Advances in Obstetrics and Gynecology Research, 2025, Volume 3, Issue 2
https://ojs.bbwpublisher.com/index.php/AOGR
Online ISSN: 2981-8060

Research Progress on Subchorionic Hematoma in Clinical Studies

Xin Guan[1], Xiaohui Qu[2], Xiangxiang Dai[1], Ruizhu Wen[1]

[1]Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi, China
[2]The Second Affiliated Hospital of Shaanxi University of Chinese Medicine, Xianyang 712000, Shaanxi, China

Abstract: Subchorionic hematoma (SCH), a common cause of vaginal bleeding in early pregnancy, is frequently associated with threatened abortion and preterm labor. It is primarily detected via ultrasonography, with reported incidence rates varying widely across studies (approximately 0.46–48%). With the accelerated pace of modern life, increasing stress, occupational factors, and emotional influences, the prevalence of SCH has risen significantly. The widespread adoption of ultrasound technology has also led to a growing number of asymptomatic SCH cases. Furthermore, the implementation of China's three-child policy and the rising proportion of pregnancies at advanced maternal age pose additional challenges for the clinical management of SCH. This article systematically reviews the etiology, pathogenesis, diagnostic criteria, pregnancy outcomes, and therapeutic advances in SCH from both traditional Chinese medicine (TCM) and Western medicine perspectives, aiming to provide evidence-based insights for clinical research and personalized treatment strategies.

Keywords: Subchorionic hematoma; Etiology; Pathogenesis; Diagnosis; Pregnancy outcomes; Integrated Chinese-Western medicine therapy

Online publication: July 8, 2025

1. Introduction

Subchorionic hematoma (SCH), also referred to as subchorionic hemorrhage, is a common complication in early pregnancy characterized clinically by vaginal bleeding, lumbar soreness, and lower back pain. It arises from blood accumulation between the chorionic plate and decidua basalis. The pathogenesis of SCH is closely linked to abnormal angiogenesis at the maternal-fetal interface, coagulation-fibrinolysis imbalance, and immune microenvironment dysregulation. Modern medical management primarily involves progesterone supplementation, anticoagulation therapy, and symptomatic treatment, though efficacy varies among individuals and carries risks of pharmacological side effects. TCM, guided by holistic principles and syndrome differentiation, employs kidney-tonifying, Chong Mai-stabilizing, blood-activating, and stasis-resolving methods. Integrating TCM with Western therapies has shown significant improvements in pregnancy outcomes. This review synthesizes recent clinical

studies to provide insights for advancing SCH research and personalized therapeutic approaches.

2. Etiology of SCH

2.1. Western medical etiology and pathogenesis

The precise etiology and pathogenesis of SCH remain incompletely understood. Studies suggest that SCH may arise from abnormal placental formation or implantation, immune dysfunction, coagulation disorders, and assisted reproductive technology (ART) pregnancies [1]. For instance, reduced protein S (PS) activity, decreased antithrombin III levels, elevated homocysteine (HCY) levels, and positive autoantibodies are associated with SCH susceptibility.

Medawara proposed the concept of "allogeneic fetal transplantation," positing that the fetus, as a semi-allogeneic entity, triggers a protective maternal immune response during pregnancy [2]. Immune tolerance to fetal antigens ensures safe gestation, with T lymphocytes and their subsets, particularly Th1/Th2 imbalance, playing a central role in SCH development [3].

SCH has been linked to hypercoagulability, positive autoantibodies (e.g., antiphospholipid antibodies, anti-β2 glycoprotein I antibodies, antinuclear antibodies), ART pregnancies, genital infections, unhealthy lifestyles, and trauma [4]. Wang *et al.* reported that advanced maternal age, a hematoma-to-gestational sac volume ratio ≥ 25%, prior intrauterine procedures, SCH detection before 8 weeks of gestation, and hematoma volume > 30 cm^3 correlate with higher risks of miscarriage, preterm birth, and placental adhesion [5]. Many studies investigating *in vitro* fertilization-embryo transfer (IVF-ET) assisted conception and SCH have shown that the incidence of SCH in IVF-ET pregnancies is higher than in natural pregnancies, and the reasons for this may be related to the following: firstly, the patients who undergo this technique have their reproductive endocrine abnormalities, and poor technique during IVF-ET may lead to shallow implantation or the use of medications that may affect the embryo to a greater or lesser extent, which may cause SCH. Firstly, the patients undergoing IVF-ET have their reproductive endocrine abnormalities, and poor technique during IVF-ET, resulting in shallow implantation, or the use of medications that affect the embryo to a greater or lesser extent, may cause SCH. In addition, coagulation abnormalities, immunologic abnormalities, infertility factors, history of miscarriage, history of menstrual cycles, and inflammation of the uterus or tubes of the pregnant women conceiving in IVF-ET may be related to the occurrence of SCH, and among them, coagulation abnormalities and immunologic abnormalities are closely related to the occurrence of SCH [6].

2.2. Summary of etiological categories

(1) Maternal factors: Coagulation dysfunction, immune dysregulation (e.g., antiphospholipid antibody syndrome), autoimmune diseases, thrombophilia.
(2) Placental abnormalities: Placental abruption, abnormal implantation, or developmental defects.
(3) External factors: Abdominal trauma, vigorous physical activity, or mechanical irritation from intercourse.
(4) Infection/Inflammation: Genital tract infections or vaginal dysbiosis.
(5) High-risk factors: Advanced maternal age, ART (e.g., IVF), polycystic ovary syndrome (PCOS), and smoking.

2.3. Pathogenetic mechanisms

(1) Aberrant angiogenesis: Downregulated placental angiogenesis factors (e.g., VEGF) impair decidual

vascular remodeling, precipitating hemorrhage [7].

(2) Coagulation-fibrinolysis imbalance: Hypercoagulable states (e.g., thrombophilia, antiphospholipid syndrome) promote hematoma formation at the maternal-fetal interface.

(3) Immune microenvironment dysregulation: Th1/Th2 imbalance and elevated proinflammatory cytokines exacerbate fetomaternal immune rejection.

2.4. TCM etiology and pathogenesis

Traditional Chinese Medicine believes that SCH belongs to the categories of "fetal leakage" and "fetal restlessness." Its pathogenesis centers on kidney deficiency and blood stasis, often complicated by spleen deficiency, liver Qi stagnation, and blood heat. The kidneys govern reproduction; insufficient kidney qi weakens the Chong and Ren meridians, depriving the fetus of nourishment. Blood stasis obstructs the uterus, diverting blood from its normal pathways and exacerbating hemorrhage risks. Modern TCM scholars emphasize the theory that "extravasated blood transforms into pathological stasis," highlighting the hematoma's dynamic pathological nature [8].

In "Fu Qing's Gynecology," the description of fetal leakage and fetal restlessness explains that the kidneys (the "root of innate vitality") and spleen (the "root of acquired vitality") are interdependent. Kidney essence relies on the spleen's transformative function to extract nutrients from food. If Qi deficiency cannot absorb blood, the fetus will leak. Blood heat causes movement, and movement causes fetal leakage. Treatment principles include tonifying the spleen and kidneys, replenishing Qi to control bleeding, and clearing heat to stabilize the fetus.

The descriptions of fetal leakage and fetal restlessness in "The Zhu Bing Yuan Hou Lun" and "Nv Ke Mi Zhi" indicate that the external causes of SCH patients include excessive work and rest, improper diet, invasion by the six exogenous pathogenic factors, environmental factors, and emotional factors, etc. The internal causes can be divided into "mother's illness," "unstable fetus," and "damage to the internal organs of the fetus." The Chong and Ren meridians are weakened and unable to collect blood and nourish the fetus, resulting in an unstable fetal origin.

3. Diagnosis of SCH: Western and TCM perspectives

3.1. Western medical diagnosis

The diagnosis of SCH primarily relies on ultrasonography, which visualizes the hematoma's size, location, morphology (crescent-shaped, triangular, annular, or irregular configurations), and involvement with the placenta or fetus. Ultrasound also distinguishes between acute, subacute, and chronic phases of SCH and rules out other causes of vaginal bleeding, such as ectopic pregnancy or hydatidiform mole, thereby guiding clinical management [9].

Hormonal biomarkers further aid in predicting adverse pregnancy outcomes during early gestation: Progesterone (P) and β-human chorionic gonadotropin (β-hCG) are critical for early fetal development. Declining progesterone levels or suboptimal β-hCG rise signal indicate abnormal pregnancy progression. Serum estradiol (E2) reflects placental and fetal growth. A slow or inadequate increase in E2 with advancing gestational age indicates potential pregnancy complications.

Emerging evidence highlights the role of Th1/Th2 cytokine imbalance in SCH prognosis. Elevated serum TNF-α and IL-2 (pro-inflammatory Th1 cytokines) coupled with reduced IL-4 and IL-10 (anti-inflammatory Th2 cytokines) correlate with higher risks of adverse outcomes [10].

3.1.1. Classification criteria for SCH

(1) By hematoma severity:

Mild: Hematoma-to-gestational sac area (or volume) ratio < 1/3

Moderate: Ratio 1/3–1/2

Severe: Ratio > 1/2

(2) Alternative grading based on maximum diameter:

Small: < 25% of gestational sac diameter

Medium: 25–50%

Large: > 50%

(3) By gestational timing:

Early SCH: Diagnosed before 12 weeks of gestation

Mid-term SCH: Diagnosed between 12–20 weeks

Late SCH: Diagnosed after 20 weeks (less common) [11]

3.2. TCM diagnosis

The Tai Chan Xin Fa distinguishes fetal leakage from fetal restlessness:

(1) Fetal leakage: Slight vaginal bleeding during pregnancy without lumbar soreness, abdominal pain, or pelvic pressure.

(2) Fetal restlessness: Vaginal bleeding accompanied by lumbar soreness, abdominal cramping, or a sensation of lower abdominal distension.

(3) Contemporary TCM practitioners classify SCH into seven primary syndrome patterns based on clinical manifestations [12]: Blood stasis pattern; Damp-heat pattern; Blood-heat pattern; Spleen-kidney deficiency pattern; Qi-blood deficiency pattern; Kidney Qi deficiency pattern; Traumatic injury pattern.

Statistical analyses indicate that kidney Qi deficiency is the most prevalent pattern, forming the basis for the therapeutic principle of "tonifying the kidneys to stabilize the fetus" in clinical practice.

3.3. Pregnancy outcomes of SCH

Studies indicate that SCH diagnosed before 12 weeks may either resolve or enlarge in later gestation, whereas those diagnosed after 12 weeks are more likely to expand, increasing risks of adverse outcomes [13]. SCH is associated with complications such as oligohydramnios, preterm premature rupture of membranes (PPROM), and fetal distress, ultimately leading to miscarriage, preterm birth, or low birth weight [14].

Shi *et al.* reported that SCH with threatened miscarriage significantly elevates risks of placental abnormalities (e.g., placenta previa, placental abruption), gestational diabetes, placenta accreta, and postpartum hemorrhage [15]. Chen observed that patients diagnosed with SCH during early gestation (4–13 weeks) exhibited less severe adverse outcomes compared to those diagnosed in mid- (14–27 weeks) or late gestation (28–34 weeks) [11]. Wang *et al.* concluded that the ratio of hematoma to the maximum diameter of the gestational sac was divided into large, medium and small hematomas, and that pregnant women with large and medium hematomas in the middle stage of pregnancy were more likely to have miscarriages and preterm deliveries [16]. The duration of hematoma was more than 4 weeks and more likely to be miscarried than less than 4 weeks; and pregnant women with subchorionic hematomas in the middle stage of pregnancy who were accompanied by vaginal bleeding were more likely to have miscarriages and preterm deliveries. Therefore, the earlier the SCH appears, the longer it lasts, the larger it is, and

the more likely it is to lead to an adverse pregnancy outcome if it is not diagnosed and treated in a timely manner.

4. Treatment of SCH

Given the adverse pregnancy outcomes associated with subchorionic hematoma (SCH), early detection through regular prenatal care and timely intervention are critical to mitigate risks. Current therapeutic strategies emphasize bed rest, emotional stabilization, and pharmacotherapy.

4.1. Western medical approaches

(1) Progesterone support: Dydrogesterone and progesterone are widely used to suppress uterine contractions and alleviate symptoms. International studies confirm dydrogesterone's efficacy in reducing miscarriage rates in threatened abortion [17].

(2) Anticoagulation therapy: Low-molecular-weight heparin (LMWH) and immunoglobulins address hypercoagulability and immune dysregulation.

(3) Adjunctive therapies: Magnesium sulfate, phloroglucinol, and α-lipoic acid are employed for symptom relief.

4.2. TCM medical approaches

TCM attributes SCH to kidney Qi deficiency, blood stasis, and spleen-stomach dysfunction, disrupting the Chong-Ren meridians' ability to nourish the fetus. Treatment focuses on: Tonifying the kidneys and spleen; Replenishing Qi and blood; Activating blood circulation and resolving stasis.

Huang *et al.* believe that the appearance of SCH in traditional Chinese medicine is related to insufficient kidney Qi, which leads to internal stagnation of blood stasis [18]. Kidney deficiency is the root cause, blood stasis is the standard, and the principle of taking the specimen into account is to nourish the kidney, promote blood circulation, remove blood stasis, stop bleeding, and stabilize the fetus. The combination of modified Shoutai Wan and Diqu progesterone has achieved good therapeutic effects in clinical practice. Wei *et al.* achieved good results in the treatment of threatened miscarriage combined with SCH with a combination of kidney tonifying, stasis resolving, and fetal stabilizing formula composed of 30 g yam and 15 g *Atractylodes macrocephala* [19]. Yang *et al.* found that in clinical patients with blood heat type SCH, the main symptoms are small abdominal pain or back pain, with a small amount of vaginal bleeding, bright red or deep red color, accompanied by dry mouth and throat [20]. Some people are accompanied by restlessness and lack of sleep, hot hands and feet, short and yellow urine, and constipation. The tongue is red in color, with thin yellow or greasy coating, and the veins are smooth or slippery. Didrogestrone combined with Huanglian Decoction granules is more effective than Didrogestrone alone. Some people have achieved good therapeutic effects on SCH by adding spleen tonifying drugs on the basis of kidney tonifying, combined with progesterone and vitamin E [21]. Sun achieved good results in the treatment of patients with Qi and blood deficiency by self-formulating Shoutai Wan modified Yiqi Yangxue Formula combined with progesterone injection when treating SCH [22]. The combination of Zishen Yutai Pill and Dexmedetomidine has achieved good results in the treatment of threatened miscarriage with spleen and kidney deficiency type SCH [23]. Guo found that the combination of kidney tonifying, blood activating, and fetal stabilizing formula and dexamethasone can effectively alleviate symptoms and improve treatment efficacy in the treatment of threatened miscarriage with SCH in early pregnancy [24].

Zhu *et al.* found that Jiaoai Hutai Tang can increase serum HCG and P levels in patients, help promote corpus luteum growth, synthesize pregnancy related hormones, reduce uterine contractions to prolong pregnancy, promote hematoma regression, reduce vaginal bleeding, and greatly increase the rate of full-term pregnancy [25]. Its combination with progesterone injection can achieve good therapeutic effects in the treatment of threatened miscarriage with SCH. Shoutai Pill is composed of *Cuscuta chinensis*, *Dipsacus aspera*, and Sangshi. It can strengthen the effect of convergence and hemostasis when used together with Puhuang charcoal. The combination of didroxyprogesterone has achieved good results in the treatment of kidney deficiency type SCH, can promote the absorption of hematoma, improve hormone levels, effectively shorten the time of hematoma and vaginal bleeding, and reduce the occurrence of adverse pregnancy outcomes [26]. Jiang *et al.* also adopted a combination of traditional Chinese and Western medicine treatment methods [27]. Western medicine used progesterone injection and dexamethasone, while traditional Chinese medicine gave oral administration of kidney tonifying and fetal stabilizing Chinese medicine and hemostatic moxibustion. In the treatment of SCH, the efficacy was better than using Western medicine alone or Western medicine combined with oral Chinese medicine. Intramuscular injection of progesterone injection combined with modified Jiaoai Tang has significant therapeutic effects on early SCH treatment [28].

In addition to traditional Chinese medicine decoction combined with hormone to treat SCH, there are other treatment schemes combined with treatment, such as traditional Chinese patent medicines and simple preparations combined treatment: Baotieling capsule combined with Diqu Progesterone has a good effect in treating SCH of kidney deficiency and blood stasis type [29]. Western medicine combined treatment: Tranexamic acid injection inhibits fibrinolysis by suppressing the activity of fibrinolytic enzymes, thereby exerting hemostatic effects. It is combined with HCG injection and progesterone injection to supplement hormones needed for pregnancy, inhibit uterine contractions, improve the success rate of fetal protection, and reduce the occurrence of adverse reactions [30]. Low molecular weight heparin has anticoagulant, antithrombotic, and immunomodulatory functions, and has a good effect on protecting the fetus. When combined with levonorgestrel, it has a better effect on treating subdural hematoma than levonorgestrel alone. It can effectively shorten the disappearance time of vaginal bleeding, abdominal pain, and subdural hematoma, reduce the incidence of adverse pregnancy outcomes, improve the secretion levels of E2, P, and β - HCG hormones, and increase the success rate of protecting the fetus [31].

Other combination therapies include research by Li *et al.* has shown that the combination of Jiawei Shoutai Pill and Metoprolol Injection can improve clinical efficacy in treating patients with threatened miscarriage and SCH accompanied by paroxysmal pain in the lower back or abdomen [32]. The combination of ear acupuncture and dexamethasone has also achieved good results in the treatment of SCH [33]. Acupoint application combined with HCG injection and progesterone injection has also achieved significant results in the treatment of SCH [34]. Zhang *et al.* believe that immune disorders are one of the causes of SCH. In the treatment of SCH, individualized treatment can be given to patients with abnormal levels of autoantibodies and cellular immune status. Suitable immune regulatory drugs such as immunoglobulin, low molecular weight heparin, alpha lipoic acid, progesterone preparations, and some traditional Chinese medicine formulas can be selected to achieve good results in the treatment of SCH. However, further research is needed in this area [35].

The above research indicates that the combination of traditional Chinese and Western medicine is the best choice for treating SCH, and individualized treatment plans should be adopted for specific clinical situations. The best clinical prescription should be selected for each patient based on syndrome differentiation and treatment.

5. Summary and prospect

In summary, SCH can lead to many adverse pregnancy outcomes, which hurt both the family and the pregnant woman herself. Therefore, clinical doctors should pay attention to every SCH patient, instruct them to undergo timely prenatal check-ups, and detect and treat SCH promptly. SCH patients can be diagnosed through examinations such as ultrasound, hormone levels, and influencing factors, and provide personalized treatment plans for each patient. The combination of traditional Chinese and Western medicine can be the first choice for treating SCH patients. However, there are many causes of SCH, and the pathogenesis of SCH is not yet clear. Further study is needed to clarify the factors that cause SCH and the pathogenesis of SCH, so that targeted treatment can be carried out. Clinical doctors should also improve their own diagnosis and treatment level to improve the success rate of the cure.

Funding

Key Research and Development Project of Xianyang Science and Technology Bureau, Shaanxi Province (Project No.: 2021ZDYF-SF-0041); National Famous Traditional Chinese Medicine Expert Yang Jianbing Inheritance Studio Construction Project (Project No.: National Medical Education Letter [2022] No. 75)

Disclosure statement

The authors declare no conflict of interest.

References

[1] Xu T, Lun W, Wang P, et al., 2023, Analysis of Risk Factors and Pregnancy Outcomes in Pregnant Women With Subchorionic Hematoma. Medicine, 102(47): e35874.

[2] Rendell V, Bath N, Brennan T, 2020, Medawar's Paradox and Immune Mechanisms of Fetomaternal Tolerance. OBM Transplantation, 4(1): 26.

[3] Wang H, Zhang F, 2023, Advances in Research Related to the Etiology and Treatment of Subchorionic Hematoma. Chinese Science and Technology Journal Database (full text version) Medicine and Health Care, 2023(5): 110–114.

[4] Lun W, Wang P, Xu T, 2023, Relationship Between Coagulation Status, Autoantibodies, and Conception Method With Subchorionic Hematoma. Zhonghua Fu Chan Ke Za Zhi, 58(11): 833–837.

[5] Wang X, Jiao J, Man X, et al., 2023, Analysis of Risk Factors for Premature Delivery and Abortion in Subchorionic Hematoma. Chinese Journal of Practical Gynecology and Obstetrics, 39(12): 1237–1240.

[6] Yu G, Fan J, Yu Q, et al., 2023, Analysis of the Influencing Factors of the Subchorionic Hematoma of Pregnant Women After In Vitro Fertilization Embryo Transfer. Chinese Journal of Family Planning, 31(12): 2962–2966.

[7] Huang Y, Liu Q, Yu Y, 2014, Relationship Between Fetal Growth Restriction and Angiogenesis Factors. Journal of Southern Medical University, 34(7): 1068–1070.

[8] Zhu Y, Xu C, Ling N, 2024, Research Progress in the Diagnosis and Treatment of Subchorionic Hematoma by Tonifying Kidney and Removing Blood Stasis Method. Journal of Liaoning University of Traditional Chinese Medicine, 26(3): 216–220.

[9] Shen Y, 2023, Correlation Between Early Pregnancy Hormone Levels and Pregnancy Outcome in Pregnant Women With Preeclampsia Combined With Subchorionic Hematoma. Chinese Science and Technology Journal Database (Full

Text Version) Medicine and Health Care, 2023(12): 34–37.

[10] Wu X, Wang S, Cao Y, 2023, Relationship Between Serum Th1/Th2 Cytokines and Progesterone, β-Human Chorionic Gonadotropin Levels and Pregnancy Outcome in Patients With Early Threatened Abortion Combined With Subchorionic Hematoma. Hainan Medical Journal, 34(9): 1290–1294.

[11] Chen H, 2022, Influence of Different Gestational Weeks and Different Degree of Subchorionic Hematoma on Pregnancy Outcome. Fertility and Health, 28(13): 31–33.

[12] Fang F, Chen X, 2018, Influencing Factors of Early Threatened Abortion Complicated With Subchorionic Hematoma and Distribution Principle of TCM Syndromes. China Modern Doctor, 56(32): 129–132.

[13] Ding X, Cang R, Wei D, et al., 2021, The Association Between the Subchorionic Hematoma of Pregnant Women and Their Increased Risk of Preterm Birth: A Meta-analysis. Chinese Journal of Family Planning, 29(9): 1784–1789 + 1793.

[14] Xu T, Lun W, Wang P, et al., 2024, Risk Factors and Pregnancy Outcomes of Subchorionic Hematoma in Patients With Threatened Abortion. China Medical Engineering, 32(1): 85–88.

[15] Shi Y, You H, Liu Y, et al., 2022, The Effect of Preeclampsia Combined with Subchorionic Hematoma on the Outcome of Pregnancy. Renowned Doctor, 2022(2): 101–103.

[16] Wang X, Zhao X, 2023, Effect of Different Types of Subchorionic Hematoma on Pregnancy Outcome in Second Trimester. Clinical Medicine, 43(9): 5–8.

[17] Carp H, 2012, A Systematic Review of Dydrogesterone for the Treatment of Threatened Miscarriage. Gynecological Endocrinology, 28(12): 983–990.

[18] Huang Y, Xu C, Li C, 2023, Clinical Observation on the Adjuvant Treatment of Subchorionic Hematoma Combined With Preeclampsia With Jiawei Shoufu Pill. Practical Clinical Journal of Integrated Traditional Chinese and Western Medicine, 23(16): 110–112 + 124.

[19] Wei Z, Yang C, Wan Y, et al., 2022, Efficacy of Tonifying the Kidney, Resolving Blood Stasis and Stabilizing the Fetus Combined With Dextroprogesterone in the Treatment of Early Preeclampsia Combined With Subchorionic Hematoma and Its Effects on Progesterone, Chorionic Gonadotrophin and Immunoinflammatory Factors. Modern Journal of Integrated Traditional Chinese and Western Medicine, 31(14): 1973–1976.

[20] Yang S, Wang W, Hu H, 2023, Treatment of Blood-Heat Type Preeclampsia Complicated by Subchorionic Hematoma by Adding Flavors to Huanglian and Agaricus Soup 35 Cases. Zhejiang Journal of Traditional Chinese Medicine, 58(6): 450–451.

[21] Ren P, Chen J, 2023, Clinical Observation on the Treatment of Spleen and Kidney Deficiency Type Early Pregnancy Threatened Abortion Combined With Subchorionic Hematoma by Combination of Chinese and Western Medicine. Electronic Journal of Practical Gynecological Endocrinology, 10(1): 33–35.

[22] Sun L, 2022, Effect of Self-Made Yiqi Yangxue Hutai Decoction Combined With Progesterone Injection on Efficacy and β-Human Chorionic Gonadotropin Level for Patients With Early Threatened Abortion Complicated With Subchorionic Hematoma of Qi-Blood Deficiency Syndrome. Journal of Sichuan of Traditional Chinese Medicine, 40(9): 151–154.

[23] Pan J, Fang Y, Yan H, et al., 2022, Effects of Zishen Yutai Pills Combined With Dydrogesterone on HCG Level and Bleeding Area in Patients With Threatened Abortion With Subvillous Hematoma. Journal of Hubei University of Chinese Medicine, 24(5): 77–79.

[24] Guo X, 2022, Clinical Efficacy of Tonifying the Kidney, Strengthening the Spleen, Resolving Blood Stasis and Stabilizing the Fetus in the Treatment of Early Pregnancy With Preeclampsia Combined With Subchorionic

Hematoma With Spleen and Kidney Deficiency and Blood Stasis. The Journal of Medical Theory and Practice, 35(29): 3329–3331.

[25] Zhu X, Li H, Yuan W, 2021, Clinical Study on Jiao'ai Hutai Tang Combined With Progesterone Injection for Threatened Abortion Complicated With Subchorionic Hematoma. New Chinese Medicine, 53(16): 77–80.

[26] Xie H, Gao X, Xie X I E, et al., 2021, Effects of Puhuang Charcoal Combined With Shoutai Pills for Subchorionic Hematoma Patients With Threatened Abortion Due to Deficiency of Kidney. Journal of Clinical Medicine in Practice, 25(20): 13–17.

[27] Jiang D, Zhang Y, Zhang J, et al., 2022, Effect of Hemostatic Moxibustion Combined With Kidney Tonifying and Fetal Safety Prescription on Immune Factors and Pregnancy Outcomes for Female Patients With Early Threatened Abortion and Subchorionic Hematoma. Journal of Sichuan of Traditional Chinese Medicine, 40(12): 161–166.

[28] Xu D, Sun Y, Hu X, 2023, Clinical Observation on 72 Cases of Subchorionic Hematoma in Early Pregnancy Caused by Cold-Congealed Blood Stasis in the Treatment of Gum Ai Tang Plus Flavor. Chinese Journal of Traditional Medical Science and Technology, 30(3): 545–547.

[29] Zhang R, 2023, Effectiveness Observation on the Treatment of Early Preeclampsia With Subchorionic Hematoma by the Combination of Fertility Preserving Spirit Capsules and Deferiprone in Early Preeclampsia. Practical Clinical Journal of Integrated Traditional Chinese and Western Medicine, 23(24): 51–53 + 101.

[30] Liu J, Lan P, Lu X, 2022, Clinical Study of Tranexamic Acid Injection Combined With Chorionic Gonadotropin and Progesterone Injection in the Treatment of Preeclampsia Combined With Subchorionic Hematoma. Heilongjiang Medicine and Pharmacy, 45(6): 50–52.

[31] Liu Y, Liu Y, 2023, Application of Low Molecular Weight Heparin in the Treatment of Subchorionic Hematoma. Electronic Journal of Practical Gynecological Endocrinology, 10(14): 75–77.

[32] Li Y, Dong M, Chen C, 2022, Influence of Phloroglucinol Combined With Modified Shoutai Pills on Patients With Threatened Abortion and Subchorionic Hematoma. Hebei Journal of Traditional Chinese Medicine, 44(11): 1857–1860 + 1878.

[33] Wu J, Ning Y, Liao J, et al., 2019, Effect on Immune Factors and Serum CA125 in Patients of Threatened Abortion in Early Pregnancy Complicated With Subchorionic Hematoma Treated With Auricular Acupuncture Combined With Dydrogesterone. Chinese Acupuncture & Moxibustion, 39(10): 1046–1050.

[34] Huang K, 2020, Analysis of the Efficacy of Acupoint Compresses Combined With Human Chorionic Gonadotropin and Progesterone in the Treatment of Patients With Preeclampsia. Practical Clinical Journal of Integrated Traditional Chinese and Western Medicine, 20(3): 33–34.

[35] Zhang C, Wang F, Mou F, et al., 2023, Progress in the Study of the Relationship Between Immunologic Factors and Subchorionic Hematoma. Chinese Journal of Family Planning & Gynecology, 15(3): 32–36.