

My Clinical Experience in Treating Infertility with TCM

Liqin Zhao (Sheffield, UK)

Abstract:

Infertility is a common problem in this modern society in the western countries. I have treated hundreds of patients diagnosed with high FSH levels, luteal phase defect, polycystic ovarian syndrome, endometriosis, unexplained or male factor infertility, and so on, or having gone through years of trying to get pregnant using IVF, IUI etc. Most of them conceived either naturally after TCM treatment or with combination of ART. However, the majority patients have complicated conditions rather than the typical cases stated in text books. So the treatment protocols I designed are specifically for individual patients. I analysed 238 patients and summarised the results. This article is the report of some case studies of female infertility with different ages and medical histories, together with my analysis of the cases by TCM theory, as well as in the Western medicine principle.

Key words:

ART - Assisted Reproductive Technology

IVF - In-Vitro Fertilisation

IUI – Intrauterine Insemination

ICSI – Intracytoplasmic Sperm Injection

FET - Frozen Embryo Transfer

PMT- Premenstrual Tension

TCM – Traditional Chinese Medicine

Recent studies estimate that one in six couples has difficulty in conceiving a baby [1]. In the western countries, most infertile couples would seek treatment such as ovulation induction, IUI, IVF or ICSI before turning to TCM. However, the average success rate for IVF in the UK is only 29.6% for women aged under 35; 23.6% for aged 35 – 37; 18.2% for aged 38 – 39; 10% for aged 40- 42; 3.2% for aged 43 - 44, and only 0.8% for those aged over 44 [2]. TCM has been used to treat infertility for thousands of years. During my 23 years clinical practice, especially in the last ten years, I've been working closely with Fertility Clinics and Assisted Conception Units (ACU) within hospitals. It has been proved that by using combination of TCM and IVF or other forms of ART for infertility patients, the success rate has increased significantly. As a woman's best response to any IVF treatment depends on her overall endocrine status in a few months prior to the procedure when the follicles are developing within the ovaries [3], I advise my patients starting their TCM treatment three months before their IVF cycle, especially if there are hormonal, immunological, mechanical, age or implantation factors. This usually gives patient enough time to restore adequate balance to the

body's energies and organs. improving the quality of the eggs, and increasing their chance of conception. Therefore, the IVF treatment will produce the best possible result. In the 238 patients that I treated between January 2003 and December 2006, 62% of them achieved a pregnancy, and 75% of those pregnancies went on to have a live birth. 68 of those 238 patients achieved a pregnancy naturally. Here I report some case studies.

Case One: Endometriosis

Carol was 32 years old. She had tried to conceive unsuccessfully for 5 years. She always had painful, clotty and heavy periods ever since her first period at aged of 17, accompanied with painful intercourse, cold hands and feet. She had a 10-year history of taking contraceptive pills for helping her painful and heavy periods. Her periods became irregular since she came off the pill five years ago. She had laparoscopy in 2002 and was diagnosed with severe endometriosis, together with a blockage in her left fallopian tube, ovarian cysts and uterine fibroids. She was told that there would be no chance for her to conceive naturally. She had three operations in two years to remove the endometrium and ovarian cysts, but it kept recurring in a few months time after the operation. She had two cycles of IUI, two IVF attempts and one cycle of FET, but unfortunately none of them was successful. After her last IVF in 2005, she had another laparoscopy and found that the endometrium had adhered to her urine bladder and the colon, she had to be operated on again.

She was recommended to me for some TCM treatment whilst she was waiting for the next IVF. I treated her with a combination of acupuncture and Chinese herbal medicine, as well as giving her a special fertility diet. After 11 weeks of treatment, she found to her surprise that she was pregnant on the day that she was expected to start the IVF drugs. She eventually gave birth to a healthy boy in the summer of 2006, and she is now trying for her second child.

Analysis:

Carol had probably suffered from endometriosis since she was 17 years old, although it was not diagnosed at the time. But she didn't receive any treatment for the cause of the problem, and instead had taken contraceptive pill for 10 years. This covered up her symptoms, however the endometriosis worsening continually. Together with many cycles of IUI and IVF attempts, the strong hormonal drugs constantly stimulated her ovaries and uterus, causing the endometriosis to worsen even more. This

seriously affected the functional status of her organs. The major cause was blood stasis, together with Kidney Yang and Spleen Qi deficiency, as well as the Liver Qi stagnation which was caused by the long term stress. I used acupuncture to soothe the Liver Qi, improve blood circulation, and regulate her period cycle, and combined herbal medicine to remove the blood stasis, to warm up the Kidney Yang and tonify the Spleen Qi. It increased blood flow to her uterus and ovaries, rebalanced her hormone levels, therefore, a comfortable environment was created for the eggs to be fertilised in and then implanted, eventually achieved a natural pregnancy, and carried to term.

<u>Case two: Polycystic ovarian syndrome (PCOS) and recurrent miscarriage</u>

Lucy, aged 34, was diagnosed with PCOS and Multiple Sclerosis (MS) eight years ago. Her period was very irregular, with a cycle between 30 - 70 days, bad PMT, spotting for 10-14 days after menstruation. She always felt tired and sluggish, with tingling sensations on her legs and feet. Her husband John, being a business manager, was very busy and stressed, and extremely tired. He has been suffering from severe eczema ever since he was a baby. They had been trying to conceive for 7 years, had two IUI cycles and one IVF attempt, and achieved three pregnancies, two of which miscarried and one resulting in a child birth in 2004. They wished to have a second child but they gave up because being afraid of having IVF again. By chance, Lucy heard about me from a friend. After consultation I told them that they still had good chance to conceive naturally while they couldn't really believe. However, after she had two sessions of acupuncture and some herbal medicine, her first period cycle was 37 days. She still experienced PMT, and the bleeding was light, thin and watery. She carried on with the treatment, and then had two 28-day menstrual cycles, with no PMT, but increased vaginal fertile mucus around day 14 of her cycle, normal blood flow, spotting for 3 days instead of the usual 10-14 days after proper bleeding. On her fourth cycle, her period was one week overdue, but she wouldn't do a pregnancy test as she couldn't face any more disappointment. However, I detected her pregnancy by her changed pulse quality and asked her to test it for confirmation. She carried on with the treatment every week until she was 16 weeks pregnant, and then monthly until 38 weeks. She delivered a healthy baby boy naturally in November 2007.

Analysis:

Lucy had an eight-year history of PCOS and MS. Her condition was caused by Spleen Qi and blood deficiency with damp and phlegm obstruction. As follicular development within the ovary is a process that takes many months, and eggs are meant to develop in an oestrogen and progesterone-rich environment [3]. Therefore, even though Lucy had ovulation-stimulating drugs with IUI and IVF, which are designed to increase the quantity of eggs, but are not helping those eggs to be healthy, so the quality of her eggs were still poor, this being the cause of miscarriage. I used the energetic principles of each phase of her cycle, and also addressed the components of her specific diagnostic

pattern throughout. I also advised both partners to follow my special fertility diet as well. She had acupuncture weekly and Chinese herbal medicine every day for four months. It improved blood flow to her ovaries and uterus, normalised her hormonal environment, restored her entire sympathetic nervous system to health and balance, then the entire hormonal cascade allowed for a healthy egg to develop and be released, eventually fertilising and conceiving naturally, and carried the pregnancy to term.

Case three: Premature ovarian failure (POF)

Debbie was 35 years old, and had taken the contraceptive pill since age of 18. She came off the pill five years ago and planning for a family, however her period was absent ever since. She was diagnosed with POF, and had to take HRT tablets to keep her having regular menstrual cycles. She had two cycles of ovulation induction, and achieved one pregnancy with second cycle in 2005, but miscarried at 6 weeks. She came to me two weeks after the miscarriage, whereas her HCG was still high (300 IU). Her lower abdominal area was lumpy and painful to touch. She was very depressed and extremely anxious, having difficulty to sleep. She always has cold hands and feet, and they go blue or white and stiff in cold weather. She urinates frequently, especially at night. My TCM treatment was designed to remove the blood stasis and to detoxify her body first (clean up the old blood that stagnated in her uterus), and then worked on tonifying the Qi and blood, to warm up the Kidney Yang. During the TCM treatment, I advised her not to have any IUI or IVF for three months, allowing time for her body to be rebalanced. But she was really concerned about her age and wanted to carry on trying without a break. She had another IUI and IVF attempts within four months, but both failed. She came back to me three months later. In this time, she had eight eggs collected after acupuncture treatment, seven of them were fertilised, and two embryos of grade one were transferred and achieved a successful pregnancy. She continued the acupuncture until she was 18 weeks pregnant, and gave birth to a healthy girl in 2006. In September 2007, she went on to have another IVF attempt without acupuncture, but there were only 4 eggs being retrieved, and none of them fertilised, so the cycle had to be cancelled. She then took my advice and came back to me for some more acupuncture prior to IVF. On this occasion, there were 9 eggs collected, 5 of which were fertilized, and 2 grade one embryos were transferred. She achieved another pregnancy with twins, and they are now three months old.

Analysis

Debbie had taken the contraceptive pill for 12 years before trying for a family, this suppressed her Kidney Qi, her oestrogen production was reduced, and the uterine lining was too thin to shed regularly as a menstruation or for implantation. She had also been vegetarian for many years, along with excessive exercise, meant that she was always under-weight. She was very stressed and anxious, worrying that may never be able to have her own genetic

child, especially after several failed IUI and IVF treatments. Her condition was both Kidney Yin and Yang deficiencies, Liver Qi stagnation and deficiency of Heart blood. These caused the Penetrating and Conception meridians to become 'empty'. My TCM treatments were focused on two points: firstly, to harmonise the Liver Qi and blood, to tonify Heart blood and calm down her spirits, and to restore her general wellbeing and ovarian functions; and secondly, to nourish her Kidney Yin supporting her oestrogen, to restore normal level of FSH, and to warm up the Kidney Yang to improve blood flow to her uterus and ovaries. Once her body was recovered completely, she responded well to the IVF drugs, producing some good quality eggs, and achieved two pregnancies.

Case four: Ectopic pregnancy with tube removal

Sarah was 36 years old, and had been married for 16 years with 12 year history of infertility. Her husband was 39 years old, had low sperm count with high abnormality. They came to me when starting their first IVF. Sarah was over weight, with Heart condition -Supra Ventricular Tachycardia (SVT). She received acupuncture once or twice weekly, combined with herbs for both partners. Unfortunately she broke her hand and wrist by accident few days before her egg collection, and she also developed severe cystitis and water infection at the same time, had to take strong antibiotics for a week. Despite that, she had nine eggs retrieved, five of which were fertilized and divided. She had two embryos transferred and another two were frozen. But it did not work. However, she continued receiving TCM treatment to loose weight, to detoxify her body and to prepare herself physically and mentally for next IVF. As a result of the treatment she lost 1.5STs of weight within seven weeks and felt great. Afterward, the couple went abroad for a holiday before their second IVF attempt, however, sadly her husband had broken his arm, her mother was seriously ill in the hospital, and their dog (being treated as their baby) died as well. They were both very stressed and depressed, leading to the IVF treatment being failed again. They came back to me six weeks later. After 8 weeks of TCM treatment, they decided to have FET. In this time Sarah achieved a strong positive result with twins, although we didn't know this at the time. Sadly she miscarried one at 7 weeks, and another one was an ectopic pregnancy. She had experienced severe abdominal pain and collapsed on the floor. She had to have an emergency operation for a ruptured ectopic pregnancy, and had removed her right fallopian tube and lost four litres of blood, which required blood transfusions. They were devastated. Sarah was suffering from severe depression and anxiety and wouldn't even walk out their door. However, they strongly believe TCM would work for them, and came back two months later. She was still very tearful, extremely tired with no energy, loosing hair, short period cycles between 15 to 21 days, with very heavy bleeding. Her lower abdominal area was very tender and hard to touch. I altered her herbs and acupuncture points accordingly, focusing on treating her spleen Qi and blood deficiency, activating blood and resolving stasis, and soothing her liver Qi and relieving the depression. In just two weeks time, she was feeling much better, and

surprisingly, fell pregnant naturally within 6 weeks, and gave birth to a beautiful girl in January 2006. She came back to me in February 2008 for more acupuncture prior to her FET, and is now pregnant again at age of forty.

Analysis

This couple was originally diagnosed with male factor infertility, which was the reason for them to go for IVF. Sarah's general condition was reasonable good, apart from Spleen Qi and Heart blood deficiencies. Applying TCM treatment that rectified this imbalance, therefore she produced the best possible response to the IVF drugs. However, the enormous stress she experienced during the first two cycles of IVF that interrupted her hormonal harmony: together with water infection and cystitis, which affected the environment in her uterus. As the result, it stopped the embryos to be implanted. After Sarah's miscarriage and removal of her fallopian tube, her general health was in poor condition with Qi and blood deficiency, as well as stagnation. Through TCM treatment, focusing on restoring her general health, her Qi and blood was tonified and harmonised, and blood stasis was resolved and her hormonal imbalance was rectified. Finally, she achieved a natural pregnancy with one tube only and conceived again with no further efford.

Case five: Advanced maternal age

Jenny was 40 years old, and had taken contraceptive pill for 25 years before trying to conceive. She had two failed IVF attempts with only two eggs retrieved each time. She was told by her consultant that her eggs qualities were very poor due to her age. Subsequently, she had another IVF attempt with a donor's eggs, unfortunately this also failed. She then came to me as a last resort.

Jenny was an asthmatic and under weight, her period cycle was normal but accompanying very light bleeding and only last three days, headache most time. She coming to me four weeks after the last IVF treatment, and was also suffering from red, lumpy and painful breast, having antibiotics for it. After she had a scan and biopsy test, she was waiting for an appointment of operation to remove the tissue in her left breast. She started Chinese herbal medicine on a daily basis with acupuncture once a week, whilst her husband taking herbs only. Two months later, she found out that she was pregnant on the day before her operation. She subsequently delayed the operation and carried on TCM treatment for three more months, and had the tissue removed then. She recovered completely within a month, however continued TCM treatment monthly till she was 33 weeks pregnant. Her boy is now three years

Analysis:

The couple had been trying to conceive for four years without any success. Jenny had a long history of taking oral contraceptive pill, which may have suppressed the growth of Kidney Qi and caused insufficiency of Kidney essence, disturbed the balance of oestrogen and progesterone, and decreased her ovarian activity (Kidney

essence is responsible for underlying egg quality and uterine lining); together with long term stress, this caused Liver Qi stagnation and blood deficiency, affecting her ovarian functions. As a consequence, she had poor response to the hormonal stimulation drugs, and developed a thin endometrial lining, as well as painful and lumpy breast. My TCM treatment principle was to regenerate her reproductive system by strengthening the Kidney Qi and nourishing the Kidney essence, soothing the Liver Qi, as well as improving blood circulation. I also treated her husband, as he was 52 years old and had suffered from diabetes since the age of 17. It was important to make sure he produced the best quality sperm, as this would also contribute towards a successful pregnancy.

Case six: Male factor with nine failed IVF attempts

Fiona and Robert were both 40 years old. This couple was diagnosed with the male-factor infertility initially. Robert has poor sperm motility and morphology. They had been trying to conceive for eight years, and had undergone nine IVF attempts, including one cancelled cycle, achieved two pregnancies, but unfortunately both had miscarried at 8 to 10 weeks. They were referred to me by a consultant when they were undergoing their 10th IVF cycle. In this time, after she had six sessions of acupuncture and combined with Chinese herbal medicine, she had 7 eggs collected, 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 spare good embryos to be frozen. She had one session of acupuncture before and one straight after embryos transferred, and two more sessions within a week to help with the implantation. Fortunately, she achieved a pregnancy, but she started bleeding when she was seven weeks pregnant. I used Chinese herbal tea to replace the herbal pills, alongside the acupuncture. She continued taking the herbs for a month, although the bleeding had stopped in just two weeks. She was fine for the rest of the pregnancy, and finally gave birth to a healthy baby girl in January 2005.

<u>Analysis</u>

Because this couple was diagnosed with the male-factor infertility initially, it was essential that both partners be treated to give them a better chance. As a company manager, Robert was busy, stressed and always felt hot in most of the time. His Liver Qi and blood were stagnated, and Kidney Yin was deficient. The Chinese herbs nourished his Kidney Yin, soothed the Liver Qi and improved the blood flow, and then improved his sperm quality. However, Fiona has only one ovary in the left side, and had already gone through nine IVF attempts, which meant nine cycles of strong hormonal stimulation drugs. Her body was totally out of balance and this situation was never fully recovered. Her organs were not functioning optimally, her Kidney Qi was depleted, and her Oi and blood were stagnated. Therefore, the blood supply to her uterus was insufficient; the progesterone level was not good enough to allow the embryos to be implanted in the uterus, nor to maintain the pregnancy. By using TCM, I rectified this hormonal imbalance, improved the blood flow to her ovary and uterus, thickened the endometrial

lining, and harmonised the environment in her pelvic area. As a consequence, she achieved a pregnancy and carried to the term.

Case seven: High FSH

When she visited me in the first time, Julie was at age of 40 and had been trying to conceive unsuccessfully for five years. She had miscarried once when she was young, and had one failed IVF attempt in March 2004 and one cancelled IVF cycle in September 2004 due to poor response and converted to IUI instead. She was very stressed, depressed and anxious, extremely tired most time, suffering bad backache and shoulder pain. She always feels cold, especially cold hands and feet. Her period cycle was between 21 to 28 days, bad PMT, heavy blood flow with clots and painful. My diagnosis was the Spleen Qi and Kidney Yang deficiency together with the Liver Qi and Blood stagnation. After she had five months acupuncture and Chinese herbs, her period cycle became 28 days regularly, and she felt much better in general. However she stopped treatment completely as her sister was really ill, and she was in a very difficult situation. Sixteen months later in August 2006 when her FSH raised to 14.6 iu/l, she was told that it was unlikely that she could conceive with her own eggs. So she went on the waiting list for a donor's egg. Whilst she was waiting for a donor, she asked the consultant to give her a last chance of IVF with her own eggs. However, she wanted to combine it with acupuncture for the first time. On this occasion, she produced five big follicles and three smaller ones. Four eggs were collected, two of which were fertilised and divided, and she had two grade one embryos transferred. They both were shocked by the positive pregnancy result. Meanwhile, because she was very anxious and worrying that she may miscarry again, she felt negative, lethargic and insecure, had no appetite and poor sleep. Therefore the acupuncture was continued for a period till she was 12 weeks pregnant. Finally at the age of 42 (five months before her 43 birthday), she gave birth to a healthy baby girl.

Analysis

Julie was a medical professional with a very demanding and stressful job. She had also gone through a very difficult time within her family. Consequently her Liver Qi and blood were stagnated seriously, together with Kidney Yang and Spleen Qi deficiency. The principle of the TCM treatment was to de-stress her and rectify her hormonal imbalance-reduce the elevated FSH. I selected different acupuncture points to soothe her Liver Qi, to relax herself mentally and physically; to warm up the Kidney Yang and to tonify the Spleen Qi. These worked to improve her general well being, to increase the blood supply to her womb and ovaries and to harmonise her hormone levels. So after the acupuncture treatment, she felt much calmer and relaxed, more energetic, and responded incredibly well to the hormonal drugs. She produced much better quality eggs than she had ever done, and also created a welcoming environment in her uterus

for the embryos to be implanted. She eventually achieved a successful pregnancy and carried on to term.

Case eight: Luteal phase defect (LPD)

Katherine was 41 years old. She had given birth to a girl by caesarean section 12 years ago, and had been trying for a second child ever since her daughter turned 2 years old, but has never been successful. She has been living together with her new partner David for 5 years, but his semen test revealed low motility. They had one IVF attempt in January 2004, but unfortunately failed with implantation. They were frustrated and decided to try TCM treatment. Katherine had always felt cold, her hands and lips would turn blue when the weather is cold. Since she had her daughter, she also experienced shorter menstrual cycles, spotting or light bleeding after ovulation for two to three days, and sometimes it continued until her period had started. She visited many consultants and was told that this would not prevent her from conceiving. However, my diagnosis was LPD, which is caused by Kidney Yang and Spleen Qi deficiency in terms of TCM. After she had 8 weeks of acupuncture and Chinese herbal medicine, while David took herbal tablets, she fell pregnant naturally. She continued her treatment until she was 14 weeks pregnant, and gave birth to a beautiful girl in 2004. She recovered incredibly well from labour, and subsequently she went on to have another pregnancy at the age of 43, and now has three healthy children.

Analysis

This is a typical case of LPD. Katherine conceived her first child at the age of 28, but bled for the first three months during the pregnancy, which indicating some hormonal imbalance, specifically an insufficiency of progesterone production. After she gave birth to her daughter, her condition became worse and she started experiencing spotting or light bleeding after ovulation. Because of the insufficiency of Spleen Qi to support her Kidney Yang, leading to poor blood supply to her uterus, and caused this so-called "cold womb". This 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 recognised to be the reason of failures in implantation with her IVF and in natural conceiving. By having TCM treatment, her Kidney Yang was strengthened and her Spleen Qi was tonified, which improved her progesterone level, thickened her womb lining, and created a nice and cosy "incubator". Consequently, she was able to conceive naturally.

Conclusion

One of the Chinese proverb says "when the soil is well prepared, the harvest will be bountiful." The quality of the soil influences the productivity and health of the plant. For the seed to be implanted, the fields, as well as the seed, must possess the conditions of fertility. Therefore, sufficient blood flow to the ovaries and uterus, and a balanced hormonal environment are crucial in achieving a pregnancy.

Through TCM, we can help direct the body's attention to the midbrain, pituitary, ovaries and uterus, as well as create the spiritual, mental and emotional health required to produce healthy eggs, provide appropriate conditions for their fertilisation and foster a welcoming environment in the uterus, so the embryos may be implanted, growing to a foetus and be carried to term. For those suffering severe long-term tube obstruction, endometriosis, fibroid etc, using only TCM is sometime unrealistic, IVF is probably the option for women who wish to have their own genetic children. However, applying TCM treatment can help those patients prepare their body for IVF, supporting them physically and mentally during and after the procedure, reducing some of the difficult side effects caused by the hormonal medications, improving the function of the ovaries to produce better quality eggs, increasing blood flow to the uterus to thicken the womb lining, and achieving good response to the hormonal stimulation. As a consequence, it creates better quality and quantity of embryos, increases the chance of conception, and also minimises the risk of miscarriage, maintaining the pregnancy to term.

* To protect confidentiality, all names have been changed.

References

- [1] www.infertilitynetworkUK.com
- [2] jttp://www.hfea.gov.uk/en/406.html
- [3] R. Lewis, The Infertility Cure, Little, Brown and Company, London, 2004.

