Treating Infertility by the Integration of Traditional Chinese Medicine and Assisted Conception Therapy

Li Qin Zhao  赵丽琴
Sheffield, UK

Abstract: Infertility is a rather common gynaecological condition in this modern society. Cases of infertility have progressively increased, especially in recent years. Traditional Chinese Medicine (TCM) has been used to treat infertility for thousands of years, although nowadays assisted conception therapy (ACT) is also available. The author has demonstrated that TCM is not only the most effective treatment of infertility, but can also improve the success rate of ACT significantly. In this article, illustrated by case studies, she will discuss the aetiology and pathology from both a TCM perspective and Western medical understanding, introduce her positive unique treatment strategies, which include the use of TCM diagnostic differentiation, TCM cycle therapy, and integrated with the most advanced ACT technology such as IUI, IVF and ICSI.

Key words: Infertility; Traditional Chinese Medicine (TCM); Western Medicine (WM); Assisted Conception Therapy (ACT); TCM differentiation; TCM cycle therapy; In-Vitro Fertilisation (IVF); Intracytoplasmic Sperm Injection (ICSI); Intrauterine Insemination (IUI); Embryo transfer (ET); Frozen embryo transfer (FET); Premenstrual tension (PMT).

Introduction

Around one in six couples have problems conceiving naturally [1], and that this is predicted to rise to one in three in Europe over the next decade [2]. In the western countries, most infertile couples would seek treatment such as ovulation induction, IUI, IVF or ICSI before turning to TCM. However, TCM has been recognized and used popularly worldwide over the last 20 years, and many studies and research have proved that it is the most effective treatment of infertility. According to my 26 years clinical and research experience, applying the integration of TCM with ACT would speed up the progress of treatment and enhance a woman’s chances of conception significantly.

Definition of Infertility

Infertility is the inability to conceive after regular unprotected sexual intercourse for two years in the absence of known reproductive pathology [3]. In some countries, reproductive endocrinologists may also consider a couple to be infertile if the couple has not conceived after 12 months of contraceptive-free intercourse if the female is under the age of 34, or the couple has not conceived after 6 months of contraceptive-free intercourse if the female is over the age of 35[4].

There are two types of Infertility: primary infertility and secondary infertility. Primary infertility means that the couple has never been able to conceive; secondary infertility is difficulty conceiving after already having conceived (either carried the pregnancy to term, or had a miscarriage).

TCM Perspective

TCM philosophy states that infertility is ultimately associated with three organs: kidney, spleen and liver. These internal organs are interconnected function units: if any of the organs dysfunction, fertility problems may appear. The Kidney, ‘the origin of congenital constitution’, is considered as the origin of yin-yang and the source of life of the human body. It stores the essence, the major material foundation for our body’s growth, development and reproduction. A weak constitution of kidney yin or yang, long term intake of oral contraceptive pills may suppress the kidney qi, or repeated use of IVF/ACT drugs interfere with kidney function, which may lead to delayed periods, scanty periods, anovulation or even amenorrhea and infertility. The Spleen, ‘the material basis of the acquired constitution’, is known as ‘the source of Qi and Blood’. It is the foundation of life after birth, governs most energetic processes in the body, transports body fluid and transforms the food into qi, blood and nutrients, and keeps blood flowing in the blood vessels. The spleen must be functioning optimally for a healthy menstrual cycle. Poor diet, over-consumption of cold food and dairy products, and extreme worry and stress may all impair spleen function. Dysfunction of the spleen may cause accumulation of dampness, qi and blood deficiency, leading to scanty or heavy periods, short menstrual cycles, spotting or bleeding after ovulation, short luteal phase and infertility. The Liver governs the normal flow of qi, stores blood and regulates the volume of blood in circulation. It plays a major role in assisting ovulation, and has a great influence over the menstrual cycle. If the liver system is not functioning smoothly, neither is the hormonal system. Dysfunction of liver qi may cause dispending pain of the chest, breasts and lower abdomen, irregular periods, mental depression, PMT and menopause. Repeated and persistent emotional abnormality may resulting in the...
stagnation of liver qi or hyperactivity of liver yang, causing oestrogen to build up, leading to heavy and painful periods, short menstrual cycles, or the uterus becoming a toxic environment, hostile to implantation and conception. If liver blood fails to replenish the uterus—the house of blood, scanty periods or amenorrhea may occur. Beside all of these, over consumption of deep fried food, greasy food and hot spicy food, heavy drinking and smoking; or pathogenic heat and toxin invading the uterus after a prolonged illness, miscarriage, abortion or pelvic surgery, which may cause accumulation of damp, heat and blood stasis in the uterus and pelvic area. This may block the Ren channel, preventing menstruation, failure of harvesting sperm. Therefore, no conception can be achieved.

WM Understanding

There are many biological causes of infertility, which are often very complicated, some of the causes are still not clear or have not been found. Therefore, it may be difficult to determine the definite cause of infertility in some cases.

There are five major factors which may cause female infertility. Obstacle of ovulation and pelvic endometriosis are often the causes of primary infertility, while fallopian tube obstruction, uterine and cervix problems are often the causes of secondary infertility.

1. Ovarian factors

- Nervous and mental factors: a woman’s dysfunction of endocrinal sexual axis can cause irregular periods, anovulation or even amenorrhea. Enduring stress, anxiety and worry can interfere with the sexual axis and restrain ovulation.

- Ovarian disorders: ovarian infection, ovarian cysts, or ovarian tumour, polycystic ovary or polycystic ovarian syndrome (PCOS). These can cause a decline in the ovarian function or endocrine disorder and, as a consequence, interfere with hormonal balance and cause ovulation problems.

- Long-term use of contraceptive pills, hyperthyroidism, hypothyroidism and severe diabetes may cause ovarian function disorder. Patients may manifest irregular periods or amenorrhea, high follicle stimulating hormone (FSH), low anti-mullerian hormone (AMH), premature ovarian failure (POF) or pre-menopause.

2. Uterine factors

Congenital malformation of uterus or cervix, endometritis, endometriosis or uterine fibroids; uterine infection after miscarriage, labour or abortion; incompetent cervix, narrow cervix, cervix infection or erosion, may interfere with the transportation of sperms and implantation of embryo, and consequently stops conceiving.

3. Fallopian tubes factors:

  Recurrent vaginal infection, pelvic inflammatory disease (PID), chlamydia, endometriosis or ectopic pregnancy, may damage the fallopian tubes and cause blockage of fallopian tubes and adhesion of the pelvis, thereby preventing conception.

4. Unexplained infertility and immunological infertility:

  It is common for a woman to be diagnosed with unexplained infertility, after having undergone an extensive array of tests, with none of the tests pinpointing her problem. Further investigation for some unexplained infertile women is sometimes necessary. Immunological tests have found that some women produce anti-sperm antibodies and/or natural killer cells, which may cause anti-sperm immunological reaction, sperm agglutinating to each other, losing the ability to penetrate and fertilize eggs or even die. Such factors will naturally lead to the woman not being able to conceive.

5. Other factors

  Age, stress, living environment or climate changes, heavy smoking and drinking of alcohol, radiotherapy and chemotherapy may contribute to infertility.

Treatment Strategies

1. TCM Differentiation Integrated with WM Diagnosis

   1.1 Deficiency of spleen Qi and kidney Yang, accumulation of cold and damp in the uterus

   Clinical Manifestation:

   Infertility, delayed periods with scanty bleeding for 2–3 days only, or spotting/bleeding around or after ovulation, sore back, stomach cramps, aversion to cold, frequent urination, loose bowels, profuse and watery vaginal discharge. Pale-swollen tongue with teeth marks, white and greasy coating, deep-fine-slow pulses.

   Treatment Principle

   Strengthening spleen qi and kidney yang, expelling cold and removing dampness, warming uterus and harmonising the chong and ren channels.

   Herbs: Nuangong Yunzi Wan, Yougui Wan.

   Acupoints: Pishu (UB20), Shenshu (UB23), Mingmen (Du4), Guanyuan (Ren4), Zusanli (St36), Fuliu (Ki7) and Taixi (Ki3).

   Moxibustion: Pishu (UB20), Shenshu (UB23), Mingmen (Du4) and Shenque (Ren8).

   1.2 Insufficient Kidney Yin(Jing) with Empty Fire, Liver Qi Stagnation with Blood Deficiency

   Clinical Manifestation:

   Infertility, irregular periods, heavy or scanty bleeding or even amenorrhea, vaginal dryness, painful sex, premenstrual breast tenderness and headaches, depression, high irritability, hectic heat, night sweats,
insomnia and fatigue, red tongue with thin and less moisture coating, wiry-fine-rapid pulses or deep-fine-rapid pulses.

It is often seen in women with unexplained infertility, after discontinuing the use of contraceptive pills, POF with high FSH and low AMH, or immunological infertility. Ovulation induction therapy – Clomid is unlikely to work in these cases, but may cause strong side-effects. IVF with donor eggs is often advised by consultants.

Treatment Principle
Nourishing kidney yin and tonifying the blood, soothing liver qi and clearing heat.

Herbs: Zuogui Wan or Nuzhen Pian, combined with Jiawei Xiaoyao Wan.

Acupoints: Geshu(UB17), Ganshu (UB18), Sheshu (UB23), Guanyuan (Ren4), Zigong (EX-CA1), Neiguan (PC6), Hegu (LI14), Xuehai (Sp10), Sanyijiao (Sp6), Taixi (KI3), Taichong (Liv3).

1.3 Deficiency of Qi and Blood, Accumulation of Phlegm and Dampness
Clinical Manifestation:
Infertility, scanty or delayed periods or even amenorrhea, low sex drive, prone to vaginal thrush, obesity, fatigue and heavy limbs, pale tongue with white or white and greasy coating, fine and slippery pulses. These women are often diagnosed with polycystic ovaries or PCOS, endocrine disorders and obesity.

Treatment Principle:
Tonifying qi and nourishing blood; removing dampness and resolving phlegm.

Herbs: Modified Cangfu Daotan Tang, or Buzhong Yiqi Wan and Tiaojing Buxue Wan.

Acupoints: Baihui (Du20), Tianshu (St25), Qihai (Ren6), Guilai (St29), Pishu (UB20), Shenshu (UB23), Zusanli (St36), Fenglong (St38), Sanyinjiao (Sp6).

1.4 Damp and Heat together with Blood Stasis in the Uterus
Clinical Manifestation
Infertility, short menstrual cycles with heavy bleeding, or impeded menstrual flow, dark purplish blood mixed with blood clots, severe abdominal pain, lower backache, premenstrual breasts tenderness, dry and bitter taste in the mouth, dark-red tongue with black spots on the edge, white or yellow-greasy coating, wiry or slippery-rapid pulses.

It is commonly seen in women with PID, uterine fibroids, endometriosis, blocked fallopian tubes, after ectopic pregnancy, miscarriage or abortion, immunological infertility etc. IVF may be necessary for some of those cases.

Treatment Principle: Clearing heat and eliminating dampness, motivating blood and resolving blood stasis.

Herbs: Xuefu Zhiyu Wan and Qinqi Huatan Wan.

Acupoints: Quchi (LI11), Hegu (LI4), Xuehai (Sp10), Tianshu (St25), Yinlingquan (Sp9), Diji (Sp8), Guilai (St29), Taichong (Liv3), Sanyinjiao (Sp6).

2. TCM Cycle Therapy

TCM cycle therapy can be very useful in treating infertility, while regulating periods and preparing general well being with TCM differential treatment. For the women undergoing IUI or IVF/ICSI treatment, applying TCM cycle therapy based on their IUI or IVF/ICSI protocol would increase their chances of conceiving dramatically.

TCM draws its philosophy and treatment from the recognition of this connection between humanity and nature. It recognises that everything is considered to be created through the integration of yin and yang, qi and blood. Different energies dominate each phase of the menstrual cycle. Therefore, TCM treatment should be focused on those energies depending on the time of period. However, the primary pattern diagnosis should always be addressed no matter what phase of the cycle.

Phase I: Yin phase – Follicular phase
Kidney yin (or essence) and blood govern the Yin phase. Nourishing kidney yin, enriching qi and blood to support oestrogen, improve eggs quality, strengthen endometrial lining, and to prepare the basic condition for conception.

Phase II: Transformation phase – Ovulation phase
Liver qi and blood flow control ovulation. Liver qi is triggered to begin the transformation of yin energy (oestrogen) into yang energy (progesterone). Therefore, nourishing kidney yin and warming kidney yang to support the transformation, soothing liver qi and activating blood to promote ovulation.

Phase III: Yang phase – Luteal phase
Kidney yang and spleen qi dominate the Yang phase. It is therefore crucial to strengthen kidney yang and spleen qi, nourish blood to support progesterone and to increase the chances of successful implantation and conception.

Phase IV: The premenstrual phase
Liver Qi helps premenstrual transformation, converts yang energy into yin energy. Harmonising liver qi, improving blood circulation, to unblock the channels and regulate period.

Phase V: The blood phase- Menstrual phase
Blood is allowed to flow, menstruation is a time of rest for all the energies. Regulate qi and blood, nourish yin and move blood stasis, so the new and fresh blood can take its place in the uterus.

3. TCM and ACT
ACT is the most advanced medical technology which helps infertile couples achieving pregnancy. However, the average success rate of IVF in the UK is only 29.6% for women under the age of 35\textsuperscript{[5]}, and this figure reduces dramatically for women aged over 35.

Many Researches have shown that acupuncture with IVF can increase success rates significantly. A recent study published by the British Medical Journal in February 2008 concluded that women undergoing IVF who also have acupuncture improved their rates of pregnancy by
65% and live birth, substantially higher than those who did not have acupuncture. This is strongly supported by my clinical pregnancy rate which is 68%.

3.1 TCM preparation before IVF/ACT

TCM can prepare a woman’s body in the best way possible to support IVF and to enhance the chances of conceiving and carrying healthy babies to term. Since a woman’s best response to any IVF/ACT depends on the overall endocrine status in the few months prior to the procedure, I usually suggest commencing TCM treatment three months before IVF. This allows sufficient time to restore adequate balance of energies and organs, reduce chromosome abnormality, and improve quality of eggs and sperms, thus consequently produce better response to IVF drugs.

3.2 Acupuncture during IVF/ACT

Applying acupuncture only may be recommended while a woman is undergoing IVF/ACT, since most consultants would not recommend patients taking any other medication besides IVF drugs. Drawing from my clinical experience and the TCM literatures I’ve read, applying acupuncture during IVF/ACT can:

• Support patients physically and mentally up to and after the IVF procedure;
• Alleviate the tension during this stressful process;
• Reduce some of the side effects caused by IVF drugs, and improve response to hormonal stimulation;
• Increase blood supply to the uterus and ovaries, strengthen endometrial lining, and improve egg quality;
• Balance hormone levels and create a more receptive environment in the womb for conception;
• Calm the uterus to prepare for implantation;
• Maintain a pregnancy if successful, minimizing the risk of miscarriage.

Case Studies

Case one: Premature ovarian failure (POF)

Medical history

Daisy, a 35 year old teacher, had taken contraceptive pills since the age of 18. She came off the pill in 2000 and planned to start a family, however her period was absent ever since. She was diagnosed with POF, and had to take HRT tablets to ensure that she had monthly menstrual bleeding. She had two cycles of IUI, and achieved one pregnancy in 2005, but miscarried at 6 weeks. She visited me two weeks after the miscarriage, where her HCG level was still high (300 IU), and lower abdominal area was lumpy and painful to touch. She was very depressed and extremely anxious, always had cold hands and feet which turned blue or white and stiff in cold weather, and suffered from insomnia, frequent urination. She has been a vegetarian for many years and undertook excessive exercise, she was always under-weight.

Treatment process

I had advised her not to have any IUI or IVF for three months while preparing her body with TCM, but she was really concerned that her age may impact on her fertility, and wanted to keep trying without a break. She had another IUI and IVF attempt within four months, both of which failed. She came back to me three months later and followed my treatment programme. She then had eight eggs collected, seven of which were fertilised, two grade one embryos were transferred and she achieved a successful pregnancy. She continued with acupuncture until 18 weeks pregnant, and gave birth to a healthy baby girl in 2006.

In September 2007, she went on to have another IVF attempt without acupuncture, but there were only four eggs being retrieved and none of them fertilized, so the cycle had to be cancelled. She then took my advice and received some more acupuncture prior to IVF. On this occasion, there were nine eggs collected, five of which were fertilized, and two grade one embryos were transferred. She had achieved another pregnancy with twins, and they are now two and half years old.

Analysis

Daisy had taken the contraceptive pill for 12 years before trying for a family, which suppressed kidney qi, and reduced oestrogen production. Her uterine lining was too thin to shed regularly as menstruation or for implantation. She was very stressed and anxious, worrying that she may never be able to have her own genetic children, especially after several failed IUI and IVF attempts. Her condition was the deficiency of kidney yin and yang, liver qi stagnation and insufficient heart blood. The TCM treatment was focused on two points: firstly to harmonise liver qi and blood, nourish heart blood and calm down spirits, restore ovarian function; secondly to nourish kidney yin in order to support oestrogen and reduce FSH levels, warm kidney yang to improve blood flow to the uterus and ovaries. Since her body had recovered completely with acupuncture, she consequently responded well to IVF drugs, produced some good quality eggs, and had achieved two pregnancies.

Case two: Ectopic pregnancy with fallopian tube removal

Medical history

Jenny, a 36 year old senior nurse, had been married for 16 years with a 12 year history of infertility. Her husband was 39 years old, had low sperm count with poor quality. They had visited me when undergoing their first IVF. Jenny was over-weight, with a heart condition-supra ventricular tachycardia (SVT).

Treatment process

Weekly acupuncture for Jenny combined with herbs for both partners. She responded really well to the IVF drugs, had nine eggs retrieved, five of which were fertilized and divided, two embryos were transferred and another two were frozen. She unfortunately had broken her hand and wrist accidentally a few days before egg collection, and also developed severe cystitis and water infection at the same time, which lead to the failure of implantation.
However, she had continued with TCM treatment to lose weight and prepare herself physically and mentally for next IVF. As a result of the treatment, she had lost 1.5 stones in weight within seven weeks and felt great. She then had FET and achieved a strong positive result with twins. Sadly she had miscarried one baby at 7 weeks, and another one was an ectopic pregnancy which required an emergency operation to remove her right fallopian tube. She had lost four litres of blood, and blood transfusion was needed.

They came back to me two months later, when Jenny was still suffering from severe depression and anxiety, was very tearful, extremely tired, suffered from hair loss, had short period cycles between 15 to 21 days with very heavy bleeding, and lower abdominal area was very tender and hard to touch. Acupuncture was used weekly combined with patent herbs for both partners. On this occasion, after six sessions of acupuncture, she had produced 7 eggs with ICSI, 6 of them fertilised and divided. They were told that those were the best quality embryos they have ever produced, and also, for the first time, had three viable embryos to be frozen. She had also received one session of acupuncture for 30 minutes before ET and one straight after ET, and two more sessions within a week to help with embryo implantation. She had successfully achieved a pregnancy, but started bleeding at seven weeks pregnant. I therefore applied Chinese herbal tea to replace the herbal pills, alongside with acupuncture. She had continued taking the herbs for a month, although the bleeding had stopped in just two weeks. She was fine for the rest of pregnancy, and gave birth to a healthy baby girl in January 2005.

Case three: After repeated IVF treatments

Joan and Jake were both 40 years old and were originally diagnosed with male-factor infertility - Jake had poor sperm motility and morphology. They had been trying to conceive for eight years, and had undergone nine IVF attempts, including one cancelled cycle. They achieved two pregnancies, but unfortunately both had miscarried at 8 weeks. They were referred to me while undergoing 10th IVF cycle.

Treatment process

Acupuncture was given to Joan once or twice weekly combined with patent herbs for both partners. On this occasion, after six sessions of acupuncture, she had achieved two pregnancies, but unfortunately both had miscarried at 8 weeks. They were referred to me while undergoing 10th IVF cycle. Joan's general condition was reasonable good, although she had spleen qi and heart blood deficiencies. TCM had improved the function of the spleen and heart. She therefore produced the best possible response to the IVF drugs. However, the enormous stress that she had experienced during IVF treatment had interrupted hormonal balance, together with water infection and cystitis, which created a hostile uterine environment. As a consequence, it stopped embryos being implanted. After she miscarried and underwent fallopian tube removal, her general health was in poor condition with severe qi and blood deficiency, as well as liver qi stagnation and blood stasis. TCM treatment was focused on strengthening spleen qi and nourishing blood to improve general health, harmonizing liver qi and blood to relieve depression and rebalance hormone level and eradicating blood and resolving blood stasis to cleanse the uterus. She eventually achieved a natural pregnancy with one tube only and then conceived again with no further effort.

Analysis

This couple was originally diagnosed with male factor infertility, which was the reason they tried for IVF. Jenny's general condition was reasonable good, although she had spleen qi and heart blood deficiencies. TCM had improved the function of the spleen and heart. She therefore produced the best possible response to the IVF drugs. However, the enormous stress that she had experienced during IVF treatment had interrupted hormonal balance, together with water infection and cystitis, which created a hostile uterine environment. As a consequence, it stopped embryos being implanted. After she miscarried and underwent fallopian tube removal, her general health was in poor condition with severe qi and blood deficiency, as well as liver qi stagnation and blood stasis. TCM treatment was focused on strengthening spleen qi and nourishing blood to improve general health, harmonizing liver qi and blood to relieve depression and rebalance hormone level and eradicating blood and resolving blood stasis to cleanse the uterus. She eventually achieved a natural pregnancy with one tube only and then conceived again with no further effort.

Case four: Secondary infertility with Luteal phase defect (LPD)

Medical History

Anna, a 41 year old officer, had given birth to a girl by caesarean section 13 years ago, and had been trying unsuccessfully for a second child ever since her daughter turned two years old. She had bled for three months during first pregnancy and also heavy bleeding after labour. Her menstrual cycle had shortened ever since, with mid-cycle bleeding or spotting, which sometimes continued until the next period started. She always felt cold, her hands and lips turn blue when the weather was cold. She was diagnosed with unexplained infertility after seeing several consultants and had everything investigated. She had then trying with her partner David for another 5 years after divorcing her husband. In 2003, David’s semen test revealed low motility, which was believed to be the cause of infertility. Therefore, they went on one IVF attempt in 2004, but failed with implantation. They were frustrated and decided to try TCM treatment.

Treatment process

I had advised both partners to stop intensive exercise, and keep a restricted healthy diet. Chinese
herbal tea was prescribed for Anna, together with weekly acupuncture, while David only took patent herbs. After 4 weeks of TCM treatment, her period cycle was regulated to 28 days and had no bleeding or spotting after ovulation. She then fell pregnant naturally after another month of treatment. She had continued treatment until 14 weeks pregnant and delivered a beautiful girl in 2004. She had recovered incredibly well from labour, and subsequently conceived again at the age of 43, and now has three healthy children.

Analysis

This is a typical case of LPD. Anna had conceived her first child at the age of 28, but bled for three months during the pregnancy, which indicates insufficient progesterone production. After she gave birth to her daughter, her condition had worsened and she started experiencing spotting or bleeding after ovulation. This was because of the deficient spleen qi, which was unable to support kidney yang, leading to poor uterine blood supply, and caused what is known as 'cold womb', which meant that her uterus was not responding to the heating effect of progesterone. The warm yang energy was not sufficient to prepare the endometrium to accept the fertilised eggs or embryos. This was the reason of failure in implantation with IVF and in natural conception. The TCM treatment programme was designed to strengthen kidney yang and spleen qi, which improved the endometrial lining and progesterone level, and created a nice and cosy ‘incubator’-the womb in which the embryos would be implanted. Consequently, she was able to conceive naturally and maintain the pregnancies to full term.

Conclusion

Infertility is not only getting more and more common nowadays, but is also much more complicated. Since women trying to conceive late, prolonged contraceptive pill intake, enduring working hours and stress, could cause infertility later on in life. They may also went through several unsuccessful attempts of IVF or IUI, then eventually turn to TCM as a last resort, which means that their condition may be rather complex and the patients are often extremely stressed with their situation. However, TCM has demonstrated that it can help these women conceive with or without ACT.

Here I summarized the most important points of infertility treatment:

1) There are numerous factors which may cause infertility. To be able to treat infertility effectively, it is crucial to determine its primary causes. The most common causes are: spleen qi and kidney yang deficiency; liver qi stagnation and blood deficiency; accumulation of phlegm and damp and blood stasis.

2) Western diagnosis may complement TCM treatment. We, however, should not be rigidly adhered to Western diagnosis. TCM differentiation integrated with cycle therapy can be the most effective treatment of infertility.

3) Most women with infertility are stressed and anxious due to frustration of failure of conception, therefore relaxation is essential for supporting patients, and acupuncture is often beneficial.

4) It is crucial to check the male partner’s sperm count and quality while treating the female partner. TCM should be given to the men when necessary to increase the women’s chances of conception.

5) IVF/ACT may be necessary for some couples. However, TCM preparation is demanding before the procedure, and timed acupuncture is crucial after transfer to support implantation.

6) As repeated IVF/ACT with strong hormonal drugs may impair kidney qi, TCM treatment must therefore be continued during early pregnancy to strengthen kidney qi and nourish blood, hence supporting progesterone production and minimising the risk of miscarriage.

Bibliography