

# A Preliminary Study and Modern Clinical Application of the Theory of "Fu Qing Zhu Nu Ke" in the Treatment of Metrorrhagia and Metrostaxis

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Abstract: "Fu Qing Zhu Nu Ke" specially set seven chapters for metrorrhagia, where Fu's treatment of metrorrhagia emphasizes the treatment of the root cause of the metrorrhagia, invisible blood hemostasis, attention to the application of drugs for supplementing qi, blood, liver and kidney, medication with sweet, mild, and gentle properties, and repeatedly emphasized the influence of sexual affairs on gynecological diseases. Modern doctors have applied this prescription in clinical treatment of metrorrhagia. In this paper, the author makes a preliminary discussion and analysis of Fu's thought of stopping metrorrhagia, and summarizes its modern clinical application and expansion, to enrich clinical experience and serve the patients better.

Keywords: Fu Qing Zhu Nu Ke; Metrorrhagia; Metrostaxis; Theory; Modern clinical application

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#### 1. Introduction

Metrorrhagia and metrostaxis<sup>[1]</sup> is a disease in which menstrual blood could not stop or dripping from time to time, also known as Menstrual disorder. Metrorrhagia and metrostaxis is one of the gynecological difficult acute and critical disease, the potential cause is due to qi and blood double deficit, which may lead to infertility, therefore the urgent treatment is aimed to have qi dead blood off the syndrome. Fu Qing Zhu Nu Ke<sup>[2]</sup> specially set up metrorrhagia, to discuss the treatment ideas and prescription composition of disintegration and hemorrhage. The young generations of doctors who used this method for the treatment of these dieses have received a remarkable result. Therefore, Fu's theory in the treatment of disintegration and modern clinical application are summarized below, to encourage the doctors to apply traditional Chinese medicine in the clinical treatment of disintegration and hemorrhage.

#### 2. Preliminary study on Fu's theory of treating leakages

The book of "Female Subject" which is written by Fu Qingzhu was published in the 17th century. Based on the statistical results of the frequency of use, taste, meridian classification, and efficacy classification of 33 Chinese medicines involved in the 7 chapters of Blood collapse, the author discussed Fu's medication characteristics and treatment ideas in the treatment of disintegration.

## 2.1. Nourish the source of qi and blood to stop the blood collapse

Metrorrhagia is one of the most frequently used drugs in Tonify Deficiency Medicine (50.77%), where this drug is prepared by using Atractylodes, Angelica, Rhizome extracted from Rehmannia, and Ginseng. It is noted that Fu paid special attention to qi and blood nourishing, therefore, in his book, he emphasized that the advantage of the prescription is not only to stop the bleeding, but also to supplement the qi and blood as tonic drugs. In addition, qi can produce blood, circulate blood, and regulate blood consumption, and the general principle of treatment should aim to regulate the spleen and stomach, as these organs healthy movement is important qi and blood check from collapse, the Rhizome extract from Rehmannia filled with Yangxue is for the kidney nourishing essence, and Ginseng as a sleeping medicine. Half of Fu's medicine is designed for preventing the qi and blood collapse; however, the modern treatment of blood collapse is mainly performed as the treatment to stop the flow or leakage, therefore Fu's treatment of blood collapse is mainly to stop the source of collapse, and with a little hemostatic medicine the blood collapse could be stopped without worries.

## 2.2. To strengthen the spleen, soothe the liver, and tonify the kidney

Metrorrhagia is mainly attributed to the liver (22.02%), kidney (17.26%), and spleen (16.67%). Fu mentioned that the liver is the origin of "flushing veins", while the spleen and the kidney is the origin of the "taking veins", and "ren veins". Fu used Atractylodes, Ginseng, and Angelica to strengthen the qi and blood of the spleen and stomach. In addition, the Cornus officinalis has many functions, such as ripe the kidney, and for Yin Jing foot which is a kidney deficiency blood heat energy. Fu advocated not only for supplementing the qi and blood from the spleen and stomach, but also reinforcing the liver and kidney to strengthen the Yin and essence. In addition, women are born with liver, which liver function is to regulates the qi mechanism of the whole body. Therefore, Fu pioneered the rule of blood collapse by calming the liver and releasing stagnation, pointing out that blood collapse is mostly caused by deficiency, heat, blood stasis, and depression <sup>[3]</sup>. Therefore, Angelica Sinensis and Paeoniae Paeoniae which proposed by Fu can be used for nourishing the liver, and softening the liver as a way to treat the root causes.

## 2.3. Nourish them with mild and peaceful products

There were 21 (43.39%), and 14 (56.92%) pleasant properties in the five types of metrorrhagia drugs, and all the medicines are based on smell. The order of frequently used sweet herbs by Fu was Atractylodes Atractylodis, Rehmannia Glutinosa, Angelica, and ginseng, which all of these are used to replenish qi and blood. The sweet herbs are used to fill the Zhengqi foot, vigorous qi and blood, and to slow the blood collapse speed with gentle prescription. This is the right way to cure collapse hemostasis. Fu liked to use drugs for supplementing the deficiency, and to stop the bleeding. However, most of the drugs are for supplementing qi and blood in the spleen and stomach are warm, and mostly for supplementing qi and blood are positive. Qi was Yang, and the essence turned into blood under the influence of the heart. If qi is replenishing but fire is not replenishing, the blood will be frozen and cannot grow rapidly with qi. More than 50% of the blood collapse can be stopped, if the medicine targeting the spleen and stomach used.

## 2.4. Be careful with sex, and keep it clean

Fu has mentioned a heavy sex influence in the womb disease, especially in elderly. Young woman metrorrhagia, sympathetic bleeding, and blood collapse can be stopped by avoiding the break by grubbing, avoiding sex during pregnancy, appropriate passionless, and be cautious in bedroom, where this is the method of the Fourier to prevent flooding. All patients who are good at health preservation, once they feel that Yang qi is suddenly strong, they will be careful to restrain themselves, not to indulge themselves to

hurt themselves. Fu <sup>[4]</sup> also mentioned that during menstruation, belt, birth, and milk are gynecological diseases which are closely related to the uncleanness or impurity of sexual life, so one should pay attention to sex, and should prohibit sex during special periods.

### **3.** Modern clinical application of blood collapse prescription in Female Branch

Fu Shan, as a gynecological master, had a profound influence on the treatment of gynecological diseases in later generations. Fu divided the blood Collapse into seven chapters and created seven prescriptions, which showed to achieved a good result in later generations. Therefore, the modern clinical application of Fu's blood collapse in female department is described as follows:

## 3.1. Guben Zhibeng Decoction

Guben Zhibeng Decoction, is the original prescription for spleen and stomach qi deficiency and deficiency fire caused by blood collapse dark. Zhao <sup>[5]</sup> believed that; Black Ginger could be injected into the blood to stop the bleeding; Keel Oyster can be added to increase the ability to absorb astringent; Angelica may overcome the hidden trouble of simmering blood, change to paeony is better; and if dizziness occurs, Ginseng, Astragalus and other qi tonic drugs can be used 15-30 grams. Huang <sup>[6]</sup> also believed that the prescription should be used at a large dose of 30g, because it can remove the dead muscle, and subsequently create a new flesh, and reverse the endometrium of adverse hyperplasia. In addition, Hao<sup>[7]</sup> believed that it can be used to dialectic all kinds of gynecological bleeding disorders for qi deficiency of blood control, such as irregular menstruation, leakage, and sliding tire. Modern clinical studies have shown <sup>[8,9]</sup> that the addition or reduction of this prescription can improve the hemoglobin index of the patients with abnormal vaginal bleeding, and menorrhagia in adolescence and elderly, and effectively improve the coagulation function to stop the bleeding. A modern clinical extension is used to treat irregular vaginal bleeding caused by instrument operation or drug treatment, such as after abortion, after drug flow, after ring fitting, and others. Wang <sup>[10]</sup> observed 110 cases of bleeding after ring attachment with medication, where alleviate all symptoms could be alleviated in 69% of the patients, and no recurrence was observed after 6 months followup, and the overall effective rate was up to 90%. This prescription can effectively solve the clinical perplexities for abnormal uterine bleeding, such as long treatment time, obvious side effects, and poor efficacy.

## 3.2. Add or subtract Angelica blood tonic decoction

Fu's treatment with or without the Angelica blood tonic for Decoction qi deficient for mark, kidney essence is not solid as the old metrorrhagia, where his own doses are particularly important <sup>[11]</sup>; With large dose of Astragalus Root is to fill the gas, and mostly 30-60g is used; 30g of Angelica is used to invigorate the blood circulation, and to promote uterus bidirectional regulation; and the key lies in the mulberry leaves dose, where the used dose should be large, especially for the thermal image. Yue <sup>[12]</sup> used more than 30g of Angelica to nourish Yin heat convergence hemostatic, and 9g of Notoginseng to braise with blood hemostasis. If each of the methods is used ineffectual, a small amount of white Peony Root and Atractylodes are added. Huang <sup>[13]</sup> made a clinical observation on 30 menopausal patients with blood insideus by giving drug with or without Angelica decoction. Among them, 21 patients stopped bleeding within 72 hours, and had more than 2 consecutive menstrual cycles, with a total effective rate of 86.67%. Zhang Hua <sup>[14]</sup> reported that he has obtained a satisfactory curative effect in clinical application of this prescription in various blood syndromes of deficiency of qi and blood, and loss of blood regulation, such as hemoptysis, hemoptysis, hemoptysis.

#### 3.3. Guqi Decoction

Guqi Decoction is used for young women who dialectically suffer from qi and blood deficiency. It is mainly used to replenish qi and supplement the blood. Liu<sup>[15]</sup> believes that this prescription was derived from Taiyuan Drink with a stronger curative effect, compared to Zhang Jingyue's Taiyuan Decoction. Bazhen Decoction containing Xiong, Peony Root, and Fructus Corni, Rehmannia Glutinosa, Eucommia Ulmoides, and Schisandra. Fu mentioned that "Where qi deficiency and leakage, this prescription can best treat, not only the collapse of miscarriage." However, the effect of this prescription of Tuckahoo Decoction is slightly lower, than Andien Ertian Decoction, which has poor performance in the patients with fetal movement. However, it is very good for the adolescent patients with renal qi deficiency and qi and blood deficiency.

### **3.4. Yinjing Zhixue Decoction**

The original formula of Yinjing Zhixue Decoction is used to treat the sympathetic bleeding caused by qi deficiency, jing deficiency, and phase fire disturbance. Zhang <sup>[16]</sup> made clinical observation on 17 cases of sexual bleeding without organic diseases, and all recovered within 7 days after using Yinjing Zhixue Decoction. It is mainly used to treat irregular vaginal bleeding of menopause with qi deficiency, Jing deficiency, Yin deficiency, and fire flourishing. This decoction also have satisfactory results for treatment of vaginal bleeding caused by sexual intercourse immediately after menstruation, postpartum, and abortion. This formula is extended, and applied to male-related diseases, such as blood in urine after sexual intercourse, blood semen after sexual intercourse, or abdominal pain and bleeding after artificial operation of uterine cavity history.

### 3.5. Pinggan Kaiyu Zhixue Decoction

Pinggan Kaiyu Zhixue Decoction is the original prescription for the treatment of stagnation and blood failure, which comes from the addition and reduction of Xiaoyao Powder. It uses a small dose of Bupleurum to soothe and calm the liver, a large dose of Guiyuan and Peony Root to nourish and soften the liver, plus Attylodes Macrocephala to prevent Muwangke spleen, and can benefit the blood between waist and umbilicus. In addition, after the liver is opened, subsequently hemostasis can be stopped. Panax Notoginseng, Cortex Tangerine and Schizonepeta Spike are added to cool the blood and to stop the bleeding. Fu<sup>[17]</sup> thinks that Angelica flavor and temperature go away, easy to break blood and wander, therefore, it should be subtracted and replaced by Mother Wort to promote the blood stasis and regulate menstruation. At present, this formula is often used in clinical treatment of blood insipidus, which is dialectically liver qi stagnation, and the symptoms of clinical patients are significantly improved, further the recurrence rate is low.

### 3.6. Zhuyu Zhixue Decoction

Zhuyu Zhixue Decoction, as the name implies, is to stop the bleeding by removing blood stasis. It is composed of Taohong Siwu Decoction and Taohe Chengqi Decoction. It is clinically used for a prolonged menstrual period or abnormal uterine bleeding, and ovulation bleeding of blood stasis type, and clinical dialectical addition and subtraction are conducted based on the actual situation. It also can be used to place the expansion, which is used to treat the synthetic caused by irregular vaginal bleeding<sup>[18]</sup>, or caused during medical abortion by intrauterine residual<sup>[19]</sup>, or chronic endometritis<sup>[20]</sup>. Studies have shown that <sup>[21]</sup> use of traditional Chinese medicine can significantly improve the blood rheology, activating blood, and removing stasis efficacy is also good for tissue repair and regeneration, thereby has good clinical value. It can also be used for a prolonged menstrual period or abnormal uterine bleeding and ovulation bleeding diagnosed as a blood stasis syndrome. Based on the actual situation, clinical dialectical addition and subtraction can determine the hemostatic effect, subsequently help in removing the clinical

manifestations.

## 3.7. Qinghai pill

Qinghai pill means the cooling of blood sea, originally used for the treatment of Yin deficiency blood heat, blood sea, and blood collapse. According the Peng female family <sup>[22]</sup>, in the clinical application one should remove the atropractic of warming and dryness, to prevent the aggravation of Yin deficiency and fire, to strengthen the effect of nourishing Yin and clearing heat. At present, it is mainly used for the treatment of abnormal uterine bleeding due to Yin deficiency and fire flourishing type, menorrhagia, and menopause caused by Yang Sheng Yin deficiency. Tao <sup>[23]</sup> made clinical observation on 46 patients with climacteric syndrome dialectical of liver-kidney Yin deficiency, and its curative effect was better, than the control group. It has been reported <sup>[24]</sup> that Qinghai pill can also be used to treat night sweats caused by deficiency of kidney essence, fire of Yin deficiency, and intractable constipation caused by deficiency of kidney essence and hot bowel.

## 4. Conclusion

Fu's treatment of blood collapse is based on supplementing qi and blood, regulating Yin and Yang, and regulating liver, kidney, and spleen are the secondary effect, and its quality method is to replenish qi and blood with warm medicine. Fu first created the method of Pinggan Kaiyu to treat liver and qi stagnation of blood insipidus, precise medication, clever compatibility, strict processing, and is a model for the treatment of blood insipidus. However, much contemporary flooding treatments were given priority to bleeding, and hemostatic drugs are given, regardless of the patient's blood. Yin and Yang, regardless of the patient's viscera qi activity, more to know regarding patients on kidney essence for flooding consumed by sex disease, thereby the womb disease can be stopped in time, shortly after the attack, at the age of painless, before the uterine cavity instruments involvement. The new generation of doctors could not be far away from such a good prescription, in clinical according to the patient's pathogenesis to expand the clinical application of prescription, to achieve the combination of traditional Chinese, and western medicine to solve the gynecological difficult and critical disease, such as leakage.

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The authors declare no conflict of interest.

## References

- [1] 2016, Gynecology of Traditional Chinese Medicine, 10th Edition, China Traditional Chinese Medicine Press, Beijing.
- [2] Fu S, 2011, Fu Qing Zhu Nu Ke, Beijing: China Medical Science and Technology Press.
- [3] Peng F, Wang J, Liu X, 1997, Characteristics of Prescriptions in the Treatment of Blood Insipidus in Fuqing Zhunv Department. Shanxi Traditional Chinese Medicine, 1997(05): 41.
- [4] He F, Zhang W, 2011, Discussion on the Treatment of Disintegrating leakage from Fu Qing Zhu Nu Ke, China Association of Traditional Chinese Medicine. China Association of Traditional Chinese Medicine, 2011(1).

- [5] Zhao JV, 1986, Shanxi Traditional Chinese Medicine, 4(02): 8–9.
- [6] Huo T, Huang Z, 2015, Huang Zhengde: A Case Study of Treating Anovulation Sexual Dysfunction Uterine Bleeding with Guben Zhibu Decoction. Journal of Hunan University of Traditional Chinese Medicine, 35(12): 68–70 + 76.
- [7] Hao S, 2000, Shaanxi Traditional Chinese Medicine, 2000(12): 569.
- [8] Yang M, 2019, Bayberry Flowers Effect of Guben Zhibu Decoction in the Treatment of Anovulation Functional Uterine Bleeding. Chinese Journal of Practical Traditional Chinese Medicine, 35(06): 667– 668.
- [9] Zhu X, Zhu Z, 2008, Inner Mongolia Journal of Traditional Chinese Medicine, 2008(02): 27.
- [10] Wang Y, Xu Y, Du F, 2007, Guben Zhibu Decoction for the Treatment of 110 Cases of Hemorrhage after Upper Ring. Henan Traditional Chinese Medicine, 2007(05): 55–56.
- [11] Liu G, He Y, 2010, Experience of Adding and Subtracting Angelica Buxue Decoction in Treating Disintegrating and Leaking. Inner Mongolia Journal of Traditional Chinese Medicine, 29(11): 52–53.
- [12] Chen Keji, et al., 1984, The Second Edition of Yue Mei's Anthology of Chinese Medicine, Beijing: Ancient Books of Traditional Chinese Medicine Press, 24.
- [13] Huang XC, Wang YY, Wang XY, 2012, Fu Qing-Zhu "Adding and Subtracting Angelica Buxue Decoction" in the Treatment of 30 Cases of Menopause Collapse. China Pharmaceutical, 21(16): 86–87.
- [14] Zhang H, 1992, Application of Adding and Subtracting Angelica Tonifying Blood Food in Internal Medicine Blood Syndrome. Journal of Shaanxi University of Traditional Chinese Medicine, 4(01): 25– 26.
- [15] Liu CS, 2017, Fu Qing Zhu Nu Ke" Medical Prescription Collection Series (10) Young Women Blood Collapse. Chinese Modern Distance Education of Traditional Chinese Medicine, 15(10): 58–59.
- [16] Zhang L, 2007, Observation of Curative Effect of Fu Shi Yinjing Zhixue Decoction on Hemorrhage. Clin Med Practice, 4(04): 296.
- [17] Fu Y, 1995, Treatment of Dysfunctional Uterine Bleeding with Traditional Chinese Medicine in 46 Cases. Practical Clinical First Aid of Integrated Traditional Chinese and Western Medicine, 1994(01): 26–27.
- [18] Cai X, Cai X, Yu P et al., 2002, Effect of Jiawei Zhuyu Zhixue Decoction on Abnormal Uterine Bleeding Caused by Intrauterine Device in 57 Cases. China Journal of Chinese Materia Medica, 4(09): 71–73.
- [19] Wang S, Zhang C, Zhao L, et al., 2011, Zhuyu Zhixue Decoction in the Treatment of Induced Abortion and Drug Abortion Insufficiency in 24 Cases. Hebei Traditional Chinese Medicine, 33(07): 1003–1004.
- [20] Zhang J, Xiong Y, Luo X, et al., 2021, Effect of Zhuyu Zhixue Decoction on Qi Deficiency and Blood Stasis Syndrome of Chronic Endometritis. Chinese Journal of Experimental Formula, 27(02): 110–115.
- [21] Qian R, Yang Y, Jiang W, et al., 2001, Study on the Mechanism of Regulating Immunity and Hemorheology of Stress Rats with Traditional Chinese Medicine of Regulating Qi and Promoting Blood Circulation. Chinese Journal of Integrated Traditional and Western Medicine, 21(5): 364.
- [22] Peng M, Peng Y, Peng J, 2014, Peng's Experience in the Application of Qinghai Pill in Gynecology. Chinese Journal of Traditional Chinese Medicine Literature, 32(02): 48–49.
- [23] Tao HJ, 2020, Clinical Observation on the Treatment of Menopause Syndrome with Qinghai Pill. China Science and Technology of Traditional Chinese Medicine, 27(01): 116–117.

# [24] Zheng Q, 2013, Clinical Application of Qinghai Pill. Journal of Practical Traditional Chinese medicine, 29(10): 866.

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