytopenia ,diagnosed as Sjogren syndrome, who was insensitive to western medication.

It is acknowledged that Sjögren syndrome is an autoimmune disease with complex pathogenesis, also involved in different systems.Generally, Primary symptoms are a dry mouth and dry eyes. However, it changed with the low level of PLT as the primary symptom in this case report. Furthermore, medication such as Methylprednisolone and acyclovir might lead to adverse drug reaction,and the patient was not response to the treatment.

The tests of the former hospitals showed the level of PLT were $28.4 \times 10^9/L$, $1.00 \times 10^9/L$, $2.00 \times 10^9/L$ respectively. Unexpectedly, the level of PLT increased to $126 \times 10^9/L$ after the treatment of prescription of Chinese medicine in the first affiliated hospital of Guangxi university of traditional Chinese medicine. It is obviously that the treatment of prescription of Chinese medicine can improve the symptoms of Sjogren syndrome and increase the laboratory index learned from the difference between the results of the tests. Besides, there was no adverse drug reaction. For this patients, "Yiqi Yangyin"(nourish qi and yin) is the main rule in the treatment. According to the principles of Chinese medicine, astragalus, Ginseng, Pinellia, beehive, red Ginseng, atractylodes and so on belong to the range of invigorating the Spleen and Qi; ACHYRANTHES BIDENTATA, parasitic mulberry and other herbals belong to the range of nourishing the liver and Kidney. All of these Chinese herbals can both improve patient's clinical symptoms and enhance the patient's physical constitution. Although the mechanism of Sjogren syndrome in the treatment of prescription of Chinese medicine is still unclear, it is confirmed that Chinese medicine can be a new therapeutic access for patients to choose.

4 Conclusion

The clinical efficacy of Sjogren syndrome is effective in the treatment of prescription of Chinese medicine.It can improve patient's symptoms and laboratory index. Also it can reduce adverse drug reactions,which provide a safer approach to the patients with Sjogren syndrome.

5 Shortcomings and prospects

In this case, there were several deficiencies. Firstly, the observation time was not enough, and the follow-up did not improve perfectly, so that there was no detailed treatment of follow-up and life evaluation, and the long-term effect and stability of therapies of traditional Chinese medicine could not be accurately evaluated. Secondly, there were lack of pathological indexes and pictures. Lastly, the mechanism of treatment of Chinese medicine in Sjogren syndrome is not clear. Due to the possible deficiencies of this study, a larger number of clinical observation centers and sample size with more observation indicators and extend time can be considered in the next research. Also, to establish more animal experiments, pharmacological experiments and other studies is vital to clarify the mechanism and safety of Chinese medicine in the treatment of Sjogren syndrome, which can be a support evidence for physicians to treat with Sjogren syndrome by Chinese medicine.

Conflicts of interest: None declared.

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