

The Treatment of Infertility from a Traditional Chinese Medical and Biomedical Perspective

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This paper is intended to educate the reader about the different approaches of infertility from both a Traditional Chinese Medicine (TCM) and Biomedical Perspective.

The main focus is to view both sides of the issue and integrate the devices in the best way possible. There are positive's and negative's on both sides of the fence. My purpose is to present as much information possible on each of the different modalities in which to gain a better understanding of both perspectives. In the end, it is my opinion, that infertility is enhanced by working with both TCM and Western Medicine. Not to say, that TCM can not treat infertility alone or vice versa, but the statistics prove otherwise. The demand for Western treatment is strong and my stance is to ease the infertility process, to help the patient relax and become aware of the importance of a healthy body for pregnancy, which will better their chances of having a child. I do not believe we all have to push everyone towards Biomedical fertility methods, but I do believe that we need to be advocates. We need to be there for our patients, to protect them, to educate ourselves and them about our medicine and Western. This gives us and the patient power that we are knowledgeable enough about a procedure, its use, its risks, its side effects, the stresses it can cause, the effect on the body, etc. Then, you must decide, Is it worth it? Sometimes, its so important that an individual has a child, they will risk most anything. At this time, we work alongside the medicine and build the body up strongly to resist any harm and make it healthy enough to produce a child. I think this is where we can best intervene, to give them the options. These are never explained well to the patient. From here, it is the patient's choice whether or not to choose which fertility method they will use, one or both.

Introduction: Comparison and overview of Traditional Chinese Medicine and Western Medicine in the treatment of female infertility

Female infertility is called Bu Yun Zheng in Traditional Chinese Medicine (TCM). This translates to mean a no pregnancy condition. The Chinese believe that infertility exists when a healthy couple is unable to achieve pregnancy after three years or the failure to conceive for several years after the first delivery. TCM has treated infertility for well over two thousand years without the help of modern advances in medicine. These Chinese Doctors have had to explore the human body in different ways

without tools. They closely watched what the human body did naturally and applied this accordingly coming up with different reasons as to why a female got pregnant and why she could not become pregnant. Chinese medicine gives infertile women or couples the ability through treatment to become fertile with a low cost, noninvasive, low potential for side effects to improve a person's overall health to be able to conceive naturally without the use of Western modalities or in coordination with Western medicine. Today, it is common to use both treatment modalities for possibly a greater chance in becoming pregnant.

Understanding Infertility and its Treatment from a Biomedical Perspective

Infertility is described as the inability of a couple to conceive after one year of unprotected intercourse. Infertility affects about one in five couples in the United States; its increasing incidence reflects later marriage and therefore a later birth of first child. Etiological factors are sperm disorders (35% of couples), ovulatory dysfunction (20%), tubal dysfunction (30%), abnormal cervical mucous (5%), and unidentified factors (10%).¹

Infertility is classified as primary when the female partner has never conceived before, or as secondary when the woman has had a previous pregnancy irrespective of the final outcome of that pregnancy (i.e. even if she miscarried). About 70% of cases are due to female infertility and 30% to male sterility.²

The ability to conceive starts with the pituitary gland, located beneath the brain, stimulates the reproductive system with two hormones: follicle stimulating hormone (FSH) and luteinizing hormone (LH).

FSH and LH are chemical messengers from the pituitary to the ovaries. The ovaries carry the lifetime supply of eggs. Each egg is encased in an ovarian follicle.

Each month, FSH helps to stimulate the production of about twenty follicles to begin to develop. After the follicles have been developing for about a week, hormone changes only allow for one of the follicles to continue to grow. This explains the reason for multiple births: occasionally more than one follicle will continue to mature and the multiple follicles are fertilized, hence multiple births (twins, triplets, etc.).

The follicle continues to grow until around the fourteenth day of the menstrual cycle. At this point, it breaks out of the ovary and floats free. Surrounded by sticky fluids, it is picked up by hair-like projections called cilia. With the help of the cilia, the follicle moves through one of the fallopian tubes and takes approximately three days to travel to the uterus.

It is only in the fallopian tubes that fertilization is able to take place. Before ovulation, the hormone estrogen stimulates the secretion of mucus, which makes the sperm able to travel easier through the fallopian tubes. Pockets in the cervix collect the sperm, which can sometimes wait several days for ovulation to occur. During ovulation, the cervical opening softens and dilates to allow the sperm easier passage. Immediately after ovulation the hormone progesterone prepares the uterine lining for a fertilized egg.

¹ <http://acupuncture.com/Acup/Fertility.htm>, p.2.

² Giovanni Maciocia, *Obstetrics and Gynecology in Chinese Medicine*, Churchill Livingstone, New York, 1998: p. 735.

If fertilization does not occur, this lining sloughs off about fourteen days after ovulation in what is called menstruation. This cycle is repeated as many as 400 times during a female's life, only to be interrupted by pregnancy, serious illness or hormone imbalance.³

Biomedical Diagnostic Tools

The three main questions to ask a patient who is experiencing infertility are:⁴

1. Is the patient ovulating?
2. Are the conditions for implantation adequate?
3. Is the morphology of the uterus and tubes normal?

For clinical evidence of ovulation the following are tested:⁵

Basal body temperature (BBT): The early morning rectal temperature will rise approximately 0.5 to 0.7 degrees Celsius after ovulation and stay in a plateau for twelve to fourteen days. This rise in BBT is due to a central effect of progesterone secretion. A slight drop of BBT might be observed 24 to 48 hours before ovulation, related to the estrogen peak secreted by a mature follicle.

Observation of cervical mucus: Under the influence of the highest level of estrogen secretion from the dominant ovarian follicle, which precedes ovulation, one can observe an abundant, clear and fluid secretion of mucus from the cervical canal. This transient secretion slightly but obviously dilates the external cervical os. It precedes ovulation by 4 to 2 days and is greatest on the day before ovulation. This mucus is highly receptive for the sperm to penetrate. The cervical mucus disappears promptly after ovulation under the influence of progesterone secretion.

Exfoliative vaginal cytology: A vaginal smear, scraped from a lateral vaginal wall with an Ayres spatula or a wet cotton swab, provides a typical result at the time of ovulation, when examined under light microscope observation, after it has been stained with Papanicolaou or Schorr staining, or with any quick dye.

The superficial cells of the vaginal mucosa are flat, well scattered, with pyknotic nuclei and highly eosinophilic. As soon as ovulation has taken place, the cells become coiled, packed together and mostly basophilic.

Transvaginal sonography: The sonographic picture of a preovulatory follicle is well documented and typical. The mature follicle measures from 18 to 23 mm in average inner dimension.

³ Karen Bradstreet, *Overcoming Fertility Naturally: The Relationship Between Nutrition, Emotions and Reproduction*, Woodland Books, Pleasant Grove, Utah: 1993, p. 6-8.

³http://matweb.hcupe.ch/endo/Reproductive_health/Diagnostic_methods_female_infert, *Diagnostics Methods in Female Infertility*, p. 1-2.

⁴ *Ibid*, p. 1-3.

After ovulation, the follicular wall becomes irregular and the fresh corpus luteum usually appears as a hypoechogenic structure and may contain some echoes corresponding to internal bleeding. The wall of the corpus luteum becomes thickened as luteinization progresses.

Pituitary and ovarian hormone assays: The secretion of LH can be detected daily in urine samples by radioimmunoassay. The LH peak usually precedes ovulation by 48 to 24 hours. At the same time, the secretion of estrogen produced by the dominant follicle, reaches a maximum in the peripheral venous blood. Soon after ovulation, the level of progesterone in the peripheral blood rises from 2.5 to 4.0 ng/ml and reaches its maximum from day 5 to day 10 after the LH peak, with a variation from 7 to 12 ng/ml. This intermediate luteal phase is the physiological time for uterine nidation.

Laparoscopy: A mature follicle increases ovarian size considerably and looks like a round bluish cyst with one or two capillaries seen on its surface. After ovulation, the stigma of the follicular rupture can be easily recognized as a small hole surrounded by a hemorrhagic structure on the surface of the ovary. Scars of previous ovulations can also be recognized on the surface of both ovaries. Clear yellowish follicular fluid can be found in the pouch of Douglas.

Clinical evidence of readiness for uterine implantation⁶

Basal body temperature: A sustained plateau of 12 to 14 days following ovulation, is indicative of a good progesterone secretion from the corpus luteum, at least of 4 ng/ml in the peripheral blood.

Transvaginal sonography: The thickness of the secretory endometrium can be precisely measured. At its thickest, it reaches 8 to 14 mm, including both layers, and should be echogenic in a regular manner.

Plasma progesterone assays: In order to have a good evaluation of the secretion of the corpus luteum, one should obtain at least three to four blood samples, for instance every other day, starting from the third postovulatory day.

Endometrial biopsy: the tissue sample should be aspirated either with a Novak cannula or with a plastic Cornier's Pipelle around the time when nidation (the development of the epithelial membrane lining the inner surface of the uterus following menstruation which allows for implantation) normally takes place, which means between day 20 to day 22 of the cycle.

Dating of the endometrial biopsy requires strict histological criteria.

Hysteroscopy: Using a small hysteroscope of 5 mm or 3 mm of diameter, a hysteroscopic examination of the uterine cavity can be easily performed on an

⁶ Ibid, p. 3-4.

out-patient basis in a clinic or in the office, with or without anesthesia. The examination can rule out the presence of uterine polyps, synechiae, or endometriosis, all of which could interfere with nidation.

Clinical evidence of normality of the internal genital tract⁷

Hysterosalpingography: As in the case of other medical methods of investigation, strict technique is necessary in order to obtain precise information. A perfect frontal and lateral view of the uterus is necessary and the position of the uterus needs to be strictly parallel to the radiological film in order to record size, morphology and the outline of the uterine cavity.

A lateral view of a correct exposure of both tubes gives more information on their morphology than the frontal view. Also, the lateral view gives a better picture of the isthmic segment of the uterus and of its width in case of a suspected incompetence of the internal cervical orifice.

Until fibroscopic tools have been utilized enough and a sufficient optical knowledge on the inside morphology of the fallopian tubes has been accumulated, hysterosalpingography remains the only way to investigate the intramural segment and the isthmic segment of the fallopian tubes.

Transvaginal sonography: With the use of vaginal sound, now it can easily measure the size of the uterus, and observe the structure of the endometrium and of the myometrium. Polyps, myomas, internal synechiae and congenital malformations are well documented in specialized text books. Ovarian cysts and sactosalpinx can easily be recognized with transvaginal sonography.

Hysteroscopy: With this method, using either CO₂ gas or saline solution as a dilation medium, the entire uterine cavity can be explored, and pathological findings detected, even those which can be sometimes missed with the hysterosalpingography.

The openings of the fallopian tubes in the uterine cavity can also be observed and demonstrated to be free of any obstacle as polyp or fibrotic tissue.

Laparoscopy: Trans or paraumbilical laparoscopy remains the most complete method to explore the anatomical situation of both fallopian tubes and their relation with the adjacent ovaries. By means of direct optical observation, one can detect unsuspected peritubal and periovarian adhesions, or asymptomatic endometriosis, or agglutination of the fimbriae of the distal portion of the tubes.

With the advent of fine fibrotic catheters, introduced into the open fallopian tubes Under laparoscopic control, we should be able to examine the internal appearance of the ampullary segments and detect small internal adhesions or post-inflammatory atrophy of the tubal epithelia.

⁷ Ibid, p. 4-5.

Biomedical Treatment of Female Infertility

Gynecological problems such as endometriosis, adhesions, fibromyomas and myomas impede the process of fertilization and implantation. These mechanical problems are commonly treated surgically. Treatment must be individualized on the basis of the patient's age, symptoms, desire for pregnancy and extent of the disease.

Options for treatment for endometriosis include medical suppression of ovarian function to arrest the growth and activity of endometrial implants, conservative surgical resection of as much of the endometriotic tissue as possible, a combination of the two therapies, and total abdominal hysterectomy, usually with bilateral salpingo-oophorectomy.⁸ A more recent treatment for endometriosis is to use GnRH or gonadotropin-releasing hormone agonists, which produce a state of relative and reversible hypoestrogenemia. However, treatment with GnRH agonists is limited to less than six months because long-term use is associated with bone loss.⁹ Uterine fibroids (myomas, fibromyomas, leiomyomas which are benign uterine tumors of smooth muscle origin are one of the most common pelvic neoplasms, occurring in ¼ white and ½ black women.¹⁰

Ovulatory dysfunction due to endocrine dyscrasia (an imbalance of components of the blood) is treated with hormone therapy using synthetic hormones to supply the deficiency.

If infertility is due to infections of the reproductive tract then antibiotics will be used.

If none of the above mentioned treatments is effective, then alternate therapies are recommended such as artificial insemination, in vitro fertilization, gamete intrafallopian transfer, frozen embryo intrafallopian transfer, and surrogate motherhood.

Artificial insemination means implanting the father's live sperm and mechanically introducing it into the uterus during ovulation. In vitro fertilization is used with women who have complications with fallopian tubes, commonly a blocked fallopian tube and that does not allow for the fertilized egg to travel to the uterus. The procedure involves the extraction of the egg from the ovary. The egg is then fertilized outside of the body with the sperm and then reintroduced back into the uterus. Gamete intrafallopian transfer (GIFT) consists of extracting oocytes, fertilizing them outside of the body and reintroducing them into the fallopian tubes. Zygote intrafallopian transfer (ZIFT) is similar to GIFT but instead of being introduced into the fallopian tubes, the embryos are frozen and stored until they are ready to use. Surrogate motherhood consists of artificially inseminating with the father's sperm a willing female to be the carrier of the couple's baby until term and then give that child to the couple upon birth.

Risks of Common Drugs that treat infertility

This information is from the 1998 Physician's Desk Reference

Bromocriptine:

⁸ Mark H. Beers and Robert Berkow, The Merck Manual of Diagnosis and Therapy, 17th edition, Merck Research Laboratories, New Jersey, 1999, p. 1957-1958.

⁹ Ibid, p. 1957-1958.

¹⁰ Ibid, p. 1959

Used to treat: amenorrhea, galactorrhea, elevated prolactin

Potential side effects: nausea, headache, vomiting, fatigue, dizziness, lightheadedness, nasal congestion, constipation, diarrhea, drowsiness, fainting, seizures, stroke, low blood pressure, shortness of breath, hallucinations, disturbed dreams.

Trade name: Parlodel

Danocrine (danazol) an androgen

Used to treat: endometriosis, fibrocystic breast disease

Potential side effects: weight gain, acne, seborrhea, hirsutism (excessive hair growth in unusual places), water retention, hair loss, voice change, spotting, amenorrhea, flushing, vaginal dryness, reduction in breast size, nervousness, emotional swings, jaundice, headache, dizziness, cataracts, pelvic pain, visual disturbances, masculinizing effects, birth defects and many others.

*This drug is limited in its usefulness because the side effects outweigh the benefits

Synarel (nasal spray)

Used to treat: endometriosis

Potential side effects: ovarian cysts, abnormal vaginal bleeding, birth defects, hot flashes, emotional disturbances, decreased sex drive, vaginal dryness, acne, reduction in breast size, irreversible loss in bone density, nasal irritation.

Metrodin (injected)

Used to treat: stimulates follicular growth; must be combined with human chorionic gonadotropin to induce ovulation.

Potential side effects: abnormal ovarian enlargement; overstimulation of the ovary leading to life-threatening complications such as accumulation of fluid in the peritoneal cavity, thorax and pericardium, respiratory distress, pulmonary embolism, stroke, multiple births, headache, gastrointestinal upset, breast tenderness, hair loss, skin problems, birth defects, ectopic pregnancy, permanent damage to ovaries. Has caused death in some cases.

Pergonal

Used to treat: stimulates follicular growth; must be combined with human chorionic gonadotropin to induce ovulation.

Potential side effects: abnormal ovarian enlargement; overstimulation of the ovary leading to life-threatening complications such as accumulation of fluid in the peritoneal cavity, thorax and pericardium, respiratory distress, pulmonary embolism, stroke, multiple births, headache, gastrointestinal upset, breast tenderness, hair loss, skin problems, birth defects, ectopic pregnancy, permanent damage to ovaries.

Profasi

Used to treat: induces ovulation in women who have been treated with Pergonal.

Potential side effects: overstimulation of the ovary, sudden ovarian enlargement, rupture of ovarian cysts with effusion of blood into the peritoneal cavity, multiple births, blockage in the arteries, fluid retention, irritability, headache, restlessness, depression, fatigue, water retention, pain at the site of injection.

Serophene (Clomiphene) (Clomid)

Used to treat: induces ovulation in women with indications of normal estrogen production
Potential side effects: visual disturbances, multiple births, birth defects, overstimulation of the ovaries with attendant risks (can lead to ovarian cancer), hot flushes, abdominal discomfort, breast tenderness, nausea, vomiting, nervousness, insomnia, ovarian cyst formation, dizziness, depression, fatigue, abnormal uterine bleeding, weight gain, hair loss.

Birth-Control Pills

Used to treat: endometriosis

Potential side effects: blood clots, heart attacks, rupture of blood vessels in the brain, cerebral thrombosis, hypertension, gallbladder disease, liver tumors, nausea, vomiting, abdominal cramps, bloating, breakthrough bleeding, spotting, amenorrhea, change in menstrual flow, temporary infertility after discontinuance, water retention,, discoloration of the skin, breast changes, weight loss or increase, change in cervical erosion and secretion, loss of milk when given immediately after birth, jaundice, migraine, rash, depression, reduced tolerance of carbohydrates, Candida infection, change in cornea of eye, intolerance to contact lenses, premenstrual syndrome, cataracts, appetite changes, headache, cystitislike symptoms, nervousness, dizziness, abnormal hair growth, loss of scalp hair, acne, colitis, others.

Advantages and Disadvantages from a TCM approach

Advantages are plentiful in the TCM treatment approach to treating infertility. The TCM diagnostic system overviews every system in the human body. It does not just treat by symptoms and diseases. TCM ventures to stimulate the bodies natural healing potential by treating the root causes rather than just symptoms. TCM pays close attention to small signs and symptoms. The TCM model also does not ignore other signs and symptoms, which appear to not be related to infertility. This can include problems with digestion, circulation, one's mood, or diet. These seemingly unrelated clues can be very useful in forming a diagnosis and treatment plan. TCM is also not an invasive form of treatment and promotes a more healthy state of being in which to achieve overall health. The treatment does not focus on getting pregnant quickly, rather re-harmonizing the body back into its optimal state where the individual is more readily able to become pregnant. The TCM style of treatment is also gentle on the body and has no or relatively few side effects. TCM may be used to strengthen and balance one's general health so that Western medical fertility drugs and procedures are more effective. The TCM patient derives general health benefits and endocrine system balancing from specific acupuncture and herbal regimes. Pregnancy becomes easier to achieve and postpartum recuperation happens faster. Medical studies have been done in China to verify this type of whole

body health enhancement.¹¹ As compared with Western modalities of treatment, TCM is much less expensive, more practical and much more humanistic.

Since menstruation is the clearest and most obvious indication of the quantity, quality and patency of the Blood, Zhu Dan-xi, one of the Four Great Masters of Internal medicine of the Jin/Yuan dynasties, said, "In order to cure infertility, the first important thing is to adjust the menstruation." By adjusting the menstruation, Zhu meant treating any menstrual pathology, such as early or late menstruation, hyper or hypomenorrhea, dysmenorrhea, premenstrual breast distention, or amenorrhea. Since Chinese medicine treats all of these conditions quite well, it likewise treats female infertility with a high degree of success.¹² Chinese medicine is one of the oldest, continually practiced, literate, and professional medicine in the world. Although it is not known very well in the United States, it is slowly gaining acceptance and has proven to work for many individuals. Its methods have been time tested over two thousand years. TCM can accurately diagnose and treat most cases of infertility and can be very beneficial to the infertile individual. Some disadvantages to TCM especially in the United States are that it is still not very well known and people are more apt to go for Western medicine because its been around so long and it is what people know. There is also not much research on the subject, even though it has been used successfully in China for thousands of years. The TCM treatments can also be lengthy in time. It can usually take up to one year to achieve pregnancy.

In some cases, it can be rather important to use both TCM and Biomedicine simultaneously for maximum benefit.

In Chinese there is a saying: Tong bing yi zhi.....Different diseases, one treatment;

Yi bing tong zhi.... One disease, different treatments.¹³

Advantages and Disadvantages from A Biomedical approach

The advantages from a Biomedical perspective are that through specific diagnostic tests and examinations, the medicine can find out exactly what is dysfunctional in the individual. Understanding this, the treatment focuses on correcting the dysfunction it can accurately depict through specific diagnostic tests and other examinations what is dysfunctional in the female and can therefore administer treatments and assess how the treatments are specifically working for the individual and whether the treatment is having a positive or negative effect. Another advantage of Western medicine is that it is widely known throughout the U.S and has been used successfully over many years. It is a scientific medicine and is positively admired and valued by many. Also from a biomedical point of view, there have been many advances in the treatment of infertility over the years. Many of these advances have been successful, others not. The medicine has much research to back it up, yet it does not always work like it should. Disadvantages of Biomedicine are that the treatments are not focused to the individual rather to what the

¹¹ Bob Flaws, *A Handbook of Menstrual Diseases in Chinese Medicine*, Blue Poppy Press, Boulder, Colorado, 1997: p.72.

¹² Bob Flaws, *Endometriosis & Infertility And Traditional Chinese Medicine, A Laywoman's Guide*, Blue Poppy Press, Boulder, Colorado: p. 80.

¹³ Bob Flaws, *A Handbook of Menstrual Diseases in Chinese Medicine*, Blue Poppy Press, Boulder, Colorado, 1997: p.72.

dysfunction of the body is. The treatments can be rather invasive, inhumane, can be disappointing and extremely expensive with no guarantee of a pregnancy.

TCM Etiology of Female Infertility¹⁴

There are many reasons a woman can be infertile, which include constitutional weakness, overwork, excessive physical work, excessive sexual activity at an early age, invasion of cold and diet. These etiologies are described as follows.

Constitutional weakness¹⁵

Constitutional weakness of the Kidney-Essence is an important cause of infertility. Such weakness may be due to the woman's mother having been too old when conceiving her, the parents' constitution being not good, the parents' health being not good at the time of conception, etc. Because the Kidney-Essence is the basis for the Heavenly Qi, the woman is unable to conceive.

Overwork¹⁶

This involves working long hours, not getting enough rest and sleep and improper diet for many years. This can be a major cause of Kidney-Yin deficiency. Kidney-Yin is the basis for menstrual blood and the Uterus and when it is deficient there may be infertility.

Excessive physical work¹⁷

Excessive physical work or strenuous exercise can weaken the Spleen and Kidney Yang, especially at puberty when a young girl's uterus is in a vulnerable state.

Excessive sexual activity at an early age¹⁸

Too much sex at too early of an age (before and during puberty, and up to the age of 18) is an important and increasingly frequent cause of disease in Western countries. It seriously weakens the Kidneys and damages the Directing and Penetrating vessels and may therefore cause infertility later in life.

Invasion of Cold¹⁹

Invasion of Cold is a very common cause of infertility in young women. If a girl undergoing puberty is exposed to cold and dampness (especially during her period) when exercising or playing sports, Cold invades the Uterus, turns into internal Cold and obstructs the Uterus and the Directing and Penetrating Vessels, preventing fertilization.

¹⁴ Giovanni Maciocia, Obstetrics and Gynecology in Chinese Medicine, Churchill Livingstone, New York, 1998: p. 691-692 unless noted otherwise

¹⁵ Ibid

¹⁶ Ibid

¹⁷ Ibid

¹⁸ Ibid

¹⁹ Ibid

Diet²⁰

Excessive consumption of cold, iced foods and drinks also leads to Cold in the Uterus as above. Excessive consumption of greasy foods and dairy products leads to formation of dampness in the Lower Burner, which also prevents fertilization; this type of infertility is often due to blockage of fallopian tubes.

Psychological Issues²¹

Stress and fear of parenting can be contributing factors to infertility

Specific Factors that can cause Female Infertility from a TCM and Biomedical Perspective

Today, the knowledge of a Western diagnosis for the TCM practitioner in treating infertility is very beneficial in order to make a more definitive TCM diagnosis. For example, in knowing that a female has a diagnosis of endometriosis, the TCM practitioner has a strong suspicion that they are dealing with a blood stagnation. The blood stagnation might involve other factors as well, but this is pretty commonplace when a woman is diagnosed with endometriosis. Therefore, it is an advantage to the TCM practitioner to have a Western diagnosis to work with. Below is a summary of possible pathological factors that can deem a woman infertile. It makes sense that TCM and Biomedicine integrate their views to find the best possible treatment for encouraging fertility in an infertile woman.

Women with a previous history of the following are often unable to conceive²²:

- Pelvic inflammatory disease (PID)
- Pregnancy outside the uterus
- Abdominal surgery
- Intrauterine device (IUD) complications
- Fibroids
- Women develop an incompatibility with or allergy to the partner's sperm, which are destroyed as a result of immune system malfunction

Other causes of infertility in women²³:

- Failure to ovulate
- Endometriosis
- Pituitary gland failure
- Ovarian failure
- Long-term effects of the birth control pill
- Hypothyroidism or other hormonal imbalances

²⁰ Ibid

²¹ www.holistic-online.com/Remedies/infertility/inf_causes.htm Infertility, p. 1.

²² www.holistic-online.com/Remedies/infertility/inf_causes.htm Infertility, p. 1-2.

²³ *ibid*, pp. 2-3.

- ❑ Age (female fertility declines fast after age 35)
- ❑ Abnormal womb shape
- ❑ History of pelvic infections
- ❑ Being underweight
- ❑ Hostile cervical mucous
- ❑ Recurrent miscarriages
- ❑ Nutritional deficiencies
- ❑ Thyroid malfunction
- ❑ Diabetes
- ❑ Fallopian tube problems-blockages, scarring,etc
- ❑ Congenital abnormalities
- ❑ Pelvic inflammatory disease
- ❑ Ectopic pregnancy
- ❑ Ruptured appendix
- ❑ Lower abdominal surgery
- ❑ Endometriosis
- ❑ Previous surgical closure (tubal ligation)

TCM Pathology and Treatment of Infertility²⁴

The three most discussed organs in modern TCM texts for treating female infertility are the Kidneys, Spleen and Liver.

The Kidneys have a Yin and a Yang aspect. These two aspects of Yin and Yang have a different meaning for the Kidneys because they are the foundation of Yin and Yang for all the other organs. Kidney-Yin is looked at as the foundation of all yin energies of the body, so that would be the energies of the Liver, Heart and Lungs. Kidney-Yang is the active, warm and functional part and is the source for the Yang energies of the body and therefore is the energy of the Spleen, Lungs and Heart. Kidney-Yin is the primary substance for birth, growth and reproduction and Kidney-Yang is the force for all psychological processes. Both Kidney-Yin and Kidney-Yang work together and if one is deficient the other will be deficient and so on.

When diagnosing infertility it is most important to distinguish whether the condition is excess or deficient. This gives the practitioner the idea of either tonifying and nourishing the body's Qi or rather to eliminate pathogenic factors. If deficiency is thought to be the cause, then one must decipher if it is one of the blood or of the Kidneys (either Kidney-Yin or Kidney-Yang). If Kidney-Yin or Kidney-Yang is deficient, the Kidney-Essence is always involved in its Yin or Yang aspect. The menstrual function and uterus rely on the Yin aspect of the Essence (Post Natal Qi) and its Yang aspect (Pre-Natal Qi).²⁵ The Yang aspect of the Essence is the Fire of the Gate of Life, also called the Minister Fire, that is formed at conception. The Minister Fire is of a special type: a

²⁴ Giovanni Maciocia, The Foundations of Chinese Medicine: A Comprehensive Text for Acupuncturists and Herbalists, Churchill Livingstone, New York, 1989: p. 95.

²⁵ Giovanni Maciocia, Obstetrics and Gynecology in Chinese Medicine, Churchill Livingstone, New York, 1998: p. 692.

‘formless’ Fire, it can actually generate Water (rather than drying it up). For fertilization to take place, the Yin and Yang aspects of the Essence must be balanced correctly: the Yin in the form of Water, Essence and Blood is the substantial basis for conception to occur, but the Yin needs the warming and fertilizing action of Yang, in the form of Minister Fire.²⁶ Therefore, if the Yin aspect of Essence is deficient it will not nourish the uterus and there will either be no egg produced, the egg will be unable to be fertilized or the fertilized egg cannot be nourished. If the Yang aspect of Essence is deficient, there is no energy to help activate the water and the egg will go unfertilized or the fertilized egg will not be nourished. On the other hand, if the if the Yang aspect of Essence is excessive the blood in the uterus will become too hot and therefore the egg will go unfertilized or the fertilized egg will be unable to get nourishment.

In the treatment of infertility involving excess conditions like cold, blood heat, dampness, stagnation of Qi and stasis of Blood these are all looked at as causing infertility because these pathogenic factors obstruct the Uterus and its corresponding channels (Directing and Penetrating Vessels) inhibiting fertilization to take place.

From a study involving 257 cases of infertility reported in Beijing’s *Journal of Chinese Medicine*, this can give an idea of statistics of each pattern and combination patterns.²⁷

- ❑ Kidney Yang deficiency: 27.63%
- ❑ Spleen and Kidney-Yang deficiency: 12.84%
- ❑ Liver and Kidney-Yin deficiency: 11.57%
- ❑ Kidney-Yin deficiency with Empty Heat: 5.06%
- ❑ Liver-Qi Stagnation: 7.39%
- ❑ Blood Stasis: 29.57%
- ❑ Phlegm: 3.11%

- ❑ Cold Dampness: 2.73%

TCM Infertility Patterns Clinical Manifestations and Treatment

There are seven commonly diagnosed patterns that are seen in female infertility. Of course, they are not limited to only seven and there may be combination patterns as well. These patterns are fully discussed below with complete treatment plans, acupuncture treatments and two herbal formulas for each pattern discussed. For a complete listing of the other herbal formulas indicated for a particular TCM pattern diagnosis, please see Giovanni Maciocia’s, Obstetrics and Gynecology In Chinese Medicine, p. 696-726. All of the information described below is from Giovanni’s text.

Another resourceful text in which to obtain variations for TCM point prescriptions and herbal prescriptions, Bob Flaw’s, Fulfilling the Essence, A Handbook of Traditional and Contemporary Treatments for Female Infertility, p. 25-92.

Empty Patterns

1. Kidney Deficiency (Yin or Yang)

²⁶ Ibid p. 693.

²⁷ Ibid p. 694-695.

2. Blood Deficiency

Full or Excess Patterns

1. Cold
2. Dampness
3. Blood Heat
4. Stagnation of Qi
5. Stasis of Blood

Kidney Yang Deficiency²⁸

Clinical Manifestations: Long term infertility or infertility in an older woman, possibly a history of late menarche, delayed periods, prolonged menstrual cycle, period either scanty or heavy, back pain, dizziness, feeling cold, depression, frequent urination. Tongue: pale, swollen, wet. Pulse: deep, weak.

Treatment Principle

Supplement Kidneys and warm the essence, warm the yang and nourish the uterus

Acupuncture Points

KID 13 (Qixue) nourishes the penetrating vessel, tonifies the Kidneys and strengthens the uterus

KID 3 (Taixi), UB 23 (Shenshu) and UB 52 (Zhishi) all tonify the Kidneys, especially Kidney Yang.

Ren 4 (Guanyuan) *with direct moxa cones*, strengthens the Uterus and tonifies the Kidneys.

Du 4 (Mingmen) *with direct moxa cones* improves mingmen fire.

LU 7 (Lique) on right and KID 6 (Zhaohai) on the left regulate the directing vessel and strengthen the Uterus and Kidneys.

Ren 8 (Shenque) *with moxibustion with a moxa stick, after filling the navel with salt*, warms the Kidneys and the Essence. *All with reinforcing method moxa* should be used.

Baomen and Zihu are *two points located two cun from Ren 4 (Guanyuan)*, Baomen on the right and Zihu on the left. They are sometimes described as extra points although they coincide with ST-28 (Shuidao). *They are empirical points with a long history of use for infertility.*

Herbal Prescription

Yu Lin Zhu (Fertility Pearl) variation

Ren Shen (Radix Ginseng 9g),

Bai Zhu (Rhizoma Atractylodis macrocephalae 6g)

Fu Ling (Sclerotium Poriae cocos 6g)

²⁸ Ibid, 699-704.

Bai Shao (Radix Paeoniae lactiflorae 6g)
Zhi Gan Cao (Radix Glycyrrhizae uralensis praeparata 3g)
Dang Gui (Radix Angelicae sinensis 9g),
Shu Di Huang (Radix Rehmanniae glutinosae praeparata 9g)
Du Zhong (Cortex Ecommiae ulmoidis 6g)
Lu Jiao Shuang (Cornu Cervi degelatinatum 6g)
Chuan Jiao (Pericarpium Zanthoxyli bungeani 2g)
Zi He Che (Placenta Hominis 6g)
Dan Shen (Radix Salviae miltiorrhizae 4.5g)
Xiang Fu (Rhizoma cyperi rotundi 6g)

Explanation

The first 12 herbs constitute the formula *Yu Lin Zhu* which tonifies the Kidney Yang and promotes fertility. *Bai Zhu*, *Ren Shen* and *Fu Ling* tonify Qi. *Ren Shen* also tonifies the Original Qi. *Bai Shao*, *Chuan Xiong*, *Dangu Gui* and *Shu Di Huang* nourish and invigorate Blood (they form the formula *Si Wu Tang*, *Four Substances Decoction*). *Tu Si Zi*, *Du Zhong*, *Lu Jiao Shuang* and *Chuan Jiao* tonify Kidney Yang and nourish the Du channel and Chong channels. *Zi He Che* nourishes Blood and the Essence. *Dan Shen* and *Xiang Fu* invigorate Blood and move Qi to counterbalance all the tonics in the formula. *Zhi Gan Cao* harmonizes.

Ba Zhen Yi Mu Tang variation (*Leonorus Eight Precious Decoction variation*)

Dang gui (Radix Angelicae sinensis 10g)
Chuan Xiong (Radix Ligustici Chuanxiong 5g)
Bai Shao (Radix Peoniae lactiflorae 8g)
Shu Di Huang (Radix Rehmanniae glutinosae praeparata 15g)
Ren Shen (Radix Ginseng 3g)
Bai Zhu (Rhizoma Atractylodis macrocephalae 10g)
Fu Ling (Sclerotium Poriae cocos 8g)
Zhi Gan Cao (Radix Glycyrrhizae uralensis praeparata 5g)
Yi Mu Cao (Herba Leonor heterophylli 9g)
Xiang Fu (Rhizoma Cyperi rotundi 4.5g)
Hong Hua (Flos Carthami tinctorii 4.5g)
Fu Pen Zi (Fructus Rubi chingii 6g)
Yin Yang Huo (Herba Epimedii 6g).

Explanation

The first nine herbs constitute the formula *Ba Zhen Yi Mu Tang*, which tonifies Qi and Blood and invigorates Blood. This formula is particularly indicated if, in addition to a deficiency of Kidney Yang, there is a pronounced deficiency of Blood. *Xiang Fu* and *Hong Hua* are added to Move Qi and invigorate Blood to counterbalance all the tonic herbs in this formula. *Fu Pen Zi* and *Yin Yang Huo* tonify and warm Kidney Yang.

Note: According to Bob Flaw's, Kidney Yang deficiency is not common among young American adults. When it is seen, it is usually due to extreme abuse of drugs, such as cocaine, or as part of a more complicated, chronic scenario involving the Spleen. If it is due to congenital weakness, it may be impossible to correct. If it is due to exhaustion, sexual excess, prolonged disease, or drugs, it can be treated with Chinese herbal medicine, rest and relaxation, a warm, nourishing diet, and moxibustion.²⁹

Kidney Yin Xu³⁰

Clinical Manifestations: long-term infertility, periods early, scanty, with light colored blood, 5 palm heat, night sweating, dizziness, tinnitus. Tongue: red without coating. Pulse: Floating-Empty or Rapid-Fine.

Treatment Principle: Nourish Kidney-Yin and Kidney-Essence

Acupuncture:

Ren 4 (Guanyuan)-tonifies the Kidneys, nourishes Yin, strengthens the uterus and the Chong and Ren channels.

Ren 7 (Yinjiao)-nourishes Yin

KID-3 (Taixi) and SP-6 (Sanyinjiao) nourish Kidney-yin

KID-13 (Qixue)-a Chong vessel point, tonifies the Kidneys, strengthens the Uterus and nourishes the Chong.

LU-7 (Lieque) on the right side of the body and KID-6 (Zhaohai) on the left side of the body both-regulate the Ren channel & nourish the Kidneys.

UB-52 (Zhishi)-nourishes the Kidney essence

Giovanni states that generally no moxa should be used. However, if the tongue is not Red or only slightly Red and the pulse is very Fine, *a small amount of moxa (as a warm needle)* on KID-3 is beneficial to increase the tonifying effect.

Herbal Prescription

Yang Jing Zhong Yu Tang variation (*Nourishing the Essence and Growing Jade Decoction variation*)

Dang Gui (Radix Angelicae sinensis 9g)

Bai Shao (Radix Paeoniae lactiflorae 9g)

Shu Di Huang (Radix Rehmanniae glutinosae praeparata 15g)

Shan Zhu Yu (Fructus Corni officinalis 9g)

Nu Zhen Zi (Fructus Ligustri lucidi 6g)

Han Lian Cao (Herba Ecliptae prostratae 6g)

²⁹ Bob Flaws, Endometriosis & Infertility And Traditional Chinese Medicine: A Laywoman's Guide, Blue Poppy Press, Boulder, Colorado, 1989: p.83.

³⁰ Giovanni Maciocia, Obstetrics and Gynecology in Chinese Medicine, Churchill Livingstone, New York, 1998: p704-705.

Explanation: The first four herbs constitute the formula *Yang Jing Zhong Yu Tang*, which tonifies the Kidneys, nourishes the Essence and Blood and promotes fertility. ‘Jade’ has the double meaning of ‘child’, hence the name of the formula. *Nu Zhen Zi* and *Han Lian Cao* constitute the formula *Er Zhi Wan (Two Solstices Pill)* which nourishes Kidney Yin and clears Empty Heat.

Empirical Prescription of Dr. Shan Dao Wei

Sheng Di Huang (Radix Rehmanniae glutinosae 9g)

Bai Shao (Radix Paeoniae lactiflorae 9g)

Di Gu Pi (Cortex Lycii chinensis radice 4.5g)

Xuan Shen (Radix Scrophulariae ningpoensis 6g)

Mai Men Dong (Tuber Ophiopogonis japonici 6g)

Qing Hao (Herba Artemisiae apiaceae 4.5g)

Gou Qi Zi (Fructus Lycii chinensis 6g)

Dan Shen (Radix Salviae miltiorrhizae 4.5g)

Yi Mu Cao (Herba Leonori heterophylli 4.5g)

Explanation

Sheng Di Huang, *Bai Shao*, *Xuan Shen* and *Mai Men Dong* nourish Yin. *Xuan Shen* also clears Empty Heat and cools Blood. *Di Gu Pi* and *Qing Hao* clear Empty Heat. *Gou Qi Zi* nourishes Blood, Yin and Essence. *Dan Shen* invigorates Blood and calms the mind. *Yi Mu Cao* invigorates Blood.

As compared with the previous formula, the present one is better at clearing Empty Heat that arises from Yin deficiency; it is therefore suitable when the tongue is particularly Red.

Blood Deficiency³¹

Clinical Manifestations: Scanty periods, pale blood, delayed cycle, tiredness, depression, dizziness, pale complexion, blurred vision. Tongue: Pale and Thin. Pulse: Choppy or Fine.

Treatment Principle: Nourish Blood and the Essence, strengthen the Liver and the Kidneys.

Acupuncture:

Ren 4 (Guanyuan)- nourishes Blood and strengthens the Uterus.

ST 36 (Zusanli) and SP 6 (Sanyinjiao)- nourish Blood.

KID 13 (Qixue) a point of the Ren vessel, tonifies the Kidneys and strengthens the Uterus.

³¹ Ibid, p. 706-709.

UB 20 (Pishu) and UB 23 (Shenshu)-tonify the Kidneys and Spleen and nourish Blood.

UB 17 (Geshu) *with direct moxa cones*, nourishes Blood..

Abdomen Zi Gong- nourishes the Essence, strengthens the Uterus and promotes fertility.

Herbal Prescription:

Ba Zhen Tang (*Eight Precious Decoction*)

Dang Gui (10g), Chuan Xiong (5g), Bai Shao (8g), Shu Di Huang (15g), Ren Shen (3g), Bai Zhu (10g), Fu Ling (8g), Zhi Gan Cao (5g)

Explanation: This formula tonifies Qi and nourishes Blood.

Dang Gui, Chuan Xiong, Bai Shao and *Shu Di Huang* nourish Blood.

Ren Shen, Bai Zhu, Fu Ling and *Zhi Gan Cao* tonify Qi.

Patent: Tai Pan Tang Yi Pian (Sugar-coated Placenta Tablet)

Tai Pan (*also called Zi He Che*)

Explanation: This remedy, composed entirely of powdered placenta, nourishes Blood and the Kidney Essence. The tongue presentation appropriate to this remedy is a pale and thin body.

Note: For more formulas that treat Blood Deficiency and case studies, please see Giovanni Macioca's *Obstetrics and Gynecology in Chinese Medicine*, p. 706-709. In addition, please see Bob Flaw's book, *Fulfilling the Essence* for other Blood Deficiency formulas, p. 53-58.

Cold in the Uterus³²

Clinical Manifestations: Primary infertility, delayed cycle, scanty period, small clots, painful period, better with heat, feeling colder during period, pale face, feeling cold, sore back. Tongue: Pale, thick-white coating. Pulse: Weak, Tight.

This is a condition of Empty Cold in the Uterus from a Kidney-Yang deficiency; it is more common in young women or young girls.

Treatment Principle: Warm and tonify Kidney Yang, warm the Uterus, scatter Cold.

Acupuncture

Ren 2 (Qugu)- *with direct moxa cones*, scatters Cold in the Uterus.

³² Ibid, p. 709-712.

Ren 4 (Guanyuan)- *with direct moxa cones*, warms Kidney Yang and tonifies the Uterus.

Du 4 (Mingmen)- *with direct moxa cones*, warms the Fire of the Gate of Life and strengthens the Du (governing) vessel.

KID 7 (Fuliu) and UB 23 (Shenshu)- tonify Kidney Yang.

Ren 7 (Yinjiao)- nourishes the Kidneys and strengthens the Uterus.

Ren 7 and Du 4 make a good combination in warming the Uterus and the Kidneys and scattering the cold out of the Uterus.

Herbal Prescriptions

Ai Fu Nuan Gong Wan and Ju He Wan (Artemisia-Cyperus Warming the Uterus Pill and Semen Citri Reticulate Pill)

Ai Ye (Folium Artemisiae argyi 9g)

Wu Zhu Yu (Fructus Evodiae 4.5g)

Rou Gui (Cortex Cinnamomi 4.5g)

Xiang Fu (Rhizoma Cyperi rotundi 9g)

Dang Gui (Radix Angelicae sinensis 9g),

Chuan Xiong (Radix Ligustici chuanxiong 9g)

Bai Shao (Radix Paeoniae lactiflorae 6g)

Huang Qi (Radix Astragali membranacei 6g)

Sheng Di Huang (Radix Rehmanniae glutinosae 9g)

Xu Duan (Radix Dipsaci aspari 6g)

Ju He (Semen Citri reticulatae 6g)

Li Zhi He (Semen Litchi chinensis 6g)

Xiao Hui Xiang (Fructus Foeniculi vulgaris 4.5g)

Explanation: The first ten herbs constitute the formula *Ai Fu Nuan Gong Wan*, which nourishes the Blood, tonifies Kidney Yang and expels Cold from the Uterus. The last three herbs constitute the formula *Ju He Wan*, which warms the Uterus and scatters Cold.

Wen Jing Tang (Warm the Menses Decoction)

Wu Zhu Yu (Fructus Evodiae rutaecarpae 9g)

Gui Zhi (Ramulus Cinnamomi cassiae 9g)

Sheng Jiang (Rhizoma Zingiberis officianalis recens 6g)

Dang Gui (Radix Angelicae sinensis 9g)

Chuan Xiong (Radix Ligustici Chuanxiong 4.5g)

Bai Shao (Radix Paeoniae Lactiflorae 9g)

Dang Shen (Radix Codonopsis pilosulae 12g)

Mai Men Dong (Tuber Ophiopogonis japonici 6g)

E Jiao (Gelatinum Corri Asini 9g)

Mu Dan Pi (Cortex Moutan radiceis 4.5g)

Ban Xia (Rhizoma Pinelliae ternatae 6g)

Zhi Gan Cao (Radix Glycyrrhizae uralensis preeparata 3g)

Explanation:

Wu Zhu Yu, Gui Zhi and *Sheng Jiang* warm the Uterus and expel Cold. *Dang Gui, Chuan Xiong, Bai Shao* and *E Jiao* nourish and invigorate the Blood. *Dang Shen* tonifies Qi to nourish Blood. *Mai Men Dong* nourishes Yin to help nourish the Blood. *Mu Dan Pi* clears any Empty Heat that might arise from Blood Deficiency. For this reason, although this formula is for Cold in the Uterus, one of its symptoms is a feeling of heat in the face. *Ban Xia* regulates the Chong vessel; it does so because of the close relationship between the Stomach channel (which *Ban Xia* affects) and this vessel through the point ST 30 (Qichong). *Zhi Gan Cao* harmonizes.

Dampness in the Lower Burner³³

Clinical Manifestations: Irregular periods, delayed cycle, mid cycle pain, vaginal discharge, long term infertility, adhesions, obesity, feeling of heaviness. Tongue: sticky coating. Pulse: slippery.

Treatment Principle: Resolve Dampness, remove obstructions from the Ren and Chong vessels.

Acupuncture:

Ren 3 (Zhongji)- strengthens the Uterus and resolves Dampness.
Zigong- an extra point 3 cun away from Ren 3, removes obstructions from the Uterus and fallopian tubes. It is often used in combination with Ren 3.
ST 28 (Shuidao), SP 9 (Yinlingquan) and Ren 9 (Shuifen)- resolve Dampness.
LU 7 (Lieque) *on the right side of the body* and KID 6 (Zhaohai) *on the left side of the body*, regulate the Ren Vessel and strengthen the Uterus.
ST 30 (Qichong)- *a point of the Chong Vessel*, regulates the Chong vessel and invigorates Blood. By invigorating Blood in this vessel, it helps to transform water.
KID 14 (Siman)- *a point of the Chong Vessel*, eliminates stagnation of water.
UB 32 (Ciliao)- drains Dampness from the genital system.
GB 41 (Zulinqi) *on the right* and SJ 5 (Waiguan) *on the left*, regulate the Girdle (Dai) vessel and drain dampness. They are used instead of LU 7 and KID 6 if there are symptoms of the Dai Vessel which include Damp Heat in the genital system, vaginal discharge, a feeling of heaviness of the abdomen, an abdominal pain that extends to the loins and a pulse that is Wiry on both Middle positions.
GB 26 (Daimai)- a Dai Vessel point that resolves Damp Heat in the genital system. It should be used in conjunction with SJ 5 and GB 41.
UB 32 (Ciliao) (*electrical stimulation with negative pole*) and Ren 4 (Guanyuan) *in combination, is a modern treatment which is used specifically for obstruction of the fallopian tubes. For this treatment, the patient need to lie on her side.*

Herbal Prescription

³³ Ibid, 709-712.

Qi Gong Wan (Arousing Uterus Pill)

Ban Xia (Rhizoma Pinelliae ternatae 6g)
Cang Zhu (Rhizoma Atractylodis lancae 6g)
Chen Pi (Pericarpium Citri reticulatae 3g)
Fu Ling (Sclerotium Poriae cocos 6g)
Xiang Fu (Rhizoma Cyperi rotundi 6g)
Shen Qu (Massa Fermentata Medicinalis 6g)
Chuan Xiong (Radix Ligustici Chuanxiong 4.5g)

Explanation:

Ban Xia, Cang Zhu, Chen Pi and Fui Ling resolve Dampness. *Xiang Fu* moves Qi, which helps to resolve Dampness. *Shen Qu* resolves accumulation of food, which helps to resolve Dampness. *Chuan Xiong* invigorates Blood; this also helps to resolve Dampness.

The main emphasis of this formula is in resolving Dampness. The tongue presentation appropriate to this formula is a thick and sticky white coating.

Empirical Prescription of Dr Shang Xian Min

Shan Zha (Fructus Crataegi 6g)
Xian Mao (Rhizoma Curculiginis orchioidis 6g)
Yin Yang Huo (Herba Epimedii 6g)
Tu Si Zi (Semen Cuscutae chinensis 6g)
Fu Pen Zi (Fructus Rub chingii 6g)
Dan Nan Xing (Pulvis Arisaemae cum fella bovis 6g)
Ban Xia (Rhizoma Pinelliae ternatae 6g)
Fu Ling (Sclerotium Poriae cocos 6g)
Xiang Fu (Rhizoma Cyperi rotundi 6g)
Zhi Ke (Fructus Citri aurantii 6g)
Bai Zhu (Rhizoma Atractylodis macrocephalae 6g)
Chuan Xiong (Radix Ligustici Chuanxiong 4.5g)
Ze Lan (Herba Lycopi lucidi 4.5g)

Explanation:

Shan Zha resolves food accumulation which helps to resolve Dampness. *Xian Mao, Yin Yang Huo, Tu Si Zi* and *Fu Pen Zi* tonify and warm Kidney Yang. *Dan Nan Xing, Ban Xia, Fu Ling* and *Bai Zhu* tonify Qi and resolve Dampness and Phlegm. *Xiang Fu* and *Zhi Ke* move Qi, which helps to resolve Dampness. *Chuan Xiong* and *Ze Lan* invigorate Blood and eliminate stasis, which helps to resolve Dampness.

This formula resolves Cold Dampness and tonifies Kidney Yang. The tongue presentation appropriate to this formula is therefore a Pale body with a thick, sticky, white coating.

Blood Heat³⁴

Clinical Manifestations: Early periods (short cycle) up to twice a month, heavy flow, feeling hot during period, thirst, mental restlessness. Tongue: Red. Pulse: Rapid, Overflowing.

Treatment Principle: Cool Blood, regulate the periods.

Acupuncture

LI 11 (Qichi) and SP 10 (Xuehai)- cool the Blood.

KID 2 (Rangu) and LIV 3 (Taichong)-in combination, cool Blood.

SP 6 (Sanyinjiao) and P 3 (Quze)- cool Blood.

UB 17 (Geshu)- cools Blood.

Ren 4 (Guanyuan)- strengthens the Uterus and nourishes the Blood.

LU 7 (Lieque) *on the right* and KID 6 (Zhaohai) *on the left* – regulate the Ren vessel and nourish Yin.

Herbal Prescription

Qing Jing San variation (*Clearing the Menses Powder variation*)

Mu Dan Pi (Cortex Moutan radidis 6g)

Bai Shao (Radix Peoniae lactiflorae 6g)

Sheng Di Huang (Radix Rehmanniae glutinosae 6g)

Di Gu Pi (Cortex Lycii radidis 15g)

Qing Hao (Herba Artemisiae apiaceae 6g)

Fu Ling (Sclerotium Poriae cocos 3g)

Huang Bo (Cortex Phellodendri 1.5g)

Huang Qin (Radix Scutellariae baicalensis 4.5g)

Qu Mai (Herba Dianthi 6g)

Che Qian Zi (Semen Plantaginis 6g)

Explanation

Mu Dan Pi, *Sheng Di Huang* and *Di Gu Pi* cool Blood. *Bai Shao* nourishes Yin. *Qing Hao* and *Huang Bo* clear Empty Heat. *Fu Ling* resolves Dampness to counteract the cloying nature of some of the ingredients. *Huang Qin* clears Heat and resolves Dampness. *Qu Mai* resolves Damp Heat, penetrates the menses and invigorates the Blood. *Che Qian Zi* conducts Heat downwards and away through urination.

Patent Remedy: Huai Jiao Wan

³⁴ Ibid, p. 719-720.

Huai Jiao (Fructus Sopohorae japonicae)
Zhi Ke (Fructus Citri aurantii)
Dang Gui (Radix Angelicae sinensis)
Di Yu (Radix Sanguisorbae officinalis)
Fang Feng (Radix Ledebouriellae divaricatae)
Huang Qin (Radix Scutellariae baicalensis)

Explanation

This remedy cools Blood and clears Heat. Although its purpose is to treat Blood-Heat affecting the Intestines, its composition is such that it may be used to treat infertility from Blood Heat. The tongue presentation appropriate to this remedy is a Red body.

Stagnation of Qi³⁵

Clinical Manifestations: Irregular periods, pre-menstrual breast tension, painful periods, breast distention, irritability. Tongue: normal color or slightly Red on the sides; if stagnation of Qi arises from Blood deficiency, the sides might be Pale. Pulse: Wiry; if Qi stagnation arises from Blood deficiency, it may be Choppy.

Treatment Principle: Move Qi, eliminate stagnation, pacify the Liver, regulate the periods.

Acupuncture

LIV 3 (Taichong), GB 34 (Yanglingquan), SJ 6 (Zhigou)- all move the Qi, pacify the Liver, settle the Ethereal Soul and eliminate stagnation.

P 6 (Neiguan)-pacifies the Liver, moves Qi and eliminates stagnation.

Ren 4 (Guanyuan)- strengthens the Uterus.

Ren 6 (Qihai)- moves Qi in the Lower Burner.

KID 14 (Siman)- *a Chong Vessel point*, moves Qi in the lower abdomen.

SP 4 (Gongsun) *on the right and P 6 (Neiguan)* regulate the Chong vessel and subdue rebellious Qi.

Herbal Prescription

Kai Yu Zhong Yu Tang (*Opening Stagnation and Growing Jade Decoction*)

Dang Gui (Radix Angelicae sinensis 6g)
Bai Zhu (Rhizoma Atractylodis macrocephalae 6g)
Bai Shao (Radix Paeoniae lactiflorae 6g)
Fu Ling (Sclerotium Poriae cocos 6g)
Mu Dan Pi (Cortex Moutan radice 4.5g)
Xiang Fu (Rhizoma Cyperi rotundi 9g)

³⁵ Ibid, p. 720-724.

Tian Hua Fen (Radix Trichosanthis kirilowii 6g)

Explanation

This formula is essentially a variation of *Xiao Yao San* (*Free and Easy Wanderer Powder*). *Dang Gui* and *Bai Shao* nourish Liver Blood and pacify the Liver. *Bai Zhu* and *Fu Ling* tonify Spleen Qi. *Mu Dan Pi* clears Liver Heat. This herb is added because long term stagnation of Liver Qi often generates Heat. *Xiang Fu* moves Qi, pacifies the Liver and eliminates stagnation. *Tian Hua Fen* nourishes Yin.

Empirical Prescription of Dr. Shang Xian Min

Chai Hu (Radix Bupleuri 6g)

Xiang Fu (Rhizoma Cyperi rotundi 6g)

He Huan Pi (Cortex Albizziae julibrissin 6g)

Dang Gui (Radix Angelicae sinensis 6g)

Chuan Xiong (Radix Ligustici Chuanxiong 3g)

Bai Shao (Radix Paeoniae lactiflorae 6g)

Shu Di Huang (Radix Rhemanniae glutinosae praeparata 6g)

Dan Shen (Radix Salviae miltiorrhizae 4.5g)

Yue Ji Hua (Flos et Fructus Rosae chinensis 4.5g)

Chen Pi (Pericarpium Citri reticulatae 3g)

Ju He (Semen Citri reticulatae 3g)

Chai Hu, *Xiang Fu* and *He Huan Pi* move Qi, pacify the Liver, eliminate stagnation, calm the mind and settle the Ethereal Soul. *Dang Gui*, *Bai Shao*, *Chuan Xiong* and *Sheng Di Huang* form *Si Wu Tang*, which nourishes and invigorates the Blood. Nourishing Liver Blood helps to pacify the Liver and eliminate stagnation. *Dan Shen* and *Yue Ji Hua* invigorate Blood and eliminate stasis. *Chen Pi* and *Ju He* move Qi and eliminate stagnation.

Stasis of Blood³⁶

Clinical Manifestations: Irregular and painful periods, dark blood with clots, irritability, manic behavior, mental restlessness, abdominal pain. Tongue: Purple. Pulse: Wiry or Choppy.

Treatment Principle: Invigorate Blood, eliminate stasis, pacify the Liver and the Chong Vessel, regulate the periods.

³⁶ Ibid, p.724-726.

Acupuncture

LIV 3 (Taichong) and GB 34 (Yanglingquan)- pacify the Liver, invigorate the Blood and eliminate stasis.

UB 17 (Geshu), SP 10 (Xuehai), SP 6 (Sanyinjiao) and P 6 (Neiguan)- invigorate the Blood and eliminate stasis.

SJ 6 (Zhigou) and Ren 6 (Qihai)- move Qi, which helps to invigorate Blood.

Ren 4 (Guanyuan)-strengthens the Uterus. *According to the ABC of Acupuncture by Huang Fu Mi (AD 259): 'For infertility with stasis of Blood, use Ren 4 (Guanyuan).*

SP 4 (Gongsun) and P 6 (Neiguan)- regulate the Chong vessel, invigorate the Blood and subdue rebellious Qi.

KID 14 (Siman)- *a point of the Chong vessel*, invigorate Blood and subdue rebellious Qi.

ST 29 (Guilai)- invigorates Blood.

KID 6 (Zhaohai) *on the right* and LU 7 (Lieque) *on the left*- regulate the Yin Heel Vessel and remove obstructions from the lower abdomen. The repeated use of this vessel in successive sessions is effective in treating adhesions.

Herbal Prescription

Shao Fu Zhu Yu Tang (Lower Abdomen Eliminating Stasis Decoction)

Xiao Hui Xiang (Fructus Foeniculi vulgaris 6g)

Gan Jiang (Rhizoma Zingiberis officinalis 2g)

Rou Gui (Cortex Cinnamomi cassiae 1.5g)

Yan Hu Suo (Rhizoma Corydalis Yanhusuo 6g)

Mo Yao (Myrrha 6g)

Pu Huang (Pollen Typhae 6g)

Wu Ling Zhi (Excrementum Trogopter 4.5g)

Dang Gui (Radix Angelicae sinensis 9g)

Chuan Xiong (Radix Ligustici Chuanxiong 4.5g)

Chi Shao Yao (Radix Paeoniae rubrae 6g)

Explanation

Xiao Hui Xiang, Gan Jiang and Rou Gui warm the Uterus and expel Cold.

Yan Hu Suo, Mo Yao, Pu Huang and Wu Ling Zhi invigorate Blood and stop pain.

Dang Gui, Chuan Xiong and Chi Shao nourish and invigorate Blood.

This formula invigorates Blood, eliminates stasis and expels Cold; it therefore eliminates stasis of Blood when this is caused by Cold in the Uterus. The tongue presentation appropriate to this formula would be a Bluish-Purple body.

Patent Remedy: Fu Ke Zhong Zi Wan (Gynecological Planting the Seed Pill)

Yi Mu Cao (Herba Leonori heterophylli)

Dang Gui (Radix Angelicae sinensis)
Bai Shao (Radix Paeoniae lactiflorae)
Chai Hu (Radix Bupleuri)
Mu Xiang (Radix Aucklandiae lappae)
Chuan Xiong (Radix Ligustici Chuanxiong)

Explanation

This remedy nourishes and invigorates Blood. It is suitable for treating infertility from stagnant Blood. The tongue presentation would be a slightly Purple body.

Treatment Plan

I believe that each individual, no matter what type of pattern they fit under, should understand that treatment of infertility is not a quick process. Since TCM attempts to regulate the entire body and prepare the body for a pregnancy, it requires more time. While interviewing Donna Keefe, LAc., she explained to me, as she does to her patients, “It takes four seasons to regulate the cycle.”³⁷ By this she means that expect about one year in order for the body and the uterus to prepare for the fetus.

Donna also explained to me the importance of moxa, especially in deficiency conditions. She emphasized the use of moxa on the abdomen to strongly warm the area making it a more desirable place for an egg to implant and a fetus to grow. Donna, in her experience treating fertility has had high success rates with pregnancy.

There was one instance she told me about that was precisely one year to the date a patient began treatment with Donna that the patient learned she was pregnant.

She explained that most of her patients take between six months to one year to conceive. She also helps the patient to understand that their health is key in achieving a healthy pregnancy and a healthy child and that can mean some time.

Integrating TCM and Biomedical Infertility Treatments (Case Studies)

Although there have only been a few serious trials concerning the use of Acupuncture in Reproductive Medicine, I have come across quite a bit of information on the subject and slowly TCM is showing its muscle in the co-treatment of female infertility. This is just the beginning!

With the help of Acupuncture, it can alleviate the side effects of medical treatments, improving the response to hormonal stimulation.³⁸ Secondly, acupuncture can help improve the blood flow to the uterus and ovaries, which has been found to be a great determinant in the success of assisted reproductive

³⁷ Meeting with Donna Keefe, LAc., July 31, 2002.

³⁸ Randine Lewis, Assisting Reproductive Techniques, Medical Articles #RL-02, Eastern Harmony Acupuncture & Herbal Clinic, Hyde Park, Houston, 2002.

techniques (ART). Finally, natural techniques can be employed to help alleviate some of the tension, which is inherent in these extremely stressful procedures. It has been well documented that stress negatively effects the outcome of ART. A recent study published by the American Society of Reproductive Medicine's Fertility and Sterility Journal, reported that stress impairs the success rate in IVF cycles up to 93%!³⁹

Donna Keefe, licensed acupuncturist has been treating female and male infertility for the past fifteen years, although it has not been until recently that it has become her focus. She spoke with me about her experiences with Western infertility modalities.

She began telling me about the doctor at the fertility clinic most of her patient's visit for their procedures. The doctor started noticing that with adjunctive acupuncture and herbal therapy, that his patients were so much calmer, relaxed and generally happy. He had never experienced this in his many years as a fertility specialist. He described most of his patients going through the infertility craze as anxious, nervous, irritable, moody, and depressed. He explains that it is not unusual because the patient's are on such an emotional roller coaster. As soon as these patients began acupuncture, their entire moods changed, he explained. Donna said the doctor said in these exact words, "I am wowed by the difference, these are like completely different people!"⁴⁰

The doctor began noticing other results. While a few women were receiving acupuncture, and were taking a fertility drug simultaneously to stimulate follicular growth, he found that the patient's were ready for the artificial insemination procedure a few days ahead of schedule. This goes on to explain how acupuncture can stimulate the number of follicles produced and the size of the follicles. This deems the follicles are accessible earlier for artificial insemination. Donna knew this was already happening, but found it exhilarating that the doctor was also seeing the positive outcome.

As a result, he invited her into his clinic to perform acupuncture treatments before and after the artificial insemination or in vitro fertilization procedures for her patients. The results so far have been astounding. Pregnancy rates have increased. In addition, many of Donna's patient's are grateful because they have saved money on the injections that are given to stimulate follicular growth. The follicular maturation happens quicker with acupuncture, so the amount of injections ends up being less, saving the patient hundreds of dollars. Each injection is about \$85 dollars per day.

Below are some case studies in which acupuncture benefits Western Medicine's treatment of infertility.

Case #1⁴¹

This case study is from a Medical Article

³⁹ Ibid,

⁴⁰ Meeting with Donna Keefe, LAc, July 31, 2002.

⁴¹ East Harmony Medical Acupuncture Clinic, Hyde Park, Houston,

Sherry was referred to me by her reproductive endocrinologist when she was 36. She previously had poor response to hormonal stimulation, and produced a maximum of three follicles during her past attempts at IVF. Each cycle was cancelled.

Sherry had contracted pelvic inflammatory disease many years prior, and had to undergo extensive abdominal surgeries for fallopian tube obstruction and resulting adhesions. Her fallopian tubes had been removed. When a diagnostic Doppler ultrasound was eventually performed, the blood flow to her ovaries was shown to be severely impeded.

Sherry was already scheduled for her next IVF procedure, and was already on oral contraceptives to control her hormones. We had only a few weeks in which to maximize her response. I performed electroacupuncture on the paraspinal muscles of her low back at the levels between vertebrae L1 and S2 which supply the sympathetic innervation to the uterus and ovaries. By stimulating these areas and the same dermatomal patterns on the lower legs, I was giving her brain a message to “turn down” the sympathetic control of the pelvic organs, delivering more hormonal stimulation to the ovaries, and improving the uterine blood flow.

Sherry was extremely anxious. Her palms were sweaty, she was despondent and scared about her poor response to the IVF cycles. Although she did not describe herself as irritable or depressed, stress had become a large part of her poor response. I taught her some Qi Gong breathing and meditative visualization techniques, and taught her husband the femoral massage technique (this stimulates blood flow to the uterus and ovaries) three times per day on Sherry.

During each acupuncture visit, I performed the back acupuncture treatment on her, followed by the “de-stressing” treatment, applying stimulation to the point between her eyebrows (Yintang), the on top of the feet (LIV 3), and the point on the hands (LI 4). I also applied stimulation to the uterus and ovarian points on the lower abdomen.

When she began injecting the drugs, Sherry and her husband reported that her mental response to the hormonal stimulation was much improved and she felt calmer, almost peaceful. She was accepting the outcome this time, no matter what the results. The response was dramatic. Her reproductive endocrinologist reported that the Doppler studies revealed a great improvement in ovarian blood flow. Nine eggs were retrieved, six fertilized, and two implanted. Both were carried to (almost) term, and they are the proud parents of twins, one boy and one girl.

Case #2⁴²

This particular case involves a woman who had been going through follicular stimulation with the drug Clomid. The test results showed that she was not producing any follicles, even with the drug. Her tests also demonstrated that her FSH levels (follicle stimulating hormone) levels were really low suggesting that she was pre-menopausal. The doctor explained to her that she had less than one half of a chance of becoming pregnant through artificial insemination.

⁴² Meeting with Donna Keefe, July 31, 2002.

Frustrated the woman went to see Donna, an acupunctuist she had been referred to that specialized in infertility. She came to Donna angry and frustrated about the whole ordeal she had just gone through.

She had a dark complexion, was irritable and moody, her tongue was pale purplish with cracks. Her body had no shape and was straight, her weight was being carried in the middle area. Her entire body was cold, especially the middle, was like an ice-cube.

Donna explained to her that it would take her three months to readjust her cycle and then they could start working on fertility.

Impatient, the women went back to her doctor, who suggested another round of Clomid. She went back to see Donna and explained the treatment she was going through again. Donna did not think going through another round was a good idea and why do it again. But, she continued to work with the issue and try and prepare her body. Since she had began the Clomid she was not allowed to take any herbs, so Donna recommended Borage Oil to help balance her hormones. She took this the entire cycle of the Clomid regime. Donna diagnosed her condition as Liver Qi Stagnation with a Cold Uterus combined with Kidney Yang Deficiency (loose stools confirmed the Kidney Yang Deficiency).

Back to the doctor she went and he told her she had produced only one egg and that it did not look to good. The chances of the artificial insemination were zero he said.

She went through the procedure anyway, this was after three acupuncture treatments, and she found out very soon after, she was pregnant.

This is still an ongoing case and she is still receiving acupuncture. So far her pregnancy is very healthy.

Lifestyle Advice

Questions about lifestyle are very important to ask the patient. This can include all aspects of life: emotional stress, job, marriage, social affairs, physical activity and exercise and rest and relaxation. All of these factors can play a major

role in disease mechanisms of infertility. Especially, in the West, we tend to work too much, be under too much stress, exercise too little, and get too little rest and relaxation.⁴³ Therefore, it is extremely important to the woman trying to conceive, that she look over her life and make some changes.

Other important advice to give to the patient would be to meditate or pray, think positive thoughts, focus on other things besides becoming pregnant, help a friend, start a new hobby, take a nice walk and enjoy what surrounds you, laugh, read a good book ,and last but not least, relax and enjoy life.

Vitamins and Minerals for Female Infertility⁴⁴

These are some important vitamins and minerals to consider according to the patient's presenting deficiencies. Some of these vitamins and minerals have been proven to be the link to an individual's fertility.

Vitamin B6- many female reproductive processes seem to be linked to this vitamin. Deficiencies may cause premenstrual syndrome, hormone imbalance, premenstrual acne, and depression. Birth control pills also almost completely eliminate this vitamin from the body.

Vitamin B6 has been shown to balance the key hormones in fertility and those are estrogen and progesterone.

Good food sources for B6 are chicken, fish, liver, pork, egg, unmilled rice, soy beans, oats, whole wheat products, peanuts, walnuts.

Vitamin E- Of all the vitamins, Vitamin E is probably the one most mentioned in fertility discussions. There are scientific studies that claim that Vitamin E enhances fertility. In one study involving several hundred women who had miscarried two or more times, 97% delivered healthy babies when undergoing Vitamin E Therapy.

Good food sources: wheat germ, whole grains and uncooked nuts (almonds).

Bioflavonoids-these are found in the white part of fruit rinds and in broccoli, parsley, potatoes, cabbage and green peppers. These nutrients play a role in the formation of healthy blood vessels. The development of healthy blood vessels is important as the uterus prepares for implantation. Bioflavonoids seem to play a role in developing a healthy uterine lining.

Good Food Sources: Broccoli, cabbage, green peppers, parsley, citrus fruit rinds.

⁴³ Bob Flaws, A Handbook of Menstrual Diseases in Chinese Medicine, Blue Poppy Press, Boulder, Colorado, 1997: p. 79-80.

⁴⁴ Karen Bradstreet, Overcoming Fertility Naturally: The Relationship Between Nutrition, Emotions and Reproduction, Woodland Books, Pleasant Grove, Utah, 1993,: p. 48-50.

B Complex Vitamins- These play a role in hormone balance. These vitamins play a central role in healthy nervous system function. A deficiency of B vitamins can create an excess of estrogen in the system and, conversely, an excess of estrogen can create a B vitamin deficiency. The B vitamins are mostly in whole grains, and most are lost during processing. Evidence also suggests that B vitamins are lost to refined sugar, stress, caffeine, alcohol and other drugs.

Borage Oil- shown to be effective in regulating Estrogen and Progesterone.

Support Groups

A nationwide support group for infertile couples called RESOLVE can provide camaraderie and can give couples an outlet for their feelings. RESOLVE's HelpLine, Medical Call-In Hour, Physician Referral Services, Member To Member contact system and Family Building magazine, are focused on providing support to couples experiencing the roller coaster ride of infertility.

RESOLVE, inc website: www.resolve.org

HelpLine 1-888-623-0744

Email: info@resolve.org

Call to find out where a RESOLVE chapter is near you.

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³http://matweb.hcuge.ch/endo/Reproductive_health/Diagnostic_methods_female_infert, Diagnosics Methods in Female Infertility, p. 1-2.

⁴ Ibid, p. 1-3.

¹ Mark H. Beers and Robert Berkow, The Merck Manual of Diagnosis and Therapy, 17th edition, Merck Research Laboratories, New Jersey, 1999, p. 1957-1958.

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