T reatment of
Qi and Blood Deficiency
in Infertility

by Damian Carey

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**Introduction**

Infertility is defined as the inability to produce offspring in a woman who has been trying for two years, who has a normal sex life and whose partner has normal reproductive function. *(Maciocia, 1998, page 691)* Flaws classifies infertility as three years of unsuccessful attempts to conceive *(Flaws, 1998)* while others define it after one. *(Marchbanks et. al., 1989)* Current epidemiological evidence suggests that 15% of couples will experience infertility, of which 25% remain unexplained. *(Templeton, 1995)*

Chinese Medicine (CM) appears to have a better record than Western Medicine (WM) in treatment of unexplained infertility, those cases that present with no discernible anatomical abnormality or hormonal deficiency. One such situation is Qi and Blood deficiency.

**Case History**

**Initial Presentation**

Anne, a 33 year old woman, presented after ten months of attempts to become pregnant via natural methods. She had previously been on oral contraceptives (OCPs) for two years.

**Associated Problems**

Insomnia; dizziness; poor memory; excessive tiredness; bloating/indigestion. Most of Anne’s menstrual periods since ceasing OCP’s involved heavy bleeding.

**Pulse**

Moderate pulse with a tendency to fullness in the Spleen and Lung

**Tongue**

Pale; toothprints; trembling

**Abdomen**

Flaccid

**Skin**

Pale

**General Health**

Lower back pain; tendency to asthma and breathlessness; need to urinate at night; anxiety about ability to conceive

**Family History**

Breast and stomach cancers on mother’s side of family; Heart disease on Father’s side of family. No known infertility history.

**Western Medical Diagnosis**

None
Chinese Medicine Diagnosis, Aetiology and Pathogenesis

**Diagnosis**

Spleen Qi and Blood Deficiency with underlying Kidney Qi Deficiency

<table>
<thead>
<tr>
<th>Sign</th>
<th>Indication</th>
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<tbody>
<tr>
<td>pale tongue</td>
<td>Blood Deficiency</td>
</tr>
<tr>
<td>toothprints</td>
<td>Spleen Qi Deficiency</td>
</tr>
<tr>
<td>trembling tongue</td>
<td>Stirring of Liver Wind - Deficient Liver Blood</td>
</tr>
<tr>
<td>moderate pulse</td>
<td>underlying good health</td>
</tr>
<tr>
<td>flaccid abdomen</td>
<td>Spleen Qi Deficiency</td>
</tr>
<tr>
<td>pale skin</td>
<td>Blood Deficiency</td>
</tr>
<tr>
<td>insomnia</td>
<td>Blood Deficiency</td>
</tr>
<tr>
<td>poor memory</td>
<td>Blood Deficiency</td>
</tr>
<tr>
<td>excessive tiredness</td>
<td>Spleen Qi and Blood Deficiency</td>
</tr>
<tr>
<td>asthma and breathlessness</td>
<td>Qi Deficiency</td>
</tr>
<tr>
<td>bloating/indigestion</td>
<td>Spleen Qi Deficiency</td>
</tr>
<tr>
<td>heavy menstrual bleeding</td>
<td>Spleen Qi fails to hold Blood</td>
</tr>
<tr>
<td>low back pain</td>
<td>Kidney Qi Deficiency</td>
</tr>
<tr>
<td>need to urinate at night</td>
<td>Kidney Qi Deficiency</td>
</tr>
</tbody>
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**Table 1: Analysis of Signs and Symptoms**

CM Aetiology and Pathogenesis

Further questioning revealed the onset of digestive disruption coincided with two years travelling in Malaysia and Thailand. The South East Asian climate is notorious for initiating invasion by Heat Damp pathogenic factors and long term disruption of digestive function/Spleen Qi. The pathology in this case arises from deficiency of the Spleen function of absorbing and assimilating the products of digestion, thus inhibiting the Spleen’s role in producing Qi and Blood. The Spleen is considered to be the main Zang organ for the manufacture of Qi and Blood. (Cheng, 1987, pg. 48) When Spleen is deficient the resultant Qi deficiency manifests as excessive tiredness and breathlessness and poor muscle tone (readily observed in the abdomen) while the resultant Blood deficiency manifests as pale skin, insomnia, dizziness and poor memory.

WM Aetiology and Pathogenesis

The CM diagnosis of Blood Deficiency has no exact match in WM, however a diagnosis of anaemia is a close equivalent. Anaemia is a deficiency of haemoglobin concentration in the blood due to lack of, or a dysfunction of, red blood cells. (Roper, 1978, pg. 16) Various types of anaemia are defined according to their underlying cause, but in all cases the reduction in haemoglobin leads directly to a reduction in oxygen supply to peripheral tissues (Greene, 1996, pg. 357) leading in turn to breathlessness, fatigue and pale skin. (Tortora & Grabowski, 1996, pg. 574)

The most common cause of anaemia is iron deficiency which is estimated to affect over 2 billion people (Galloway & McGuire, 1994) and leads to decreased red blood production and abnormalities of mature cells. Less common is pernicious anaemia, a failure of the gastric mucosa to secrete adequate intrinsic factor, essential for the absorption of vitamin B 12 which, in turn, is necessary for the formation of red blood cells. (Greene, 1996, pg. 357; Roper, 1978, pg. 16; Tortora & Grabowski, 1996, pg. 574)
**Chinese Medicine Treatment**

**Treatment Principle**
Nourish Blood; regulate Qi; support the Spleen; regulate the Chong & Ren vessels.

**Acupuncture Points and Methodology**

**Treatments 1 and 2**
Anne presented initially with a full, swelling Lung pulse and a moderately full Kidney Yin pulse. This is the main clinical indication for using the Ren Mai and supported the treatment principle while addressing the need to dissolve anxiety. (Carey, 2005)

<table>
<thead>
<tr>
<th>Point</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lu 7 and Kid 6</td>
<td>in combination, activate the Ren Mai</td>
</tr>
<tr>
<td>CV 4</td>
<td>fortifies the Spleen, supplements Qi, benefits the uterus and assists conception</td>
</tr>
<tr>
<td>CV 7</td>
<td>regulates menstruation and Blood and benefits the lower abdomen</td>
</tr>
<tr>
<td>CV 12</td>
<td>fortifies the Spleen and regulates Qi</td>
</tr>
<tr>
<td>CV 17</td>
<td>regulates Qi</td>
</tr>
<tr>
<td>St 36</td>
<td>supports the Spleen and supplements Qi and Blood</td>
</tr>
</tbody>
</table>

**Treatments 3 and 4**
By the third treatment Anne’s pulse pattern had changed. Her Lung and Kidney Yin pulses had returned to normal and her Spleen and Kidney Yang/Pericardium pulse were now full. This is the main clinical indication for using the Chong Mai and again coincided with the treatment principle. The Chong Mai regulates menstruation, is closely associated with Spleen function and has the ability to mobilise Qi and Blood in the lower jiao. (Carey, 2005)

<table>
<thead>
<tr>
<th>Point</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sp 4 and Pe 6</td>
<td>in combination, activate the Chong Mai</td>
</tr>
<tr>
<td>CV 1</td>
<td>regulates the Chong and Ren vessels, regulates Yin and calms the spirit</td>
</tr>
<tr>
<td>CV 4</td>
<td>fortifies the Spleen, supplements Qi, benefits the uterus and assists conception</td>
</tr>
<tr>
<td>St 37 &amp; 39</td>
<td>points of the Sea of Blood</td>
</tr>
<tr>
<td>St 37</td>
<td>regulates Qi and regulates Spleen</td>
</tr>
<tr>
<td>St 30</td>
<td>regulates the Chong Mai and harmonises Blood</td>
</tr>
<tr>
<td>Kid 13</td>
<td>regulates the Chong Mai and is indicated for infertility</td>
</tr>
</tbody>
</table>

**Herbal Medicine**
Si Wu Tang - a classic Blood nourishing formula

**Lifestyle, Dietary and Exercise Advice**
Avoid sugar and cold, raw foods; concentrate on warm, moist, savoury meals based on meat and vegetables with an abundance of green leafy vegetables; eat slowly in a peaceful environment; rest as much as possible after meals.
Assessment of Outcomes

Anne’s signs of Qi and Blood Deficiency resolved within the period of treatment. She was sleeping much better after the first treatment and her dizziness and tiredness were gone after the second. After the third treatment Anne reported an increased vitality, describing herself as becoming unusually outspoken, engaging in intense emotional dialogues and experiencing empowering dreams.

The four treatments took place over two months, within two menstrual cycles. Unknown to either of us, Anne conceived shortly after the third treatment. She experienced an untroubled pregnancy and subsequently gave birth to a healthy boy.

Research

The past two decades has seen enormous advances in Assisted Reproduction Technology (ART). Women under 38 are achieving a 38% viable pregnancy rate per embryo transfer. (Lyttleton, 2004, pg. 362) Yet serious ethical dilemmas and social implications of ART remain unresolved. A well conducted 2005 systematic review determined a statistically significant 30-40% increased risk of birth defects associated with ART, (Hansen et.al., 2005) underscored by the observation: “... we know virtually nothing about the molecular signature of a ‘high quality’ oocyte.” (Schultz, 2005)

In the realm of CM, examination of the research suggests both acupuncture and Chinese herbal medicine are distinctly effective for assisting female fertility. (Yang, Ma, Liu, Wang & Liu, 2005; Quintero et. al., 2005; Davis, 2004; Xia, Cai & Zhang, 2004; Chao, Huang & Yen, 2003; Paulus, Zhang, Strehler, El-Danasouri, & Sterzik, 2002; Mo et. al., 1993; Gerhard & Postneek, 1992; Lian, 1991)

A 2003 review of controlled trials of acupuncture for women’s reproductive health care concluded “... doubt remains about the effectiveness of acupuncture for gynaecological conditions in view of the small number of studies and their variable quality ...” however “Acupuncture appears promising for infertility.” (White, 2003)

By 2004, researchers from New York Weill Cornell Medical Center were declaring that acupuncture helps:

- Reduce stress hormones that interfere with ovulation
- Normalize hormones that regulate ovulation so an egg is released
- Increase blood flow to the uterus, improving the chances of a fertilized egg implanting
- Improve ovulation cycles in women with polycystic ovary syndrome (PCOS), which makes getting pregnant difficult
- Improve pregnancy rates in women undergoing in vitro fertilization (IVF)

(Hanlon, 2004)

With regard to anaemia as a cause of infertility, several studies have pointed to the link between celiac disease, which involves high incidence of anaemia, and infertility. (Collin, Vilska, Heinonen, Hallstrom & Pikkarainen, 1996; Stazi, & Mantovani, 2000; Harakati, 1996) The link between vitamin B deficiency and infertility has also been well noted. (Bennett, 2001; Gulden, 1990; Sanfilippo & Liu, 1991)
Discussion

The value of Chinese Medicine

This case study illustrates the simple elegance of CM diagnosis and treatment yielding positive results. The treatments combined local acupoints known to be effective in supplementing Qi and Blood with the systemic action of the two Extraordinary channels associated with menstruation and pregnancy. Both of these channels have documented psycho-emotional benefits which were pertinent to the patient’s anxiety and vitality. (Carey, 2005) The addition of the classic Blood nourishing herbal formula Si Wu Tang emphasised the treatment principle and increased the likelihood of success. Thus, multiple principles were addressed and re-emphasised with relatively few needles and a basic herbal formula. This is an easily tolerated intervention compared to the distress of a woman unable to conceive.

CM is highly effective in generating relaxation and reducing the emotional distress experienced by infertile women. This is a critical factor in conception, demonstrated by Anne’s improved sleep after the very first acupuncture session, an outcome rarely attained in WM without detrimental side effects.

Contrasts and interaction between CM & WM theories and practice

There are stark differences between CM and WM treatment of infertility. Herbal medicine and acupuncture have a long history of use in infertility treatment, whereas WM treatment, using drugs and surgery, has only recently become established. CM relies on the subtleties of pulse and tongue diagnose, combined with simple questioning; on the other hand, WM has developed highly sophisticated diagnostic methods such as ultrasound, hysterosalpingography, laparoscopy and blood hormone tests. WM’s ability to manipulate the stimulation of the ovaries to produce eggs and the surgical correction of anatomical abnormalities allows WM to achieve positive results in extreme circumstances. “The worse a diagnosed cause of infertility is, the better the chance of getting pregnant naturally will be after [WM] treatment.” (Jansen, 1997, pg. 7) In contrast: “The slighter the variation from normal, the more trouble [Western] medicine has in correcting it.” (Jansen, 1997, pg. 7) It is subtle disharmonies like Qi and Blood Deficiency that WM finds difficult to diagnose and treat.

The central symptoms of Qi and Blood Deficiency coincide with those of anaemia: breathlessness, fatigue, dizziness and pale skin. This allows us a reasonable comparison of CM and WM theories and practice. The WM response to iron deficiency anaemia is dietary iron supplementation. This is known to be associated with moderate incidence of gastro-intestinal side-effects such as heartburn, nausea, vomiting, diarrhoea, or constipation (Bharti, 2004; Hyder, Persson, Chowdhury, & Ekstrom, 2002) but is nonetheless effective. Similarly, it is not uncommon for women to develop a digestive reaction to the strong flavours of Chinese Blood supplementing herbs.

However, in contrast to WM, CM recognises the need not only to provide the right raw materials for making Blood, but also to ensure that the digestive system is capable of absorbing those materials. As CM sees it, the fundamental task is to tonify the Spleen to make Blood. Furthermore, iron is a single, inorganic chemical isolate whereas herbal medicine is based predominantly on whole plants with the four herbs of Si Wu Tang comprising hundreds, if not thousands, of complex organic molecules, operating synergistically.
Co-management

In an ideal world, Western and Chinese Medicine practitioners, with their complementary strengths and weaknesses, would co-operate and complement each other in the treatment of infertility. WM diagnostics can be used to confirm and refine CM prognosis. Surgery and laparoscopy can be used when anatomical abnormalities are beyond CM’s realm of influence. CM herbs and acupuncture can provide a baseline of individualised support for women, with ART able to provide backup when CM procedures fail.\(^{(1)}\)

Ethical Dilemmas

1. One particular ethical dilemma raised by this case is the use of Huiyin (CV 1), situated in the perineum, between the anus and vagina. Huiyin is rarely used due to the invasion of personal modesty, yet it is a potent point with clear relevance to this case, having the functions of regulating the Chong and Ren vessels, regulating Yin and calming the spirit. A bio-mechanical assessment of Huiyin would describe it as a trigger point for the pelvic floor muscles. Deadman and Al-Kafaji observe: “It is unfortunate that due to its location [Huiyin] is clinically less used than it otherwise might be.” (Deadman & Al-Kafaji, 2000)

   A cautious practitioner might well dispense with the point, hopeful that the treatment will succeed without it. Yet a thorough practitioner has the choice to at least consider its use and make a careful assessment of the possible risks versus the possible benefits in each case.

   The ethical dilemma is heightened when the practitioner is male. Naturally, the use of Huiyin would require careful explanation with permission clearly sought and received. However, this in itself is not enough: an argument can be raised for coercion in light of the unequal power dynamic in the practitioner/patient relationship.

   One way to minimise this risk of coercion would be to raise the possibility of using Huiyin in a future treatment, allowing the patient time to consider it in privacy. Another option is to invite a female witness to be present. Careful use of draping to minimise exposure is also highly recommended.

2. A broader dilemma exists in ART’s ability to artificially override the normal physiological filtering of unhealthy gametes, leading to the potential for generations of sub-healthy ART children to be born. This issue requires deep analysis and is beyond the scope of this paper, yet it must be addressed at least briefly.

   From the CM view, a women with distinct deficiency of Qi and Blood or Kidney Jing will pass this deficiency on to her child. Yet given time, CM has the ability to correct these deficiencies thus increasing the likelihood of healthy offspring.

   This is a challenge and a contradiction for CM and WM practitioners alike. It may well be that this issue raises the stakes for co-operation between the two systems from being a good idea to a matter of urgency.

\(^{(1)}\) A 2002 German study provides an excellent example of acupuncture and ART co-operation. It compared 80 women receiving acupuncture treatment shortly before and after embryo transfer with a control group of 80 women receiving no acupuncture. Clinical pregnancies were documented in 34 of 80 patients (42.5%) in the acupuncture group, whereas pregnancy rate was only 26.3% (21 out of 80 patients) in the control group. (Paulus, Zhang, Strehler, El-Danasouri, & Sierzik, 2002) With minor variations, this study has been repeated at least three times since then with similar results.
Conclusion

This case study falls outside the general range of defined infertility. With no WM diagnosis and only ten months of attempts to conceive after ceasing OCP’s, no definitive conclusion can be drawn from this case with regard to infertility treatment. However, it is a classic presentation of Qi and Blood deficiency and provides a good example of clinical CM procedures in the context of persistent, unsuccessful attempts to conceive.

An infertile woman with Qi and Blood Deficiency signs, presenting to a WM practitioner, is likely to be lead through a series of invasive and stressful procedures which might well result in successful pregnancy. Yet the cost in personal stress and finances, along with the risks of a sub-healthy child, compare poorly to the straightforward, economical and time tested treatment procedures offered by CM.

According to Lyttleton, the statistics for infertility and the personal distress resulting from it are universal and “the biological imperative to reproduce has no cultural boundaries.” (Lyttleton, 2004, pg. 1) The use of CM as a first choice for infertility treatment would be cost effective and lead to better social outcomes.
References


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*Masters of Acupuncture/TCM - Women’s Health 1 - University of Western Sydney*


