

The Prevention and Treatment Of Recurrent Spontaneous Miscarriage

by Li Qin Zhao

Abstract

Miscarriage is becoming a common condition for pregnant women, especially in recent years where miscarriage rates have progressively increased as women try to conceive later in life and more and more patients seek IVF treatment. Traditional Chinese Medicine (TCM) has demonstrated that it can prevent and treat recurrent spontaneous miscarriage (RSM) effectively and successfully. In this article, the author analyses the aetiology and pathology of RSM and discuss the differentiation and general modifications according to her clinical experience. The author will also introduce the modern Western medicine approach regarding the diagnosis and treatment of RSM, particularly in with immunological reactions, and report two case studies.

Introduction

RSM is a term used when three or more consecutive miscarriages have occurred. It is also known as Habitual Abortion. Miscarriage affects around 25% of all pregnancies^[1]. Recurrent miscarriage occurs in at least 15% of confirmed pregnancies during the first trimester (12 weeks)^[2]. 21% of IVF pregnancies are miscarried spontaneously^[1], and women around the age of 40 experience nearly 50% pregnancy loss with IVF alone^[3]. In Western medicine, there are three stages to a miscarriage or spontaneous miscarriage: threatened miscarriage, incomplete miscarriage and complete miscarriage. There is little to prevent or treat recurrent miscarriage in western medicine. On the contrary, TCM has been treating it for thousands of years, not only preventing miscarriage but also maintaining the pregnancy until full term, and therefore increase the live birth rate.

TCM Aetiology and Pathology

According to TCM philosophy, therefore we focus on determining the underlying causes of RSM. There are six main factors according to my clinical experience and the TCM literature that I have researched.

1. Deficiency of kidney and spleen, disharmony of chong and ren channels

The kidney is considered as ‘the origin of congenital constitution’, it stores essence, dominates growth, development and reproduction. The spleen is ‘the material basis of the acquired constitution’, and ‘the source of qi and blood’. The chong channel is the sea of blood, and the ren channel is the sea of yin channels, arising from the uterus in women and is related to conception. Both of them are responsible for blood supply to the foetus. A kidney and spleen deficiency will lead to an inadequate quantity of essence and blood and a disharmony of the chong and ren channels. As a consequence, the foetus cannot be nourished and miscarriage occurs.

2. Deficiency of kidney qi with blood stagnation in the uterus

Women born with a constitutional kidney qi deficiency; or those who have taken the oral contraceptive pill long term; or have had more than one consecutive miscarriage; or many failed IVF attempts, or several strong hormonal drugs have been used can impair the kidney qi, causing kidney qi deficiency and inadequate essence, blood stagnation in the uterus, where the foetus is devoid of blood supply and stops growing, eventually miscarrying.

3. Deficiency of qi and blood:

The spleen and stomach transport and transform the food we eat into usable nutrients and energies, and are considered as “the source of qi and blood”. A spleen or stomach deficiency could cause inadequate blood production and the sinking of qi, consequently failing to nourish and hold the foetus, leading to a miscarriage.

4. Yin deficiency with blood heat

A woman born with a constitutional yin deficiency, or long term emotional factors such as stress, worry, anxiety, fear, anger or grief, can cause liver qi stagnation, which eventually turns into liver fire and blood heat ; or suffers from heat syndromes such as

infection during pregnancy. The heat will attack the foetus in the uterus and cause a miscarriage.

5. Damp heat stagnating in the uterus

Severe endometriosis or fibroids that have been inflamed or urinary tract infections (UTI) during pregnancy can produce excessive heat and damp in the body, stagnating in the uterus. This can affect the development of a foetus. It may eventually lead to a miscarriage if left untreated.

6. External factors-Traumatic injury

Any falls, accidents, impacts, or physical work may impair the chong and ren channels, causing disharmony of qi and blood. As a consequence, foetus growth and development may be affected and threaten a miscarriage.

Differentiation and Treatment

Traditionally there are four patterns of miscarriage. However, I have modified them according to my clinical experience and divided them into six patterns.

1. Kidney yang and spleen qi deficiency

It is commonly seen in women with Luteal Phase Defect (LPD), which can cause infertility initially and miscarriage in the early stage if a pregnancy is achieved.

Signs and symptoms

Pain in the lower back; sinking sensation in the lower abdomen; vaginal bleeding during early pregnancy; dizziness; frequent urination and feeling cold; pale tongue and a weak pulse.

Treatment principle

Strengthen kidney yang and spleen qi; warm the uterus to calm and nourish the foetus.

Acupuncture points

Baihui (DU 20), Geshu (UB 17), Pishu (UB 20), Shenshu (UB 23), Zusanli (ST 36), Taixi (KI 3) and moxa on Yinbai (SP 1).

Patent herbs

Shou Tai Wan (Foetus Longevity Pill), Nuan Gong Yun Zi Wan (Warm Uterus to Support Conception Pill), or Tai Shan Pan Shi San (Taishan Bedrock Powder); Bu Shen Gu Chong Wan (Strengthen the Kidney to Secure the Chong Channel Pill) if the woman has had previous miscarriages.

Dried herbs or concentrated powders

Tu Si Zi, Xu Duan, Sang Ji Sheng, Du Zhong, Shu Di Huang, Chao Bai Zhu, Dang Shen, Ai Ye and Gui Zhi.

2. Kidney qi deficiency with blood stasis

It is more likely to occur in women who have autoimmune disorders or anti-phospholipid syndrome (blood clotting disorders). Miscarriage can happen at any stage of the pregnancy.

Signs and symptoms

Backache or sore back; fatigue; vaginal bleeding or spotting with dark brown blood; slow developing and growing foetus; pink tongue with black spots and a deep and thready pulse

Treatment principle

Strengthen the kidney qi; invigorate the blood and dispel blood stasis; nourish the foetus.

Acupuncture points

Baihui (DU 20), Geshu (UB 17), Ganshu (UB 18), Shenshu (UB 23), Xiehai (SP 10), Fuli (KI 4).

Patent herbs

Shou Tai Wan (Foetus Longevity Pill) combined with Gui Zhi Fu Ling Wan (Cinnamon Twig and Poria Pill).

Dried herbs and concentrated powders

Tu Si Zi, Sang Ji Sheng, Xu Duan, Du Zhong, Ji Xie Teng, Dan Shen, Chuan Xiong, Huang Qi, Gui Zhi, Mu Dan Pi, Chi Shao Yao.

3. Qi and blood deficiency

It often occurs in early pregnancy for women with hypothyroidism, LPD, or incompetent cervix.

Signs and symptoms

Tired and weak; shortness of breath; sinking sensation in the lower abdominal area; bloated stomach; light bleeding with a pink colour; pale complexion; pale tongue; fine and slippery pulse.

Treatment principle

Tonify the Qi and blood, strengthen the kidney to boost the essence and nourish the foetus.

Acupuncture points: Baihui (DU 20), Yintang (EX-HN3), Neiguan (PC 6), Zusanli (ST 36) and moxa on Geshu (UB 17), Ganshu (UB 18), Pishu (UB 20) and Yinbai (SP 1).

Patent herbs

Tai Yuan Yin (Foetal Source Beverage), Gui Pi Wan (Restore the Spleen Pill), or Bu Zhong Yi Qi Wan (Tonify the Middle to Augment the Qi Pill), or the combination of two of them.

Dried herbs or concentrated powders: Dang Shen, Chao Bai Zhu, Shu Di Huang, Bai Shao, Huang Qi, Dang Gui, Du Zhong, Sheng Ma, Sha Ren, Zhi Gan Cao.

4. Yin deficiency with blood heat

It is likely to occur in women producing anti-sperm antibodies, natural killer cells or hyperthyroidism.

Signs and symptoms

Vaginal bleeding in the early pregnancy with bright red blood; restless foetus; abdominal pain; constipation; irritation and restlessness; anxiety; disturbed sleep; hot palms; hectic fevers; night sweats; red tongue with a yellow coating or no coating at all; taut, slippery and rapid pulse.

Treatment principle

Nourish the yin and blood, clear the heat and calm the foetus.

Acupuncture points

Yintang (EX-HN3), Xiehai (SP 10), Quchi (LI 11), Neiguan (PC 6), Shenmen (HT 7), Taixi (KI 3); Taichong (LIV 3), Geshu (UB 17), Ganshu (UB 18).

Patent herbs

Bao Yin Jian (Protect the Yin Beverage) and Yang Xie An Shen Wan (Nourish the Blood to Calm the Shen Pill).

Dried herbs or concentrated powders

Sheng Di Huang, Huang Qin, Bai Shao Yao, Han Lian Cao, Mai Men Dong, Shan Yao, Xu Duan, Dan Shen, Suan Zao Ren, Fu Ling, Gan Cao.

5. Damp heat stagnation in the uterus

This is likely to occur in the second or third trimester after having been infected.

Signs and symptoms

Abdominal pain; bloated stomach; fever; itchy skin; headaches; restlessness; slow developing foetus (or even stop growing); dark, red tongue with a yellow greasy coating; slippery and rapid pulse.

Treatment principle

Clear excess heat and remove the dampness, detoxifies the blood to nourish the foetus.

Acupuncture points

Yintang (EX-HN3), Neiguan (PC 6), Quchi (LI 11), Xiehai (SP 10), Zusanli (ST 36), Yinlingquan (SP 9); Geshu (UB 17), Ganshu (UB 18), Pishi (UB 20), Taichong (LIV 3).

Dried herbs or concentrated powders

Huang Qin, Jin Yin Hua, Lian Qiao, Chi Shao Yao, Sheng Di Huang, Dan Shen, Mu Dan Pi, Huang Bai, Fu Ling, Yin Chen.

6. Traumatic injuries*Signs and symptoms*

Lower abdominal pains with a sinking sensation; backache; restless foetus; vaginal bleeding for the worst cases; pale complexion; lethargy and a weak pulse.

Treatment principle

Tonify the Qi and nourishes the blood; invigorate the kidney; calm the foetus; tranquilise the spirit; ease the mind.

Acupuncture points

Baihui (DU 20), Si Shen Cong (EX-HN1), Yintang (EX-HN3), Neiguan (PC 6), Zusanli (ST 36), Shenmen (HT 7).

Patent herbs

Gui Pi Wan (Restore the Spleen Decoction) combined with Shou Yai Wan (Foetus Longevity Pill).

Dried herbs and concentrated powders

Ren Shen, Huang Qi, Bai Shao Yao, Gan Cao, Shu Di Huang, Tu Si Zi, Sang Ji Sheng, Xu Duan, Long Yan Rou, Chao Bai Zhu, Fu Shen, Du Zhong.

General Modifications

It is often the case that patients have more complicated conditions. Therefore, modifications are necessary and can make a significant impact on the outcome. Here I summarised the general modifications according to my clinical experience:

- For blood deficiency, add Dang Gui, Shu Di Huang, Gou Qi Zi, He Shou Wu, Ji Xie Teng, and needle Geshu (UB 17) and Ganshu (UB 18).
- For Qi deficiency, add Huang Qi, Dang Shen, Sheng Ma, Chai Hu, and needle Zusanli (ST 36), Baihui (DU 20), use moxa on Qihai (Ren 6) and Guanyuan (Ren 4).
- For spleen deficiency, add Fu Ling, Shan Yao, Bai Zhu, and needle Zusanli (ST 36), Yinlingquan (SP 9), use moxa on Pishu (UB 20) and Weishu (UB 21).
- For kidney Yang deficiency, add Du Zhong, Xu Duan, Tu Si Zi, Gui Zhi, and use moxa on Shenshu (UB 23) and Mingmen (DU 4).
- For kidney Yin deficiency, add Shu Di Huang, Han Lian Cao, Shan Zhu Yu, Sang Shen Zi, Huang Jing, Mai Men Dong, and needle Taixi (KI 3), Shenmen (HT 7), Shenshu (UB 23) and Neiguan (PC 6).
- For abdominal pains, add Bai Shao Yao, Gan Cao, and use moxa on Zusanli (ST 36), Pishu (UB 20) and Ganshu (UB 18).
- For the sinking sensation in the lower abdomen, add Huang Qi, Sheng Ma, Chai Hu, and use moxa on Pishu (UB 20), Baihui (DU 20), Zusanli (ST 36).
- For bleeding due to heat, add Han Lian Cao, Huang Qin, and needle Xiehai (SP 10), Dadun (LIV 1) and Quchi (LI 11) acupuncture points. For bleeding due to cold, add Ai Ye, Jing Jie Sui, and use moxa on Baihui (DU 20) and Yinbai (SP 1).
- For nausea and poor appetite, add Sha Ren, Chen Pi, Bai Zhu, Sheng Jiang, and needle Neiguan (PC 6), Zusanli (ST 36), Zhongwan (Ren 12) and Shenque (Ren 8).
- For stress, anxiety and insomnia, add Chai Hu, Bai Shao Yao, Suan Zao Ren, Wu Wei Zi, Fu Shen, Long Yan Rou, Bai Zi Ren, and needle Baihui (DU 20), Si Shen Cong (EX-HN1), Yintang (EX-HN3), Neiguan (PC 6) and Shenmen (HT 7).

Western Medicine Approach on Diagnosis and Treatment

Immunological reactions

Recent research has been suggested that in some cases of human reproductive failure (RSM and infertility), they may be the consequence of immunological abnormalities^[4]. Approximately 80% of miscarriages are caused by an immunologic reaction^[5]. Dr. George Ndukwe has developed the reproductive immunology programme at CARE for RSM in collaboration with the immunology laboratory at the Chicago Medical School in the USA. There are five categories of immunologic problems that can cause pregnancy loss^[6].

- Autoimmune disorders - lack of the blocking antibody to pregnancy:

In couples that are a close genetic match, there is a lack of the Blocking antibody to pregnancy. The embryo or foetus is rejected and the pregnancy fails. The treatment for this is Lymphocyte immune therapy (LIT).

- Development of antibodies to Phospholipids

Antiphospholipid antibodies can cause placental thrombosis (thrombophilias), starving the embryo or foetus, resulting in a miscarriage. This is called Antiphospholipid Syndrome (APS) or Blood clotting disorder. The use of low doses of Aspirin and Heparin in the cycle and through pregnancy has been shown to improve pregnancy outcome^[7].

- Development of anti-sperm antibodies and anti-nuclear antibodies

Women can develop anti-sperm antibodies which kill the sperm as it enters the vagina, or kills the developing embryo preventing implantation. Anti-nuclear antibodies can directly attack the embryo or foetus and cause it to abort. The treatment for this is steroids such as Prednisolone or Dexamethasone, started on day six of the menstrual cycle and continued until at least 13 weeks of pregnancy.

- Elevated Natural Killer (NK) cells and elevated Cell Designation (CD) cells and Altered Th-1/Th-2 ratios

All these factors can attack the fertilized eggs and prevent implantation, resulted in a miscarriage. Possible treatment for this may include LIT, Intravenous Immunoglobulins (IVIg), Humira, low dose Aspirin or Prozac.

- Hypothyroidism and hyperthyroidism

Approximately 23-35% of women with RSM have anti-thyroid antibodies^[8], which may be indicative of these thyroid disorders. The medication for this is Thyroxine. However, this research is still in the experimental stages and the therapeutic effect has not been clearly established. These drugs can be very expensive, and there are potentially serious adverse reactions.

Other possible causes of RSM

- 70% of defected conceptions are caused by Chromosomal abnormalities and genetic diseases^[2].

Endocrine disorders

- Premature ovarian failure (POF): high follicle stimulating hormone (FSH).
- Luteal phase defect (LPD): inadequate progesterone production.

Uterine problems

- Uterine abnormalities.
- Uterine adhesion or cervical lesion.
- Endometriosis or fibroids.
- Incompetent cervix.

Maternal infections

- Rubella, toxoplasmosis, appendicitis, pneumonia, or urinary tract infection (UTI).

Typical Cases

Case one: Kidney yang and spleen qi deficiency, together with traumatic injury.

Jane, 31 years old, solicitor. She had achieved five pregnancies, one resulting in a live birth, one miscarried at 12 weeks, and another three miscarried at 5-6 weeks. She conceived again five months later after the last miscarriage, and went to see the consultant in the Early Pregnancy Assessment Unit (EPAU) at the hospital. She was told that they could neither conduct any investigation during pregnancy, nor offer preventative treatment. Instead, they advised her to try alternative medicine. She was five weeks pregnant and felt tired and cold, extremely stressed and anxious, experienced lower abdominal pain and backache, frequent urination, pale complexion. She also had a pale tongue with patched coating, and a deep, thin pulse.

Treatment

Acupuncture points: Baihui (DU 20), Yintang (EX-HN3), Neiguan (PC 6), Shenmen (HT 7), Zusanli (ST 36). Moxa on Guanyuan (Ren 4), Qihai (Ren 6), Shenshu (UB 23) and Mingmen (DU 4). This was done weekly until 14 weeks, and then once every 4 weeks until 29 weeks.

Herbal prescription: Huang Qi, Dang Shen, Chao Bai Zhu, Dang Gui, Bai Shao Yao, Sang Ji Sheng, Xu Duan, Du Zhong, Tu Si Zi, Shu Di Huang, Ai Ye, Sha Ren and Zhi Gan Cao. Six bags a week until 8 weeks, then four bags a week until 12 weeks. Meanwhile, she was advised to work part time.

She had no complaints at all after two weeks of treatment, apart from feeling a bit tired and nauseas. She had blood tests and ultrasound scans regularly every 2-3 weeks until 17 weeks, and had found that the

foetus was developing well all the way through. Unfortunately, she was involved in a car accident at 29 weeks, had suffered from severe pain on her neck, back, shoulder and chest, headache, stomach cramps, anxiety and insomnia. However, an ultrasound scan showed that the baby was fine.

I altered the acupuncture prescription as follows: Baihui (DU 20), Sishencong (EX-HN1), Yintang (EX-HN3), Neiguan (PC 6), Shenmen (HT 7), Zusanli (ST 36), Taichong (LIV 3), Tanzhong (Ren 17), Jingbailao (EX-HN15), Jianzhongshu (SI 15), Tianzong (SI 11) and a few Ashi points.

The herbal prescription was: Dang Shen, Huang Qi, Bai Shao Yao, Gan Cao, Suan Zao Ren, Shu Di Huang, Tu Si Zi, Xu Duan, Sang Ji Sheng, and Du Zhong. One bag a day for 10 days. She went on to deliver a healthy baby boy naturally at full term.

Case two: Yin deficiency with blood heat

Natalie, 33 years old, company manager. She had been trying to conceive for four years, had achieved five pregnancies, including one natural pregnancy and four IUI pregnancies. Unfortunately, she miscarried one at 9 weeks, and the other four at 4-5 weeks. She had blood tests for immunological reactions and chromosomal defects, the results were normal. She was referred to me when she was undergoing IVF treatment from CARE Fertility hospital.

She always had painful and clotty periods ever since she was young and had to take painkillers for pain relief. She also went on the contraceptive pill for five years before trying for a family. She was physically healthy, but mentally very stressed and busy with her business. She also went to the gym 3-4 times weekly, the excessive exercise leading to profuse sweating. She drank 5-6 cups of tea and coffee each day. She had a red tongue with a thin coating, thread and rapid pulse.

Treatment

Before egg collection, acupuncture was given to tonify qi and nourish blood, improve egg quality, and prepare her body while she was on the IVF drugs. The points used: Yintang (EX-HN3), Neiguan (PC 6), Hegu (LI 4), Tianshu (ST 25), Guanyun (Ren 4), Zigong (EX-CA1), Xiehai (SP 10), Sanyinjiao (SP 6), Taixi (KI 3), Taichong (LIV 3), Shenshu (UB 23), Geshu (UB 17). Meanwhile, I advised her to stop drinking tea and coffee, to exercise in moderation, and work fewer hours.

After the embryos had been transferred, acupuncture points were altered to support implantation: Baihui (DU 20), Neiguan (PC 6), Shenmen (HT 7), Zusanli (ST 36), Taixi (KI 3). Auricular points: Naodian (Brain), Neifenmi (Endocrine). She was prescribed Clexane injection and Progesterone pessaries at the hospital. I advised her to stop exercising completely for 12 weeks and take it easy.

When she successfully conceived, treatment was changed to maintain the pregnancy: she had a bit of brownish spotting at 6 weeks for one day, but with no abdominal pain or backache. She received an ultrasound scan the next day and the foetus' heartbeat was detected. I modified the acupuncture points again accordingly during pregnancy. She was fine until 17 weeks when she experienced light bleeding, which was found to be caused by a polyp in her uterus. We monitored her closely, the polyp stopped growing and she had no more bleeding. She eventually gave birth to a healthy baby daughter at full term.

Discussion

Spontaneous miscarriage can be very heart-breaking, especially after a woman has suffered from fertility difficulties in the past, and gone through years of treatment to achieve the pregnancy. The most overwhelming loss a woman can experience is the reoccurrence of consecutive miscarriages. In some countries, they would not be investigated until it happened at least three times. All they could do is 'wait and see'. Whenever they managed to conceive, they would go through an emotional roller coaster and wait with tremendous stress and anxiety, which would worsen their condition even further and increase the risk of miscarriage. Therefore when we treat these patients, it is crucial that we strengthen the kidney and tonify the blood to encourage their body to be more conceptive and maintain the pregnancy to full term. Soothing liver qi and nourishing heart blood to ease their mind must also be considered.

When a pregnant woman experiences lower abdominal pain or vaginal bleeding during the early stages of pregnancy, they should be checked to ensure that it is not an ectopic pregnancy. To be able to treat the patients effectively, we must understand their TCM diagnosis and differentiation. The most important rule to remember in treating miscarriage is not to move the qi too forcefully or quicken the blood. Any Chinese herbs or acupuncture points with those functions should be used carefully or completely avoided. For those women who have had previous miscarriages, receiving TCM treatment to prepare their body before conception is just as important as the treatment during pregnancy.

It is necessary to sometimes combine Chinese medicine with Western medicine to achieve the best possible

result. However, when we treat pregnant women who have conceived through IVF, ICSI or IUI, I would suggest that we must be extra cautious about prescribing Chinese herbs, especially if they have immunological disorders (which are often prescribed the aforementioned medication). In these cases, I strongly recommend using acupuncture only, unless the patient insists on taking herbs.

Biography

Dr. Zhao graduated from the Henan University of TCM in 1985, and has practised in the Second TCM Hospital of Luoyang city for 10 years as a consultant, specialising in gynaecological and reproductive medicine. She has been practising TCM in the UK since 1995 and founded her clinic in 1997. She has developed her special TCM programme for infertility and recurrent miscarriage, and has been working in collaboration with CARE, the largest independent fertility treatment provider in the UK and some gynaecological and reproductive consultants in the local hospitals. She has successfully treated hundreds of infertile couples across the country. She has also been featured several times on the presses and on television. For further information, please contact: fertilitycare@zhongjing.co.uk

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