# Research Process in Modern Application and Diseases Control of Shengyu Decoction

# Zhang Xiaoqing, Cao Lanxiu\*

Shaanxi University of Chinese Medicine, Xianyang, Shaanxi, 712046, China \*Corresponding author

Abstract: Shengyu Decoction was initially mentioned in "the Secret of Orchid House" written by Li Dongyuan. It is one of the first 100 classic recipes in the list of ancient classic recipes (the first batch) released by the State Administration of Traditional Chinese Medicine in 2018. The soup is beneficial to qi and blood circulation, nourishing blood, and tonifying deficiency. It is mainly used for various diseases caused by qi and blood deficiency in gynecology. Moreover, it is found that the application of shengyu decoction has been expanded in modern clinical practice. All patients with deficiency of qi and blood or excessive blood loss can apply shengyu decoction to mitigate these symptoms. The theory from traditional chinese medicine believes that qi and blood are the basis of life activities, and replenishing qi and blood makes healthy good and diseases difficult to invade. So the shengyu decoction performs a great effect in treating some diseases, including gynecological disease, bone disease, oncology, cardiovascular internal medicine disease, nerve internal medicine diseases, and skin diseases. The study found that more soups could promote blood cells proliferation, improve arterial blood flow velocity, restore nerve function, reduce inflammation and edema reaction and improve the immune function. With the increase of modern working pressure and the aggravation of aging, Shengyu Decoction has great potential in treating deficiency, and its mechanism and curative effect are worth further studied.

**Keywords:** Shengyu Decoction; Compatibility characteristics; Modern clinical; Classification of diseases

#### 1. Introduction

Shengyu Soup was originally mentioned by Li Dongyuan in The Book Lanshiyizang · Sore Selection Gate [1]. It is composed of six herbs: raw ground, cooked ground, Ligusticum chuanxiong, ginseng, Angelica sinensis, and Astragalus membranaceus, which can cure excessive blood loss. The original text of Lanshiyizang contains: Zhu Danxi, in his book Mai Yin Zheng Zhi, changed the natural place yi into a white peony root to make it stronger in convergence and hemostasis. It has become a universal holy healing soup in modern times and is widely used in gynecology. Shengyu decoction qi and blood double tonic, Yin and Yang homology, astragalus, angelica two drugs for the king, phase must be used, played qi nourishing blood work; Cooked ground and paeonia lactiflora fill the essence and nourish the blood to help angelica nourish the blood; Ginseng sweet and nourishing qi, help Astragalus qi tonic, are minister medicine; Chuanxiong is the blood gas medicine, the line of qi and blood circulation, so that the complement without stagnation, as adjuvant. Studies have shown that Angelica [2] has the effects of improving anemia, anti-depression, anti-inflammation, and enhancing cardiovascular function. Astragalus [3] can resist fatigue, improve hematopoietic dysfunction, regulate blood pressure, etc. Shu Di [4] can enhance hematopoietic function, improve osteoporosis and enhance memory; [5] Paeonia lactiflora can protect liver, fight inflammation and promote hematopoiesis of bone marrow cells. Ginseng [6] can strengthen the heart, improve immunity and improve heart failure; Ligusticum chuanxiong [7] has antiinflammatory, analgesic, antidepressant and anti-thrombotic effects. In recent years, Shengyu Decoction has been widely used in the treatment of gynecology and obstetrics, orthopedics, internal medicine, oncology, dermatology and other diseases, with very high clinical application value. The review is as follows.

#### 2. Modern clinical application

#### 2.1. Application of Shengyu Decoction in obstetrics and gynecology

#### 2.1.1. Irregular menstruation

Irregular menstruation is a common gynecological disease, including menstrual cycle, menstrual volume, and menstrual changes, also accompanied by menstrual abdominal pain, headache, dizziness, and other symptoms, traditional Chinese medicine believes that qi and blood are the material basis of menstruation, qi and blood filling, blood sea filling, menstruation can be on time and come. Shengyu Decoction is effective for blood deficiency types and irregular menstruation type. Liu Jie [8] treated 30 patients with less months by adding Shengyu Decoction and ordered the patients to take routine medicine. After three menstrual cycles of treatment, 6 cases were cured, 19 cases were effective, and only 2 cases were ineffective, the total effective rate was up to 93.33%, the effect was satisfactory. Gu Yufeng [9] treated 80 patients with a prolonged menstrual period with shengyu Decoction, and the total effective rate was up to 96.25% after three menstrual cycles. Pan Lijuan [10] divided 30 patients with weak qi and blood dysmenorrhea in the outpatient department into mild, moderate and severe dysmenorrhea, and treated with Shengyu Decoction. After 20 days, the recovery rate of mild dysmenorrhea patients was 80%, and that of moderate and severe dysmenorrhea patients was 70%, indicating that Shengyu Decoction could significantly improve dysmenorrhea syndrome caused by qi and blood deficiency.

#### 2.1.2. Functional uterine bleeding

Functional uterine bleeding in Traditional Chinese medicine known as "leakage", refers to women during non-menstrual vaginal bleeding, a large amount of collapse, a small amount of leakage, Shengyu soup qi, and blood, suitable for Tongren deficiency damage, blood fixation without the right to cause leakage. Liu Xin-hua [11] reported that 32 cases of qi and blood deficiency caving were treated with Shengyu Decoction, and all recovered, with  $10 \sim 15$  doses in severe cases. Wu Yu rainbow [12] treated 80 patients with ren, are two qi types, it can be divided into control group and treatment group, the treatment group was treated with flavored st the soup of the day, morning and night after dinner warm clothing, the control group given palace blood ning capsule, three times a day, each time two grain, a week after the observation, found flavored st the soup has very good hemostatic effect, treatment group total treatment rates of 95%, compared with the control group 87.5%, it has a significant advantage.

#### 2.1.3. Hyperplasia of mammary gland

Mammary gland hyperplasia in Chinese medicine could be classified as "breast lump" or "breast lump" Its core rises and falls with the anger, more by the worry injury spleen, anger injury liver, stasis and become also., treat when dredge liver qi, invigorate blood stasis. Shengyu Decoction combined with Paeoniflora alba for soothing the liver and relieving pain, Ding Liyu [13] found that paeoniflorin, its main active ingredient, could effectively improve the disorder of SERUM E2, P, PRL, and FSH in rats, and alleviate the symptoms of mammary hyperplasia rats with liver depression. He Haiyan [14] divided 60 patients with mammary hyperplasia into the control group and the experimental group. The control group was given tamoxifen once per day,10 mg per time, and the experimental group was added shengyu Decoction combined with acupuncture on the basis of the control group. After three months of treatment, the total effective rate of the control group was 76.67%, the total effective rate of the experimental group was 96.67%. Compared with the control group, the patients in the experimental group had significantly smaller breast lumps, and the accompanying symptoms such as pain, breast discharge and abnormal menstruation were significantly improved.

#### 2.1.4. Menopause syndrome

Menopausal syndrome is similar to "dirty mania", the main pathogenesis of qi consumed, alongwith, st the soup has very good role of blood yangxin, Hu Liping [15] treated 94 cases of merger insomnia menopausal syndrome patients, were divided into control group and experimental group, control group was treated with zopiclone capsule, the experimental group give zopiclone capsule plus SAN decoction, after treatment, The total effective rate in the experimental group was 95.74%, significantly higher than 78.72% in the control group.

#### 2.1.5. Infertility

Ovulation disorder is an important cause of infertility, accounting for 25% ~ 35% of infertility [16]. Shengyu Decoction has a very good therapeutic effect on it. Xie Xiaofang et al. [17] showed that adding Shengyu Decoction can significantly improve the serum estrogen level of ovariectomized rats and

directly regulate endocrine in the hypothalamic-pituitary-ovarian axis. It can improve the morphology of uterus and ovary and promote follicle development in rats. Li Jinghua [18] admitted 120 patients with ovulatory dysfunction infertility, who were randomly divided into shengyu Decoction group and control group. The control group took clomiphene 50mg orally, once a day for 5 days, and the Shengyu decoction group was routinely decocted for 3 months as a course of treatment. Results The total effective rate of Shengyu decoction group was 90.0%, significantly higher than that of the control group (81.7%). Zhang Yunrong [19] also used flavored Shengyu Decoction and oral clomiphen to conduct a controlled test on patients, and the results showed that flavored Shengyu Decoction could effectively increase the number of mature follicles and endometrial thickness, and had a significant impact on improving cervical mucus score and fertilized egg implantation.

#### 2.1.6. Postpartum constipation

Pathogenesis of maternal postpartum constipation insufficient Yin blood, body fluid loss causes intestinal dry constipation, gas blood loss or injury is serious, qi deficiency lead to promote the dregs downward, Gao Hongzhen [20] to observe the more holy tonga subtraction of postnatal constipation, the effect of 120 cases of postpartum constipation patients were given the more holy tonga subtraction treatment, result 99 cases cured, only 1 case was ineffective, the total effective rate was 99.2%.

#### 2.1.7. Perineal laceration

Fetus during the process of natural childbirth is too large, fast delivery and other reasons can lead to maternal perineal laceration, Xu Junjuan [21] the 200 cases of vaginal delivery perineal deep II degree laceration maternal divided into control group and treatment group, control group without intervention after routine disinfection, suture, the treatment group in the control group on the basis of given flavored SAN soup, five days after the detection, The levels of serum IL-1, IL-6, IL-10 and TNF- $\alpha$  in the treatment group were significantly reduced, which played an anti-inflammatory role. Meanwhile, the treatment group could also relieve pain and promote wound healing after childbirth and obstetrics.

#### 2.2. Application of Shengyu Decoction in orthopedics department

#### 2.2.1. Cervical spondylosis

Cervical spondylosis is a syndrome with a series of symptoms and signs caused by cervical degenerative compression or acupuncture of peripheral spinal cord, nerves and blood vessels, etc. Huang Nuhu <sup>[22]</sup> divided 60 patients with cervical spondylosis myelopathy into experimental group and control group. The experimental group was treated with Shengyu Decoction plus and minus manipulation, while the control group was treated with manipulation only. After 2 months, The total effective rate of the experimental group was 93%, and that of the control group was 70%, the difference was statistically significant, indicating that Shengyu Decoction could improve cervical spondylosis.

Nerve root cervical spondylosis (CSR) is the cervical spondylosis with the highest clinical incidence, accounting for 50%-70% of cervical spondylosis. Wang Qinjian [23] found that Shengyu Decoction combined with acupuncture can significantly relieve pain and increase activity in PATIENTS with qiblood deficiency CSR, and after treatment, the serum IL-1 $\beta$ , IL-6, CGRP and other inflammatory factors are significantly reduced. The levels of CD3+ and CD4+ in T lymphocytes increased significantly, suggesting that Shengyu Decoction combined with acupuncture could treat CSR from anti-inflammatory and immune-enhancing aspects. St the soup can significantly improve the cervical vertebra oppression blood vessels leads to brain cause dizziness, Cao Hongchun [24] 120 cases of cervical vertigo patients, randomly divided into treatment group and control group, control group routine acupuncture combined flunarizine hydrochloride, the treatment group control group was given with the soup, a month after the observation, treatment group total effective rate is as high as 96.67%, Vertigo and cervical occipital pain were significantly improved in the treatment group. Vs and Vd of vertebral artery and basilar artery were significantly increased and PI was significantly decreased in the treatment group compared with the control group. Blood flow velocity of vertebral artery and basilar artery was improved in the treatment group.

#### 2.2.2. Knee osteoarthritis

Knee osteoarthritis is a chronic joint disease, multiple in the older population, joint pain, swelling, and loss of sexual function as the main characteristics, in the traditional Chinese medicine belong to the category of "poliomyelitis", the disease belongs to the virtual to real, its pathogenesis is deficiency of qi and blood, ribs alongwith the complex feeling cold origin attack so that qi and blood stasis, and meridians closed resistance, st the soup on the disease curative effect is very good, Feng Yanqi [25] confirmed that

Shengyu Decoction has a significant therapeutic effect on arthritis in mice, mainly through regulating SDF-1/CXCR4 signal axis, inhibiting the activation of Erk/p38MAPK pathway, reducing the expression of related matrix metalloenzymes and inflammatory cytokines, and improving the symptoms of synovial hyperplasia and cartilage degeneration of ankle joint in mice. Cao Yuanfei [26] admitted 82 patients with knee osteoarthritis complicated with synovitis, and they were divided into control group and Shengyu group. The control group was given sodium chlorophenol enteric-coated tablet, and the Shengyu group was treated with Shengyu Decoction and Wuling SAN. After treatment, the total effective rate of shengyu group was 97.56%, significantly higher than 85.37% of the control group. Therefore, Shengyu Decoction and Wuling SAN can effectively improve the knee function of patients.

#### 2.2.3. Lumbar disc herniation

Lumbar disc in TCM belongs to "lumbocrural pain", "the physique disease" category, the fundamental reason for liver and kidney loss, on the basis of this feeling cold origin, so that the waist channels twin acute, and qi stagnation and blood stasis, professor shi qi believes the disease treatment process should pay attention to "harmonize qi and blood," Shen Jintao [27] 67 cases of the third lumbar transverse process syndrome patients into two groups, control group of 34 people, Shockwave therapy was used for 3 days/time. 33 patients in the experimental group were treated with shockwave + Shengyu Decoction. After two weeks, it was found that the experimental group was superior to the control group in improving lumbar pain and clinical symptoms. Chronic degenerative changes of lumbar spine occur with age. Sun Mingliang [28] believed that the treatment should pay equal attention to qi and blood as well as tonifying liver and kidney. He divided 120 elderly patients with lumbar disc herniation into two groups. Living by the treatment group USES the more holy tonga parasitic soup joint orientation of traditional Chinese medicine and medicine treatment, control group by given diclofenac sodium double release of enteric capsules with medium frequency pulse treatment, 1 month after treatment group total effectiveness 95%, control group total effectiveness 78.33%, that the more st joint for the elderly live alone parasitic soup soup lumbocrural pain is better than western medicine treatment.

#### 2.2.4. Venous thrombosis

Primary hip arthroplasty in patients with lower limb venous thrombosis (DVT) rate is as high as 42%  $\sim$  57%, Shen Jintao  $^{[29]}$  believe that belong to the category of qi and blood of traditional Chinese medicine two kui clamp silt, 180 patients were randomly divided into two groups, control group given oral pp sand, the more experimental group use the soup o joint pp sand, found in the control group after 2 weeks the incidence of DVT was 10%, The incidence of DVT in the experimental group was only 2.2%, indicating that Shengyu Decoction could significantly reduce the incidence of lower limb thrombosis after hip replacement.

#### 2.3. Application of Shengyu Decoction in oncology Department

#### 2.3.1. Chronic atrophic gastritis precancerous lesions (PLGC)

PLGC is a key link in the development of chronic gastritis into gastric cancer, which belongs to the category of "epigastric pain", "noisy" and "full of PI" in TRADITIONAL Chinese medicine. Xu Wenqiang [30] divided 62 patients with spleen and stomach PLGC into the control group and the experimental group. The experimental group was given Shengyu Decoction Jiajian Granule, and the control group was given Weifuchun tablet. After 12 weeks, the total effective rate for symptom improvement in the experimental group was 83.33%, and the total effective rate in the control group was 53.33%. Compared with the control group, the treatment group significantly improved symptoms such as stomachache, tiredness, chronic inflammation and atrophy, and Shengyu Decoction Jiajian granules promoted the expression level of tumor suppressive gene LET-7A.

### 2.3.2. Liver cancer complicated with gastrointestinal bleeding

Based on [31] 43 cases of onset complicating acute gastrointestinal bleeding after radiofrequency ablation of liver cancer patients, it can be divided into the treatment group (22 cases) and control group (21 cases), the treatment group is given priority to with the more add and subtract the soup with injection of blood clotting enzyme + esso beauty pull azole sodium, control group simply using injection of blood clotting enzyme + esso beauty pull azole sodium, after two weeks, The effective rate of hemostasis in the treatment group was 95.45% higher than that in the control group (76.19%). In the treatment group, the hemostasis, reduction of fecal occult blood time and reduction of adverse reactions were obviously treated with western medicine alone. Meanwhile, the experimental group could improve the body immunity and reduce the expression of VEGF protein.

#### 2.3.3. Chemotherapy-related anemia

Severe anemia often occurs in patients with malignant tumor after chemotherapy, which is related to the side effect of chemotherapy drugs killing and inhibiting hematopoietic cells in bone marrow. Experiments have confirmed [32] that Shengyu Decoction can promote the synthesis and secretion of hematopoietic growth factors such as IL-6, IL-11 and GM-CSF, and promote the activation of bone marrow nucleated cells into S and G2/M, and promote the proliferation of bone marrow hematopoietic cells. Wang Ruojin [33] admitted 80 patients with advanced colon cancer patients with chemotherapy-associated anemia, who were divided into two groups on average. The control group was given recombinant human erythropoietin injection and polysaccharide iron complex capsule, and the experimental group was treated with Shengyu Decoction. After 12 weeks of comparison, it was found that the hemoglobin and hematocrit of patients in the treatment group were significantly increased. These results suggest that Shengyu Decoction can significantly improve the anemia associated with chemotherapy in patients with advanced colon cancer.

Zhang Chengcheng [34] divided 60 anemia patients with gynecological malignant tumor after chemotherapy into shengyu Decoction group and control group. The control group was given supportive psychological therapy, and the Shengyu decoction group was added on this basis. After treatment, the effective rate of the control group was 6.67%, and the effective rate of the Shengyu decoction group was 76.67%. Shengyu Decoction was superior to control group in improving hemoglobin and hematocrit. Qiao Xiaoyan [35] randomly divided 42 patients with anemia after chemotherapy for malignant tumor into the treatment group and the control group. The treatment group received shengyu Decoction for supportive treatment, and the control group received only supportive treatment. After 4 weeks, the average increase of hemoglobin and hematocrit in the treatment group was 21.0g/L and 5.23%. While in the control group, hemoglobin and hemocyte ratio decreased 12.5g/L and 3.34%, respectively. There was a statistical difference in the efficacy of the two groups, suggesting that Shengyu Decoction is suitable for the treatment of anemia caused by chemotherapy of malignant tumor.

#### 2.4. Application of Shengyu Decoction in cardiovascular medicine

#### 2.4.1. Hypertensive cerebral hemorrhage

Hypertensive intracerebral hemorrhage is caused by systemic arteriosclerosis caused by hypertension. It is caused by sudden rise of blood pressure induced by various reasons, resulting in cerebrovascular rupture and hemorrhage. The risk of morbidity, death and disability is very high. Tang C Y [36] randomly divided 100 patients with hypertensive cerebral hemorrhage into shengyu group and control group. The control group was given comprehensive treatment, and shengyu group was given shengyu decoction on this basis. Compared with the control group, Shengyu group could significantly reduce serum HMGB1, BNP and NSE, improve brain edema and restore nerve function. Zhao Guangwei [37] also found in the experiment that modified Shengyu Decoction could reduce the water content of brain tissue on the injured side of rats, reduce the damage of hippocampal nerve cells and improve the neural function of rats.

# 2.4.2. Chronic arrhythmia

Chronic arrhythmia Chinese medicine says "palpitation" "Palpitation", etc., "Jing Yue Quanshu Palpitation" mentioned: What "virtual micro also micro, move also greatly", he thought the palpitation is associated with considerations of Yin deficiency, hai-fei Lin [38] then 60 cases of type two qi tardy arrhythmia patients into the group and the control group, the group using traditional Chinese medicine (TCM) st. Tonga taste, the control group gives the western medicine salbutamol tablets, 2 weeks later, the more holy group total effective rate was 90.00%, The total effective rate of the control group was 73.33%, the difference was statistically significant, indicating that shengyu Decoction can effectively treat arrhythmia caused by deficiency of qi and blood.

# 2.5. Application of Shengyu Decoction in neurology department

#### 2.5.1. Ischemic stroke

Ischemic stroke is arterial blood supply to the brain disorders, diseases of the limitations of brain tissue necrosis ischemia hypoxia, st. besides can improve arterial blood flow situation, the soup is proved [39] act on pyruvate metabolism, metabolism of glycine, threonine, serine, alanine, aspartic acid, glutamic acid metabolism, the Krebs cycle, and glycolysis and sugar dysplasia pathway, Improve hypoxia symptoms. Li Di randomly divided 120 patients with ischemic stroke [40] into two groups. The control group was given general rehabilitation treatment, and the experimental group was added shengyu

Decoction on the basis of the control group. After one month of treatment, the total effective rate of the control group was 78.46%, and the total effective rate of the experimental group was 95.38%. Protecting brain cells and improving nerve defects were significantly better than the control group.

#### 2.5.2. Aphasia of stroke

Clinical about a third of the stroke patients with aphasia, yong-tao liu [41] treated 85 cases of patients with aphasia after stroke, divided the patients into control group (43 cases) and the experimental group (42 cases) and control group given conventional western medicine therapy, the experimental group to give the more conventional western medicine treatment + SAN soup + acupuncture treatment, control group total cure rate 81.40% after two months, The total cure rate of the experimental group was 95.24%. In addition to the improvement of aphasia and TCM signs, the NHISS and MoCA scores of the experimental group were better than those of the control group, suggesting that the treatment group could improve the cerebral nerve function defect. Rui Jinwei [42] divided 96 patients with aphasia after ischemic stroke into treatment group and observation group. The observation group was given routine rehabilitation training and acupuncture, and the treatment group was added shengyu Decoction on this basis. After 24 weeks of treatment, the total effective rate of the treatment group was 95.8%, while the observation group was 81.2%, which significantly promoted the recovery of patients' speech function. The neurological function and intracranial blood flow velocity were improved.

#### 2.6. Application of Shengyu Decoction in dermatology

Professor Ai Rudi [43] believes that chloasma is based on deficiency, which causes blood stasis and focuses on regulating qi and blood and tonifying liver and kidney. Wang Yamei [44] admitted 57 cases of chloasma patients and divided them into treatment group and control group. They were given oral Chinese medicine decoction of self-designed Shengyu Decoction and oral vitamin C and vitamin E respectively. After treatment, the total effective rate of treatment group and control group was 86.7% and 37.1% respectively, and the area and color of chloasma in the treatment group were significantly improved. At the same time for patients with insomnia, fatigue, constipation and other accompanying symptoms.

## 3. Summary and outlook

To sum up, Shengyu Decoction is a classic recipe for supplementing qi and blood. When used alone or combined with other prescriptions, significant curative effects can be achieved. Qi and blood are the material basis of life activities. Qi is not blood and blood is not qi, so it is said that qi is warm and blood is moisten.", coordination, and functions of qi activity can inspire the physiological activities of the organs of zang-fu organs and meridians, resist invasion, invaded by promoting the metabolism of human body and human blood and body fluid, blood vein, the insides, musculoskeletal nutrition effect, qi and blood, Yin and Yang are based on the mutual root interoperability, qi deficiency is not blood, blood deficiency cannot gas, insides, Loss of energy and blood in the musculoskeletal system leads to disease. In Shengyu decoction, ginseng and astragalus membranaceus nourish the vitality, angelica, Ligusticum chuanxiong and Shu Di nourish and invigorate the blood, ligusticum chuanxiong stimulates the blood and acts qi, and Paeoniae paeoniae converge to stop bleeding. Both qi and blood can be replenited without stagnation. Chuanxiong xin SAN, and astragalus to drum, so that blood is still scattered in muscle, fur.", the inside of the qi and blood to be filled, the mind to keep, then all diseases in addition. Shengyu Decoction has been proved to have the functions of hematopoiesis, improving immunity, anti-hypoxia and repairing nerves. Modern doctors take the etiology and pathogenesis of "qi and blood deficiency" as the breakthrough point, do not stick to the simple excessive blood loss, and grasp the essence of "replenishing qi and blood". Widely applied st the soup in obstetrics and gynecology, orthopedic chronic blood loss strain after disease, stroke, nerve damage, bleeding after chemotherapy anemia, such as virtual fatigue sex disease, is closely connected with the ideas of the different development of traditional Chinese medicine, also give enlightenment on clinical, if able to firmly seize the key pathogenesis of deficiency, we can be very flexible application of the party.

#### References

[1] By Kim Lee Dong-yuan, annotated by Li Zhong-ping. LAN Room Secret collection [M]. Beijing: China Medical Science and Technology Press, 2011:95.

[2] Feng Huimin, Li Yue, LUO Xudong, LIANG Tingting, Jia Miaoting, Qiang Zhengze, WEI Xiaocheng,

- ZHANG Guangyuan, ZHOU Ruijuan, LI Chengyi. Research progress of Chemical Constituents and pharmacological action of Angelica sinensis and predictive analysis of quality markers [J]. Chinese Journal of Traditional Chinese Medicine:1-17
- [3] Li shu-fang. Research progress on pharmacological action of astragalus membranaceus [J]. Hubei journal of traditional Chinese medicine, 2013,35(06):73-75.
- [4] Chen Jin-peng, ZHANG Ke-xia, LIU Yi, GAi Xiao-hong, Ren Tao, LIU Su-xiang, TIAN Cheng-wang. Research progress on chemical Constituents and pharmacological action of Rehmannia glutinosa [J]. Chinese Traditional and Herbal Medicine, 201,52(06):1772-1784.
- [5] Xu Jiaxin, Xu Jun, Cao Yong, Zhu Yuejian, LI Xiangyu, GE Dezhu, Ma Lei, ZHANG Tiejun, LIU Changxiao. Chinese Journal of Traditional Chinese Medicine: 1-12. (in Chinese
- [6] Xing Jin-yue, Yang Han-tong, Han Li-hua, Li Guan-hao, CUI Fu-shun, LI Xiang-guo. Research progress of Ginseng and its drug pairs [J]. Chinese Journal of Traditional Chinese Medicine: 1-7. (in Chinese
- [7] Zhang Xiaojuan, ZHANG Yanli, Zuo Dongdong. Research progress on chemical constituents and pharmacological action of ligusticum chuanxiong [J]. Information of traditional Chinese medicine, 2020,37(06):128-133.
- [8] Liu jie. Jiawei shengyu decoction in the treatment of 30 cases of qi and blood deficiency deficiency with less moon passage [J]. Guangming traditional Chinese medicine, 2014,29(04):737-738.
- [9] Gu Yu-feng. Observation on curative effect of shengyu decoction on 80 cases of prolonged menstrual period [J]. Yunnan Journal of Traditional Chinese Medicine and Chinese Materia medica, 2005(05):14. [10] Pan lijuan. Analysis on the clinical effect of shengyu decoction on dysmenorrhea of qi and blood weakness [J]. Journal of shandong medical college, 2014,36(01):34.
- [11] Liu Xin-hua. Shengyu Decoction for treating 32 cases of caving [J]. Chinese Folk Therapeutics, 2005(02):49-50.
- [12] Wu Yuhong, Chen Shaodong. Clinical observation of shengyu decoction in the treatment of 40 cases of deficiency of qi and blood [J]. Bulletin of traditional Chinese medicine, 2014,13(04):54-55.
- [13] Li Chunxiang, DING Liyu, DING Fang, Hu Shuzhao, Wang Liang, Chen Jincheng. Effects of Paeonia lactiflora on nourishing blood, softening liver and relieving pain and its Compatibility and Correlation of paeoniflorin content [J]. New Chinese medicine and clinical pharmacology, 2011,22(01):54-56.
- [14] He Haiyan, Zhang Geping, Tan Juan, GAO Ruirui. Clinical study of Shengyu Decoction combined with acupuncture and moxibustion in treatment of breast hyperplasia [J]. Liaoning Journal of Traditional Chinese Medicine, 2020,48(04):164-167.
- [15] Effect of shengyu decoction on the treatment of menopause syndrome complicated with insomnia [J]. Medical theory & practice, 2020,33(08):1279-1281. (in Chinese)
- [16] Wang Lijun, Yang Kemin, Jiang Lijuan. Progress of traditional Chinese medicine treatment of ovulation dysfunction infertility [J]. Chinese Journal of Integrated Traditional and Western Medicine, 2018,13(04):267-269+273.
- [17] Xie Xiao-fang, PENG Cheng, ZHAO Xiao-mei, QIAO Wei-juan. Effect of Jiawei Shengyu Decoction on regulating menstruation and its mechanism [J]. Chinese Materia Medica Pharmacology and Clinical, 2012, V. 28; No.157(01):19-25.
- [18] Li jinghua. Shengyu decoction for treatment of ovulation dysfunction infertility in 60 cases [J]. Sichuan journal of traditional Chinese medicine, 2014,32(09):112-113.
- [19] Zhang Yunrong, Zhang Jiannan. Clinical study on effect of jiawei shengyu decoction on ovulation induction therapy [J]. Chinese medical forum, 2009,24(01):19-20.
- [20] Gao Hongzhen, Gu Shumei. Inner Mongolia journal of traditional Chinese medicine, 2010, 29(18):6. [21] Xu Jun-juan, Li Xiao-yan, NI Juan, MA Chen-han, HU Hui-min, Qiu Xue-xian, LI Qin, YU Xia-mei. Effect of Jiawei Shengyu Decoction on deep perineum ii degree lacerations and its effect on wound healing and pro-inflammatory factors [J]. Chinese Journal of Traditional Chinese Medicine, 2021,39 (07):29-31.
- [22] Huang R H. Shengyu Decoction combined with bone-setting manipulation in the treatment of 30 cases of cervical spondylotic myelopathy [J]. Henan traditional Chinese medicine, 2011,31(11):1275-1276.
- [23] Wang Qin-jian, Wang Yan. Clinical effect of Shengyu Decoction plus subtraction combined with acupuncture on patients with nerve root type cervical spondylosis with deficiency of qi and blood and influence on T lymphocyte subgroup [J]. Chinese journal of experimental formulae, 2020, 26(11):130-135.
- [24] Cao Hongchun, Li Zonglin, Yao Ming. Effect of shengyu Decoction combined with acupuncture and western medicine on cervical vertigo [J]. World Journal of Integrated Traditional And Western Medicine, 2021,16 (09):1724-1727+1732.

- [25] Feng Yan-qi, Ma Shao-cheng, Yao Ruo-yu, Wu Xue-qun, Xu Li-zhong, WAN Hong-bo. Effect of Shengyu Decoction on sdF-1 /CXCR4 signaling pathway in collagen-induced arthritis mice [J]. Anatomical Research, 2021,43 (03):257-263.
- [26] Cao Jian-fei, HE Si-jun, Song Ying-hong, DENG Hai-tao, TANG Qiang. Clinical observation of shengyu Decoction combined with Wuling SAN in the treatment of knee osteoarthritis complicated with synovitis [J]. Clinical practice of integrated traditional Chinese and western medicine, 2016,16(12):42-43
- [27] Shen Jintao, Zhang Yingjie, Wang Shangzeng. Application of "harmonizing qi and Blood" in the treatment of lumbar three transverse process syndrome [J]. Asia-pacific traditional medicine, 2020,16(08):109-111.
- [28] Sun Ming-liang, GAO Xiang, LI Li, ZHANG Yi-yi, JIANG Hong-jun, GAN Xiao-fang, Chen Xiao-yan, CAO Zhi-hua. Clinical observation of shengyu Decoction and Duhuizi Decoction combined with Traditional Chinese medicine directional drug penetration in the treatment of elderly lumbar disc herniation [J]. Chinese journal of general practice, 2019,17(08):1356-1359
- [29] Shen Jintao, Zhang Yingjie, Wang Shangzeng. Effect of shengyu decoction combined with apixaban on prevention of thrombosis after orthopedic surgery [J]. Asian-asia traditional medicine, 2020,16(04):116-118.
- [30] Xu Wenqiang. Clinical study of Shengyu Decoction in the treatment of chronic atrophic gastritis precancerous lesions with spleen and stomach weakness [D]. Shandong University of Chinese Medicine, 2020.
- [31] Li Danqing, He Fan. Effect of integrated Traditional Chinese and Western medicine on the expression of VEGF protein in patients with hepatocellular carcinoma complicated with acute gastrointestinal hemorrhage after radiofold ablation [J]. Guangdong med, 2017,38(15):2397-2399.
- [32] Liu Fenye, Sha Qipeng, Wang Wei. Chinese journal of traditional Chinese medicine, 2019,37(10):2328-2331. (in Chinese with English abstract)
- [33] Wang Ruojin, Li Shaodan, Wang Pu, Cui Yixin, Yang Qingqing, Wu Yu. Clinical study of shengyu Decoction in patients with advanced colon cancer with moderate anemia associated with tumor chemotherapy [J]. Journal of Traditional Chinese Medicine, 2021,27(02):49-52+59.
- [34] Zhang Chengcheng. Clinical efficacy of shengyu decoction in treatment of anemia after chemotherapy for gynecological malignant tumor [J]. China modern drug application, 2017,11(15):95-96.
- [35] Qiao Xiaoyan, Yang Shuming, CAI Jiaosheng. Clinical observation of shengyu decoction in the treatment of anemia after chemotherapy for malignant tumor [J]. Guangming traditional Chinese medicine, 2010,25(08):1423-1424.
- [36] Tang Congyao, Tian Zhaohua, Li Huaiyou, Chao Weiping. Effect of Shengyu Decoction on serum HMGB1, BNP and NSE levels in patients with hypertensive cerebral hemorrhage [J]. China medical guide, 2018,20(05):271-274.
- [37] Zhao Guangwei, Li Yongcai, Jiang Zhenglin, Xi Xin, Ma Dongming, Wang Yong, Wang Guohua. Neuroprotective effect of Jiawei Shengyu Decoction on traumatic brain injury in rats and its mechanism [J]. Shandong medicine, 2013,53(32):18-21+112.
- [38] Lin Haifei, Huang Lina. Clinical observation of shengyu decoction in the treatment of bradyarrhythmia with deficiency of qi and blood [J]. China journal of traditional Chinese medicine, 2015,33(05):1244-1246.
- [39] He Juan, Yang Qian, Xiao Bingkun, Yang Jianyun, Huang Rongqing. Study on serum metabolomics of shengyu decoction against hypoxia [J]. Military medical journal, 2020,44(01):64-67.
- [40] Li Di, Lou Xiqiang, Tao Yongjun. Effects of shengyu Decoction combined with early rehabilitation on neurological function and limb function in patients with ischemic stroke [J]. Clinical and education of general medicine, 2018,16(06):672-674.
- [41] Liu Yongtao, Liu Xiaoxin, Xie Lijuan, Wang Fei, Shi Yan, Wang Jianhua. Clinical efficacy and safety of Shengyu Decoction combined with Xingnaokai mute acupuncture in the treatment of aphasia after stroke [J]. Journal of Chinese medicine: 1-12 [2021-12-16]. http://kns.cnki.net/kcms/detail/21. 1546.R.20210706.1628.030.html.
- [42] Rui Jinwei, Qu Shujuan, Quan Yuanding, Yang Penghua, Yuan Yuepeng. Effects of shengyu Decoction combined with acupuncture on language function and quality of life in patients with aphasia after ischemic stroke [J]. Journal of modern integrated Chinese and western medicine, 2020, 29(35):3920-3924+3928.
- [43] Cheng Yingjie, Zhou Ce, Tang Ke, Peng Li, Song Zongzhu, Guo Jing. Chinese journal of traditional Chinese medicine, 2018,33(02):564-566. (in Chinese with English abstract)
- [44] Wang Yamei. Clinical observation of self-designed Shengyu Decoction in the treatment of female chloasma [D]. Chengdu University of Traditional Chinese Medicine, 2007.