

Reclaiming Fertility, Harmonizing & Strengthening
Wellness, Facilitating Pregnancy & Healthy Babies



True healing involves returning to one's original nature: We may only be considered to be healed when the damaging events of life no longer limit self-expression and the manifestation of life's purpose (1).

-Lonny S. Jarrett

Written by Thomas S. Nerbas

Introduction

This paper compares and contrasts Western and traditional Chinese medicine aspects of disease diagnosis and treatments. This paper provides diagnostic and treatment principles with respect to Eastern medical techniques for improving and reclaiming male and female fertility.

What is infertility?

A couple is considered infertile when pregnancy has not occurred after one year of coitus without contraception. Infertility is classified as being either primary or secondary. The free medical dictionary by farlex defines infertility: Infertility is the failure of a couple to conceive a pregnancy after trying to do so for at least one full year. In primary infertility, pregnancy has never occurred. In secondary infertility, one or both members of the couple have previously conceived, but are unable to conceive again after a full year of trying (2).

Who is affected by infertility? There are many potential causes of both male and female infertility. Approximately 15% of couples are infertile. Of this 15%, male infertility counts for approximately 20% of the cases. Female infertility accounts for up to 70% of these cases, largely due to the very complex processes involved in the female reproductive system (3).

In modern society, many couples delay childbearing until they are in their thirties or later. Because of this delay: Infertility affects at least 20-25% of couples who are of reproductive age. This means that at least one in five of the couples you know will be affected by some degree of infertility! A sobering thought but fortunately many of these couples can benefit from help. Statistics vary but it would seem that around 30% of men are sub-fertile and at least 2% of men are totally infertile (4).

Incidence of the main infertility factors are: Hormonal factors of ovulation, 41% (25% of these are from failure to ovulate). Fallopian tube abnormalities, 32%. Uterine factors, 16%. Cervical factors, 4.7%. No apparent cause, 5% (5).

Table 1.0 outlines the major causes and typical western medical treatments of infertility.

Table 1.0			
Female infertility causes			
Condition	Definition	Symptoms	Western Treatment
Female tube blockages	Blocked or damaged fallopian tubes prevent eggs from getting to the uterus and sperm from getting to the egg. Leading causes include pelvic inflammatory disease, sexually transmitted diseases such as Chlamydia, and previous sterilisation surgery.	None.	Laparoscopic surgery to open tubes, if possible (small area of blockage). If surgery fails, in vitro fertilisation is an option.
Endometriosis	This condition, in which endometrial tissue (the uterine lining that sheds with each monthly period) grows outside the uterus, is a major cause of infertility in women.	Painful menstrual periods, irregular or heavy bleeding and possibly, repeated miscarriages.	Laparoscopic surgery to remove abnormal tissue or unblock tubes and assisted conception treatments.
Ovulation problems	Any condition (usually hormonal) that prevents the release of a mature egg from an ovary.	Absent or infrequent periods and excessively heavy or light bleeding.	Ovulation-stimulating drugs such as clomiphene, follicle-stimulating hormones, human chorionic gonadotrophin (HCG) and in vitro fertilisation (IVF) using these drugs.
Poor egg quality	Eggs that become damaged or develop chromosomal abnormalities cannot sustain a pregnancy. This problem is usually age-related -- egg quality declines significantly in the late 30s and early 40s.	None	Egg donation or surrogacy.
Polycystic ovary syndrome	Patients whose ovaries contain many small cysts have hormone imbalances and do not ovulate regularly.	Irregular menstrual periods, excessive hair growth, acne and weight gain.	Ovulation-stimulating drugs such as clomiphene, follicle-stimulating hormones, and IVF.
Male infertility causes			
Male tube blockages	Any obstructions in the vas deferens or epididymis (the tubes that transport fertile sperm). Varicoceles (varicose veins) in the testicles are the most common cause of male tube blockages. Sexually transmitted diseases, such	None.	Surgery to repair the varicoceles or other obstruction.

	as Chlamydia or gonorrhoea, are also linked to tube blockage problems.		
Sperm problems	Low or no sperm counts, poor sperm motility (the ability to move), and abnormally-shaped sperm can all cause infertility.	None.	Fertility drugs may boost sperm production. Other options include artificial insemination with donor sperm and injecting sperm directly into the egg (intracytoplasmic sperm injection).
Sperm allergy	Fewer than 10 per cent of infertile women and men have immune reactions to sperm, which cause them to produce antibodies that kill sperm cells. In men, this is most common after a vasectomy.	None.	Sperm washing and intrauterine insemination, assisted conception treatments. Immunosuppressive drugs, such as cortisone and prednisone, are sometimes used but many doctors don't recommend them.
Unexplained and combination infertility			
Unexplained infertility	This catch-all term is used when doctors can't find a cause for infertility after a full series of tests and assessments. Some experts think being significantly over- or underweight, exercising excessively and even environmental toxins may be contributing factors but no direct links have been confirmed.	None.	Beyond timed intercourse, there is no specific treatment. Some couples try fertility drugs and assisted conception procedures such as in vitro fertilisation, which have usual success rates. Others decide not to have children.
Combination infertility	The term used to describe couples who have both male and female infertility problems, or when one partner has more than one fertility problem.	Symptoms vary, depending on causes.	Once all infertility causes are determined, appropriate treatments follow.
Table 1.0 - Adapted from BabyCenter – 2009 (6).			

Understanding the process of female and male reproduction:

A woman's reproductive system is stimulated by five hormones: gonadotropin-releasing hormone (GnRH), luteinizing hormone (LH), follicle stimulating hormone (FSH), estrogen and progesterone. Here's a summary of the process of how hormones

regulate a woman's fertility: The hypothalamus, a region in the brain, first releases a hormone called gonadotropin-releasing hormone (GnRH). GnRH causes the pituitary gland to produce two more hormones-luteinizing hormone and follicle stimulating hormone. These hormones, in turn, tell the ovaries to release estrogen and progesterone. A woman's ovaries contain 200,000 to 400,000 egg follicles, small sacs that contain the ingredients needed to form ripened eggs. Over a two-week period in a woman's monthly cycle, FSH causes several follicles in the ovaries to ripen and mature. FSH also orders the ovaries to produce estrogen, which in turn, launches the manufacture of large amounts of LH hormone. LH hormone stimulates the release of an egg from the largest follicle into the fallopian tubes, a process called ovulation. LH hormone also stimulates the follicle to produce corpus luteum, a collection of yellow tissue that manufactures progesterone. Progesterone and estrogen work together to thicken and prepare the lining of the uterus for a fertilized egg. Together, these hormones swell the lining of the uterus with blood, making it easier for a fertilized egg to implant itself there.

A man's reproductive system involves four primary hormones: gonadotropin-releasing hormone (GnRH), luteinizing hormone (LH), follicle stimulating hormone (FSH) and testosterone. The process of hormones regulating male fertility are as follows: In a man, the brain's hypothalamus first releases gonadotropin-releasing hormone (GnRH). GnRH stimulates the pituitary gland to produce two hormones - follicle stimulating hormone (FSH) and luteinizing hormone (LH). These hormones regulate the production of sperm and the release of the male hormone testosterone, all of which takes place in the male testes, located in the scrotal sac. Sperm begin life in the testes in cells called Sertoli cells. At the beginning of a sperm's life cycle, hormones develop its head and tail. The sperm then escapes from the Sertoli cell into the epididymis, located behind the testes. For three weeks, a sperm travels through the epididymis in an energizing fluid containing fructose. As the sperm swims through this fluid, it matures and acquires the ability to swim and move back and forth. A mature sperm has a head that contains the man's DNA - his genetic material - and a tail that rapidly moves from side to side, propelling it forward. When a man ejaculates during sex, muscular contractions push the sperm out of the epididymis to channels called the vas deferens. The sperm then move to the ejaculatory ducts and out the urethra (the passage through which urine and semen are passed from the body). Just before ejaculation, the sperm in the ejaculatory ducts mix with fluids that come from the prostate gland and from glands called the seminal vesicles, creating semen. During orgasm, the seminal vesicles push the semen forcefully out into the urethra. A muscle in the bladder also locks shut to prevent the semen from traveling backward into the bladder and mixing with urine.

The semen moves from the urethra to a holding area at the bottom of the penis, where muscles propel it out of the penis. Of the 100 to 300 million sperm released when a man ejaculates, only about 40 survive the trip through the acidic environment of the vagina and cervix. The woman's thick cervical mucous can also be a barrier. But during ovulation, the woman's mucous thins and allows the sperm to travel more freely. After it bores through the cervical mucous, the sperm trigger the acrosome (a special membrane located on their heads), and it dissolves and releases special enzymes. These enzymes allow the sperm to penetrate the tough coating surrounding the egg in the fallopian tubes. Only one sperm ultimately fertilizes the woman's egg (7).

How fertilization occurs:

An egg is usually fertilized by sperm within the fallopian tubes - but only if the woman has sex with a man around the time the egg is released. The sperm must penetrate the egg to fertilize it. Sperm can survive for six days after entering a woman's vagina and can fertilize the egg at any time during this period. However, research shows that fertilization is most likely to occur two days before or on the day the egg is released. The fertilized egg then moves on to the uterus, where it implants and grows into an embryo, and pregnancy results. If the egg is not penetrated by sperm, it lives for 12 to 24 hours. The egg and the bloody lining of the uterus then slough off, traveling out of the uterus, the cervix and vagina - a process called the woman's menstrual period (7).

Strategy for tracking ovulation:

A good strategy for successful fertilization is to plan to have sex during the days the woman is ovulating. To determine the days when she ovulates: a woman can take her temperature by mouth or in the vagina with special thermometers. Her temperature will rise slightly on the days she ovulates. A woman's temperature rises about 1 degree Fahrenheit during the days she is ovulating (producing eggs). By taking her temperature every morning with a special thermometer, a woman and her partner can chart the rises and falls in her morning temperature. They can then plan intercourse for the days she is ovulating her most fertile time (7).

It has been a belief of many that fertility in women decreases with increasing age as illustrated by the following statistics: Infertility in married women ages 16-20 = 4.5%. Infertility

in married women ages 35-40 = 31.8%. Infertility in married women over the age of 40 = 70% (8).

While these statistics may be valid, there are ways women can increase their fertility. A woman's hormone levels fluctuate as she ages. Acupuncture encourages a woman's body to return to more youthful levels of hormonal balance and blood flow so that the ovaries produce and release eggs naturally: Acupuncture and acupressure are the only known methods to improve the blood flow to the ovaries (9). Alternative medical treatments like Traditional Chinese Medicine (TCM) can help Western medical treatments work better due to TCM's ability in restoring health and balance to the body. It is my belief that the body is designed to heal itself, when the matrix of body, mind and spirit are in coherent unity balance with each other, health is the result. Communication between Western and Eastern medicine is essential. If the patient has a Western medical doctor it is best they be made aware of: herbs, supplements, acupuncture, exercise and other modalities the patient employs to affect fertility. This enforces the intention that treatments are working for the best of all concerned. Many individuals integrate both Western and Eastern medicine simultaneously. If the patient responds with good results to either or both modalities, maintain treatment. The patient is the only one who truly knows how their body subjectively feels and responds positively or negatively to treatments. It is wise that the patient journal their own treatment progress. Journaling encourages responsibility and ownership of health.

Advantages and disadvantages of Western scientific biomedicine

Advantages of Western scientific biomedicine: employ specific qualitative and quantitative diagnostic examinations to determine what is dysfunctional in an individual. It's treatment focus on correcting dysfunctions via administering treatments and assessing positive or negative results of those treatments for the patient. Western biomedicine has many advances in treatment of fertility over the years and much research to back it up, many successful and others not. Disadvantages of Western biomedicine are that treatments are not focused specific to the individual rather treatment focuses on what the dysfunction of the body is. Treatments can be invasive, inhumane, expensive and disappointing with no guarantee of pregnancy.

Advantages and disadvantages of a TCM approach

Advantages in the TCM diagnostic and treatment approach of infertility are plentiful. This ancient medicine has been practiced long before the Christian era began: The earliest records of gynaecological writings are found in inscriptions on bones and tortoiseshells dating from the Shang dynasty (1500-1000 B.C.E.) (10). TCM's subjective diagnostic system encompasses every system of the human body specific to each unique individual. To restore and maintain health, TCM focuses on addressing energetic imbalances underlying organs and systems. Eastern medicine stimulates the body's own energy to produce and respond to its own endorphins, hormones, organs, energy systems, restoring its own natural balance and fertility. Focus is placed on re-harmonizing the body back into its optimal natural balanced state conducive to natural pregnancy. TCM treats the whole individual, acknowledging the root causes of disease rather than just symptoms. TCM does not ignore signs and symptoms that may appear unrelated to infertility. Examples include problems with sleep, diet, digestion, circulation, emotional state et cetera. These signs and symptoms are very useful in determining diagnosis and treatment. TCM is a gentle, non invasive form of treatment promoting reclamation of fertility and successful pregnancy. Bringing the body into alignment with the holistic approach of nurturing and nourishing the entire being: body, mind and spirit is addressed. Observing the whole patient; strengthening wellness in all systems rather than focusing on disease. Diagnosis reveals expressions of the underlying imbalance: whether there is heat or cold, dryness or dampness, excess or deficiency, interior or exterior syndromes, yin or yang syndromes. When the root problem is treated, disease manifestations disappear. Treatments strengthen and balance health so that Western medical fertility drugs and procedures are more effective. Pregnancy through; post partum recuperation are more efficient with TCM balancing. TCM is affordable, more practical and humanistic.

A possible disadvantage to TCM is that treatments can be lengthy in time, in some cases it may take up to a year for the body to become balanced to support healthy pregnancy.

Both TCM and Western biomedicine may be used simultaneously for achieving maximum fertility and pregnancy benefits.

Western clinical infertility investigations and diagnostic tools:

Three main questions doctors ask female patients experiencing infertility are: 1) Is ovulation occurring? 2) Are implantation conditions adequate? 3) Is the morphology of the reproductive systems uterus and fallopian tubes unobstructed and functional?

In order to determine clinical evidence of ovulation table 2.0 describes fertility tests conducted via western medicine.

Table 2.0 - Western clinical evidence of ovulation	
Test	Definition
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. 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 & direct	A mature follicle increases ovarian size considerably and looks like a round bluish cyst with one or two capillaries seen on its surface. After

observation of the ovaries.	ovulation, the stigma of the follicular rupture can be easily recognized as a small hole surrounded by an hemorrhagic structure on the surface of the ovary. Scars of previous ovulations can also be recognized on the surface of both ovaries.
Western clinical evidence of readiness for uterine implantation	
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 normally takes place, which means between day 20 to 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, an hysteroscopic examination of the uterine cavity can be easily performed on an 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 endometritis, all of which could interfere with nidation.
Western clinical evidence of normality of the internal genital tract	
Hysterosalpingography	As in the case of other medical methods of investigation, strict technique is necessary in order to obtain precise information. A perfectly frontal view and also a good lateral view of the uterus, with a position of the uterus body being strictly parallel to the radiological film, is necessary to appreciate the size, the 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 os. 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. Pelvic adhesions can only be demonstrated by this radiological method, if a sufficient amount of opaque medium has been spread into the pelvis or, better, if a complementary hydrotubation with sterile saline is used at the end of the procedure, and if the last picture is taken after the patient has been leaned alternately on each side for a few minutes (" brassage ").
Transvaginal sonography	With the use of a vaginal sound, we can now 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 also be easily recognized with transvaginal sonography.
Hysteroscopy	With this method, using either CO2 gas or saline solution as a dilatation 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
Western clinical investigation of male infertility	
Medical history	A review of the man's medical and surgical history are necessary, because chronic disease, pelvic injury, childhood illness, abdominal or reproductive organ surgery, recreational drug use, and medications can affect fertility. Reproductive-fertility history specialist inquire: Early puberty (may result from hormonal disorder). Late puberty (may result from Kallmann's syndrome). Previous pregnancy. Sexual intercourse timing (understanding ovulation). Sexual transmitted diseases (pathogens: virus, bacterium, parasite, fungus) that is spread from person to person primarily through sexual contact. Can cause scarring, obstruction. Use of lubricants (may kill sperm).
Semen analysis	Examines the entire ejaculate, because seminal fluid can affect sperm function and movement. Generally, three semen samples are taken at different times to account for variables such as temperature and error. Six sperm factors are analyzed in semen analysis: Concentration (sperm/milliliter; cc). Morphology (sperm shape; normal structure associated with sperm health). Motility (or mobility; % sperm movement). Standard semen fluid test (thickness, color). Total motile count (total number of moving sperm). Volume (total volume of ejaculate).
Sperm-mucus interaction test	Examines whether the sperm are able to swim through the female reproductive tract. This ability is referred to as forward progression. In the middle of the menstrual cycle, the cervical mucus becomes watery. Intercourse is recommended during this time, followed, the next day, with an inspection of the mucus to determine if: enough semen was delivered to the cervix. Sperm are healthy and do not show large numbers of clumped, motionless, or dead cells. Sperm are swimming energetically through the cervical mucus.
Sperm penetration assay (SPA)	Examines the ability of sperm to penetrate the egg by combining it with a hamster egg.
Immunobead test	Looks at semen for the presence of antibodies that damage sperm
Table 2.0 - Adapted from Meylan - 2008 (11).	

Licensed acupuncturist, Randine Lewis writes: If you too have been told you are infertile, I have one message for you: There is no such thing as infertility; it is a myth! Rarely have I met a woman of childbearing age with all her reproductive organs intact who isn't capable of bearing children. As long as the anatomical structures are present, a medical diagnosis of "infertility" is often a fallacy (12). I have found that most hormonal imbalances (which contribute to 40 percent of documented cases of infertility, yet are considered untreatable by conventional Western medicine) respond to Eastern methods of treatment (13).

TCM diagnoses infertility 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 to eliminate excess pathogenic factors such as cold, blood heat, phlegm, dampness, stagnation of Qi and stasis of blood. Excess pathogenic factors cause infertility by obstructing the uterus and its corresponding channels (Directing and Penetrating Vessels) inhibiting fertilization to take place. Vital substances of yin, yang, blood, essence or a combination of deficiency patterns of the spleen, kidney and liver can prevent conception. Improper diet such as excessive consumption of cold, foods and drinks, greasy foods and dairy products can lead to formation of cold in the uterus and dampness or phlegm obstruction which prevents fertilization. Constitutional weakness of kidney essence, overwork, stress, chemicals, lack of exercise, poor eating, excess emotions can all put the body off balance. In woman's infertility there are four main organs systems: spleen, kidney, heart and liver see table 3.0. Four vital substances: yin, yang, qi and blood that are most likely imbalanced caused by excess, deficiency or stagnation of energy.

Table 3.0 - Organ systems and their functions	
Organ systems	Functions
Kidney:	Contains our genetic makeup. Controls the reproductive system and a woman's hormones. Connects reproductive, skeletal, neurological and endocrine systems.
Spleen:	Governs energy production, metabolism, digestion, and elimination. Converts nutrients and qi into blood. Essential for healthy menstrual cycle. Affects thyroid hormone production. Sustains the luteal phase.
Heart:	Governs mind and spirit. Controls blood and circulatory system. Provides blood for the uterus.
Liver:	Controls smooth flow and distribution of blood.

	Responsible for all the transformations in body, including ovulation. Provides blood for menstruation. Affects expression of emotions, calms emotional energy. Stores blood.
Uterus:	Palace of the child Connected with rest of body, especially the heart and kidneys. Source of conception vessel and penetrating meridian.
Table 3.0 - Adapted from Lewis – 2004 (14).	

The penetrating, conception and governing meridians represent the hypothalamic-pituitary-ovarian (HPO) axis which control energies that determine growth, maturity, aging and hormonal aspects of reproduction, refer to table 4.0. To activate these meridians, TCM employs acupuncture points SP4 & PC6 (penetrating), LU7 & KI6 (conception), UB62 & SI3 (governing) to regulate the HPO axis.

Table 4.0 - Vessels, meridians and their functions	
Vessel/ meridian	Functions
Conception Vessel:	Sea of all yin meridians Regulates yin energy. Supplies kidney, liver, spleen, heart, pericardium and lung organ systems. Connected with production of estrogen.
Governing Vessel:	Sea of all yang meridians Regulates yang energy. Supplies urinary bladder, gallbladder, stomach, small and large intestines and triple warmer. Oversees testosterone and progesterone production.
Penetrating meridian:	Sea of blood Communicates with other meridians. Presides over menstruation and hormonal cycles. Source of Conception and Governing meridians. Coalescent points Ren 1 and KI 11-21.
Girdle meridian	Encircles the body horizontally at the waist Binds the penetrating, conception, kidney, liver, and spleen channels Used to drain excess vaginal discharge Restrains vaginal leakage, including miscarriage. Coalescent points GB26-28.
Table 4.0 - Adapted from Lewis – 2004 (15).	

Women are capable of pregnancy from the onset of menstruation until menopause. The key to natural conception is a healthy, normal monthly cycle. When the period does not come it means the uterine vessel is obstructed. Refer to table 5.0 regarding irregular menses.

Type	Description	Treatment Principles
Menorrhagia	Excessive menstrual flow	Harmonize blood, treat the root cause of bleeding, astringe, treat qi. Each of these treatment aims is composed of four steps: 1) Stop bleeding. 2) Eliminate stasis 3) Calm blood 4) Nourish blood
Metrorrhagia	Bleeding extends beyond its normal time.	
Menometorrhagia	Bleeding extends beyond its normal time and is excessive.	
Amenorrhoea	Primary: when a woman does not have her period by the time she is 18. Secondary: when a woman has had periods, but they have stopped for more than three months.	
Dysmenorrhea	Pain occurring before, during and after menstruation.	

Table 5.0 - Adapted from Oswald – 2008 (16).

The TCM treatment principle addresses the underlying pattern of imbalance first. Table 6.0 depicts guiding principles of treatment for the phases of a woman's monthly cycle.

Monthly cycle phase	Duration of phase	Treatment Principle
Phase one (follicular phase)	12-15 days	Nourish yin and blood.
Phase two (ovulation)	A couple of days	Ensure both qi and blood are adequate and unobstructed; move qi and blood
Phase three (luteal phase)	about 14 days	Tonify qi and yang
Phase four (premenstrual phase)	2 – 7 days	Move stagnant liver qi
Phase five (menstruation)	Starts on the first day of bleeding lasting 4 - 6 days	No treatment required unless problems with severe pain and bleeding. If the bleeding is too heavy, diagnose and treat the pattern accordingly. I.e: clear heat, tonify qi, or resolve stasis – whichever pattern(s) fit.

Table 6.0 - Adapted from Lewis – 2004 (17).

A general guideline for tracking, evaluating and assessing one's own monthly cycle employs use of a basal body temperature (BBT) chart. See fig.1

		Patient's Name _____																																																									
Month(s)	Year	Last 12 Cycles:												Shortest					Longest					This Cycle's Length																																			
Cycle Day		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45													
Date																																																											
Day of Week																																																											
Intercourse																																																											
Time Temp Taken																																																											
Waking Temperature		99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99							
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Fig.1. Basal body temperature (BBT) chart.

Record your (BBT) temperature with a digital thermometer immediately each morning upon waking prior to activity, drinking water or taking anything. Note the temperature on each day of your cycle and then create a graph such as shown in fig.2. Because a woman's BBT typically rises by four-tenths of a degree to a degree when she ovulates, taking your BBT throughout the month is one of the best ways to keep track of your progress through the phases of your own cycle.

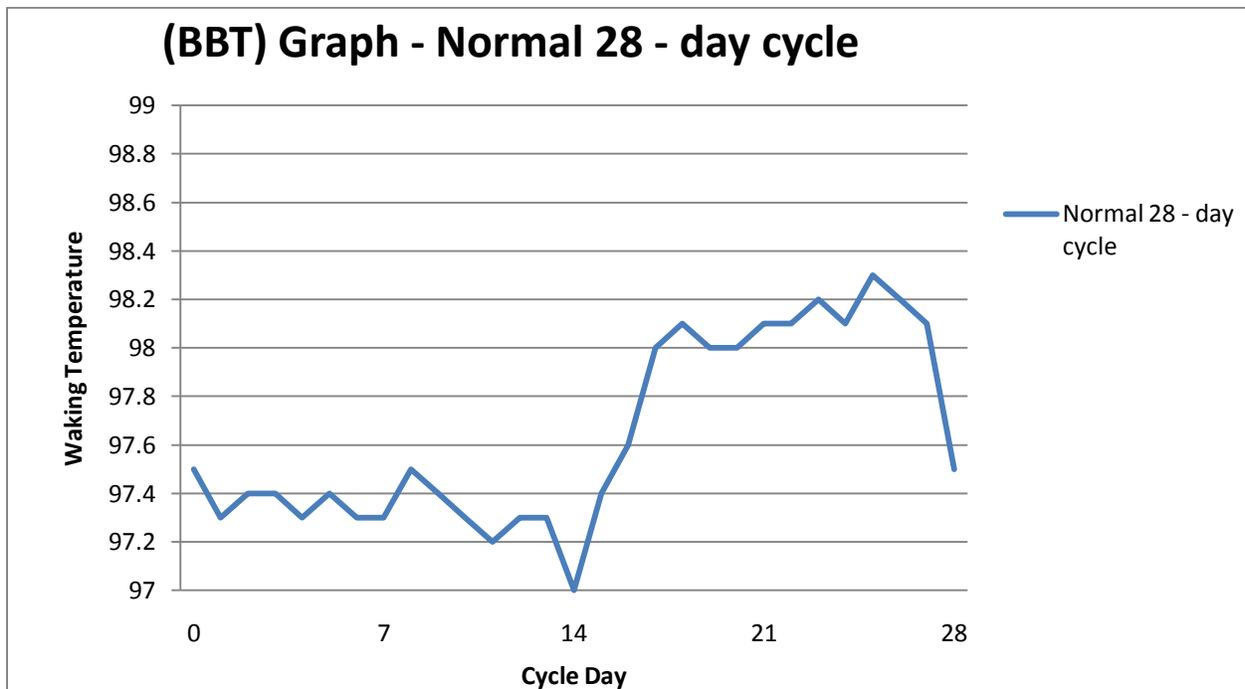


Fig.2. **BBT Graph** - Normal 28-day cycle.

A typical graph will show a slight drop in temperature just prior to ovulation, followed by a rise of about half to one degree Fahrenheit, a result of rising progesterone after ovulation. Temperature (and progesterone) should remain elevated for twelve to fourteen days and then drop, signalling the onset of menses. **If conception occurs, your temperature should remain elevated and even jump to a third level on the graph (18).**

Temperatures that are too high during the follicular phase indicate excess heat, just as temperatures that are too low during the luteal phase indicate deficiency. Erratic temperature fluctuations are consistent with liver qi stagnation (19). Fig.3. depicts a graph comparing various cycles: a normal 28 day cycle, qi stagnation from kidney yang deficiency or

blood stasis, liver qi stagnation, luteal phase shorter than 12 days, shortened luteal phase with liver qi stagnation & excess heat.

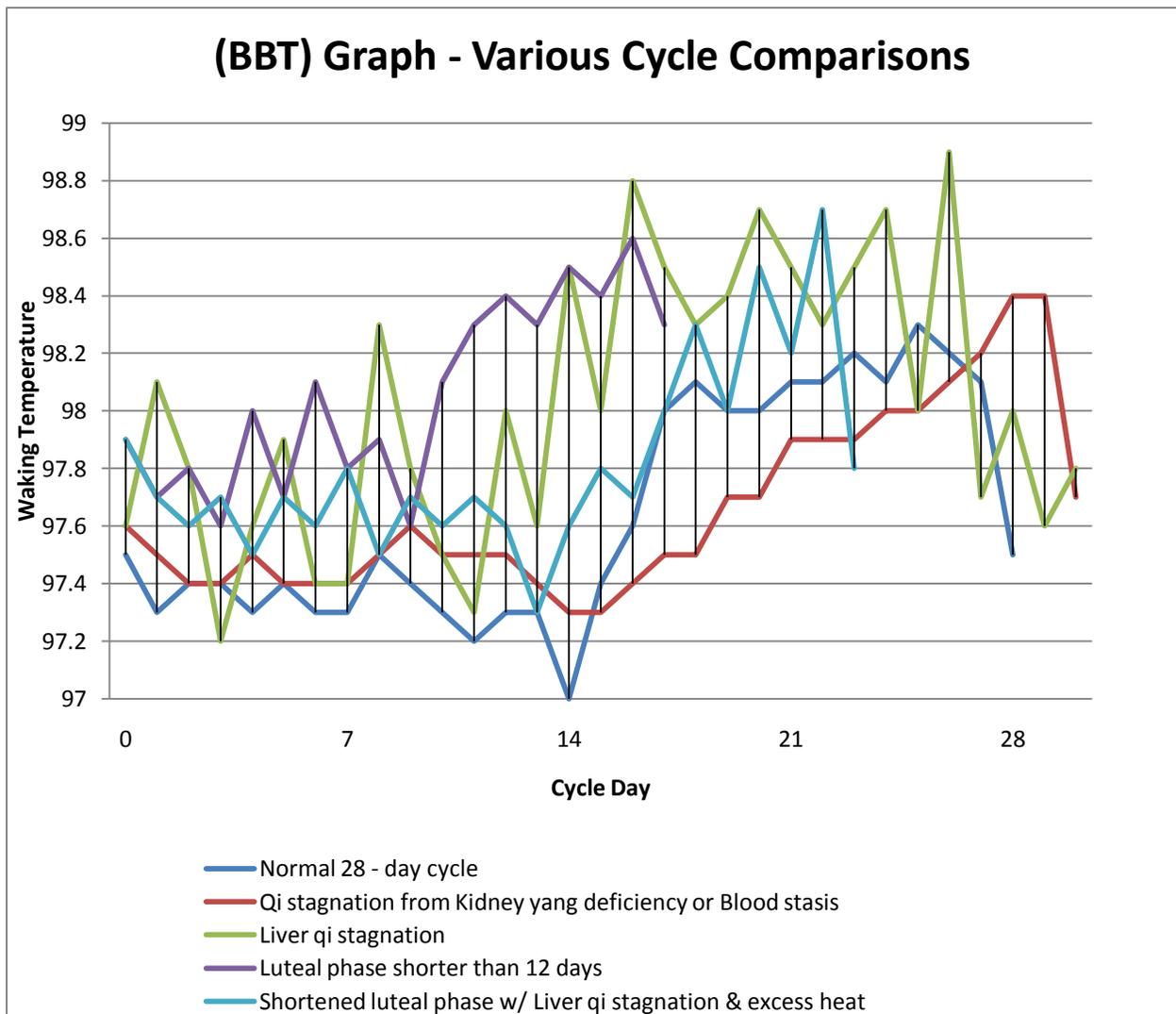


Fig.3. **BBT Graph** – various cycle comparisons.

The menstrual cycle process takes approximately twenty-eight days, the amount of one full moon to the next. This cycle is divided into phases just like the moon phases: To regulate and maintain women’s reproductive cycle, TCM works with the phases dominant energies to bring the cycle back and maintain them in balance.

Phase one corresponds to the new moon. The yin phase: Kidney yin and blood energies govern the follicular phase: Follicular development and egg production are fortified

by yin and produce more yin and blood. We encourage and maximize the energies of phase one by supplementing the kidney yin and nourishing the blood (20).

For optimum fertility, phase one shouldn't be shorter than ten or longer than seventeen days. A short phase corresponds to abnormal heat from either deficient yin or excessive yang. If phase one is too long: it may mean a woman's estrogen production is low, compromising egg quality and delaying ovulation. Phase one may be prolonged if kidney yin production is insufficient to trigger the transformation of yin energy into yang, or if there is not enough kidney yang or spleen qi available to perform the transformation (21).

High BBT during phase one indicates heat, conversely a low BBT indicates deficiency of yang. If heat is present treatment is employed to clear excess heat and tonify yin and blood. Phase two (ovulation) corresponds with the full moon. Ovulation phase: Liver qi and blood movement control ovulation. Toward the end of the follicular phase, as estrogen peaks and yin energy reaches its apogee (when maximum yin produces a dip in temperature before ovulation), liver qi is triggered to begin the transformation of yin energy (estrogen) into yang energy (progesterone). This process encourages (GnRH) from the brain to trigger the pituitary gland to emit both (LH) and (FSH) (22).

Upon release of these hormones the following events occur: in the ovary a follicle discharges its egg into the abdominal cavity where the fallopian tube guides the egg towards the uterus to be penetrated by sperm.

Phase three: Yang phase: kidney yang and spleen qi energies manage the luteal phase. During this phase the follicle that released the egg becomes a corpus luteum which releases the warming yang hormone progesterone. Whose primary purpose is to prepare and maintain the endometrium of the uterus for safe implantation and development of a fertilized egg during the window of implantation (approximately five to seven days after ovulation). During the yang-dominated luteal phase your BBT should remain elevated an average of at least four-tenths of one degree over the follicular phase baseline temperature for fourteen days. This phase is governed by kidney yang and spleen qi. There should be no premenstrual spotting (which indicates qi deficiency, blood stasis, or pathological heat) or extreme breast tenderness (which suggests qi stagnation) in the absence of pregnancy (23).

If there is pregnancy: the embryo will release human chorionic gonadotropin (hCG), which signals the corpus luteum to increase its production of progesterone, thus maintaining a thick, hospitable uterine lining for the embryo. If there is no embryo secreting hCG, the corpus luteum does not produce more progesterone, and it undergoes a programmed demise. Progesterone levels (and temperatures) drop, and the uterine lining is shed (24).

Phase four: Premenstrual phase: Liver qi helps the premenstrual transformation. Without fertilization and implantation, the body's yang is transformed into yin, this phase lasts between two to seven days: as the liver qi converts yang energy into yin, the corpus luteum ceases its progesterone production. Your basal temperature falls, and your period begins. For this transformation to occur smoothly, however, both qi and blood must be flowing freely throughout the body (25).

Phase five corresponds with the dark of the moon. The blood phase: Blood is allowed to flow, this stage begins on the first day of bleeding. Menstruation is a time of rest for all energies where enzymes liquefy the uterine lining, allowing it to shed: The menstrual period, especially for the first three days of a woman's flow, is the hormonal zero point, when no principle hormone prevails. After three days, the hormonal cycle begins again, but until then it's important to allow the body to rejuvenate. This is also a time to take a break from all treatment. Unless a woman is experiencing excessive cramps. According to TCM, women should not exercise or undertake many activities (including intercourse) during the first three days of their period (26).

Menstrual factors:

Assessing menstrual blood mirrors the state of a woman's ovaries hormonal activity. A healthy normal 28 day cycle reveals: the menstrual flow should be smooth and neither scanty nor excessive. The color should be red, not brown or black, and the consistency should not be watery. Clots should be minimal to none. The bleeding should last approximately four to six days, then stop rather abruptly without spotting. There should be no pain, either uterine or abdominal cramping or lower back discomfort (27).

Femoral massage

Femoral self massage technique can be performed to improve the blood flow to the uterus, ovaries and pelvic organs up to ovulation: 1. Compress (by applying pressure with your fingertips) the large artery just beneath the crease in your groin area between your thigh and lower abdomen. This is the femoral artery. The iliac artery has branches that supply blood to the uterus, fallopian tubes, and ovaries. (The ovaries have an additional blood supply, which branches off the arterial section that supplies the kidneys.) 2. You should be able to feel with your fingertips when the pulsation in the artery stops. Hold the pressure for 30 to 45 seconds. The blood is now backing up and increasing the pressure in the iliac arteries, forcing more blood into the pelvic arteries and flooding the pelvic organs with more blood. 3. Release the pressure and let the blood flow naturally. When the hold is released, you should feel a sensation of warmth rushing down your leg as the blood supply returns to the lower extremity. 4. Repeat on the opposite side. Perform this femoral massage sequence three times in a row, twice a day, up to ovulation (or the day before embryo transfer, not beyond). *Note: do not perform this exercise if you are or might be pregnant. If you have high blood pressure, heart disease, circulatory problems, or a history of strokes or detached retinas, do not practice this technique (28).

Infertility phase symptoms, conditions, clinical manifestations and TCM treatment principles are recorded in Table 7.0.

Table 7.0 - Female infertility symptoms, indications and TCM treatment			
Phase Symptom	Condition	Clinical manifestation	Treatment Principle
Phase 1 (the yin phase)	Kidney yin deficiency. Kidneys need to be supplemented; blood needs to be nourished.	Long term infertility, early periods, scanty with light colored blood, 5 palm heat, night sweating, dizziness, tinnitus. T: red and peeled P: floating-empty or rapid-fine.	Nourish kidney-yin and kidney-essence: consume chlorella, spirulina, seaweed, royal jelly. Avoid hot thermal natured foods. Attain sufficient rest & sleep. Perform light exercise and femoral massage to improve blood circulation to pelvic organs. *Too much exercise depletes yin. Massage ear intragic notch. Avoid smoking & stimulants like coffee which only
Prolonged phase 1	Kidney yin deficiency. Insufficient yin produced to transform into yang.	See above	

			borrows energy from the kidneys. Acupuncture points: LU7 on right, KI6 on left, KI3, SP6, Zigong, Ren4, Ren 7, KI10, KI13, UB23, UB52, Liv3, Liv8, SP4, PC6. Herbal formula: Liu Wei Di Huang Wan
Prolonged phase 1	Kidney yang deficiency, insufficient kidney yang.	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. T: pale, swollen, wet. P: deep, weak.	Tonify and warm kidney yang, tonify ming men fire, warm & strengthen the uterus. Warm the lower abdomen with a hot water bottle or TDP lamp. Indirect moxa or warming needle stimulating points: LU7 on right, KI6 on left, KI7, KI3, Ren8, KI16, GB26, Ren6, SP6, Ren3, Ren 4, Zigong, ST29, ST30, UB23, UB52, DU4, ST36, SP6, UB62 & SI3 Herbal formula: Yu Ling Zhu
Prolonged phase 1	Insufficient spleen qi. Related pattern: Spleen qi deficiency	Excessive vaginal discharge that is white or slightly yellow, sticky, without smell and persists, Tiredness, loose stools, poor appetite, dull complexion, depression, cold limbs. T: pale P: weak	Tonify the spleen, raise qi and regulate any discharge. Avoid sugar, refined carbohydrates, starches, dairy products, cold drinks and cold raw foods. Stimulate points ST36, SP6, Ren4, Ren6, Ren12, SP3, UB20, UB21, Liv13, ST29. Herbal formula: Gu Ben Zhi Ben Tang
Polycystic ovarian syndrome diagnosis	Dampness or phlegm	Irregular periods, delayed cycle, mid-cycle pain, vaginal discharge, long term infertility, adhesions, obesity, feeling of heaviness. T: sticky and slippery coating. P: slippery or soft	Resolve dampness, remove obstructions from the conception and penetrating meridians. Stimulate SP9, ST40, Ren5, Ren9, ST28, ST30, SP4 & PC6, Liv5, UB40, GB 41 on the right with TW 5 on the left, GB26-28 for damp heat. Lateral recumbent electro UB32 with Ren4 for fallopian tube

			obstruction. Herbal formula: Qi Gong Wan If damp heat is present use Si Miao San
Shortened phase 1	Excess heat due to either excess or deficiency	Early periods (short cycle) heavy flow, feeling hot during period, thirst, mental restlessness. T: red P: rapid, surging	Clear heat, regulate the menses. Avoid hot natured foods, greasy foods or hot thermal medicine like Clomid. Avoid hot bathing, saunas, Jacuzzis, hot yoga. Stimulate PC3, LI11, LI4, Liv2, Liv3, SP6, SP10, UB17, UB40, LU 7 on the right and KI 6 on the left Herbal formula: Qing Jing San. To nourish yin and clear heat: Zhi Bai Di Hunag Wan
High BBT	Related pattern see kidney yin deficiency above	See above	See above
High BBT	Related pattern see excess heat above	See above	See above
Low BBT	Related pattern see kidney yang deficiency above	See above	See above
Phase 2 ovulation	Liver qi stagnation prevents liver qi transforming yin (estrogen) into yang (progesterone)	Irregular periods, pre-menstrual breast tension, painful periods, breast distention, irritability. T: normal color or slightly red on the sides; if stagnation of qi arises from blood deficiency, the sides might be pale. P: wiry; if qi stagnation arises from blood deficiency, it may be choppy.	Move qi, eliminate stagnation, pacify the liver, regulate the periods: Liv2, Liv3, TW6, Liv14, LI4, Liv8, GB24, GB34, GB40, DU24, Yintang, SP 4 on the right and P 6 on the left. Massage ear triangular fossa. Herbal formula: Kai Yu Zhong Yu Tang and Xiao Yao San with Sheng Ma Do light activities such as yoga and Qigong.
	Blood stasis	Irregular and painful periods, dark blood with clots, irritability, manic behaviour, mental restlessness, abdominal	Invigorate blood, eliminate stasis, pacify the Liver and the penetrating meridian, regulate the periods.

		pain. T: purple. P: wiry or choppy.	LI4, Liv3, SP6, PC6, SP8, SP10, Ren6, ST29, ST36, Liv14, UB17, SP4 & PC6, KI 11-21, UB31-35 LU 7 on the right and KI 6 on the left. Herbal formula: Shao Fu Zhu Yu Tang Add Ru Xiang & Mo Yao or Gui Zhi Fu Ling Wan
Painful ovulation	Related pattern: blood stasis	See above	See above Ear intertragic notch.
Phase 3: yang phase (luteal phase)Diagnosis of luteal phase defect	Yang or qi deficiency. Related patterns: kidney yang deficiency, spleen qi deficiency	See above	See above. Eat fresh pineapple for the enzyme bormelain which helps implantation. *Contra indicated points during the luteal phase and after implantation include: lower abdominal & uterine points, LI4, SP6, ST36, SP10, UB60, UB67, GB21, ST12,
Uterine lining out of phase with day of cycle	Excess condition: Cold in the Uterus Related patterns: Kidney yang deficiency, blood stasis see above	Primary infertility, delayed cycle, scanty periods, small clots, painful period, better with heat, feeling colder during period, pale face, feeling cold, sore back. T: pale, thick white coating. P: weak when full cold or tight when empty cold.	Warm and tonify kidney yang, warm the uterus and scatter cold. Employ femoral massage. Indirect ginger insulated moxa cone Ren8, warming needle stimulating points: Ren 2, Ren4, Ren6, Ren7, ST36, DU4, KI7, UB23, UB52 Herbal formula: Ai Fu Nuan Gong Wan & Wen Jing Tang
Shortened phase 3	Related patterns: Excess heat, kidney yin deficiency, liver qi stagnation	See above	See above
Slow biphasic, stepwise formation on BBT graph	Qi stagnation caused by blood stasis of kidney yang deficiency Related patterns: Liver qi stagnation, blood	See above	See above Invigorate blood with femoral massage

	stasis, kidney yang deficiency		
Erratic, low & high temperatures, fatigue, inadequate luteal phase	Qi or yang deficiency together with liver depression Related patterns: Spleen qi deficiency, kidney yang deficiency, liver qi stagnation	See above	See above
Low temperatures during phase 3	Yang deficiency Related pattern: Kidney yang deficiency	See above	See above
Erratically high temperatures with emotional symptoms	Spirit disharmony, liver and heart fire Related patterns: Excess heat, liver qi stagnation see above. Heart deficiency	Liver fire: Insomnia, excessive dreams, chest oppression, agitation, easily angered, red eyes, red face, acne, heart palpitations, bitter taste in mouth, breast distention to pain, excessive menses. T: Dark red and/or swollen sides, thin white-yellow coat. P: wiry, rapid Heart Fire: Agitation, insomnia with excessive & disturbing dreams, racing heart, outward projected restlessness, tongue & mouth ulcers, dry stools, red face, frequent urgent yellow urination. T: Red, thin yellow coat P: Rapid, wiry, or slippery, surging Heart deficiency: Shortness of breath, heart palpitations aggravated by exertion, insomnia, poor memory, mild dizziness, lack of motivation, fatigue, exhaustion. T: Pale, thin-white coat P: Fine, weak, interrupted	Clear heat/fire of Liver fire: Liv2, LI4, LI11, HT7, PC6, UB18 Herbal formula: Long Dan Xie Gan Tang Clear heart fire: HT8, HT5, PC7, PC8, Ren15, LI4, LI11, SP6, HT3, UB15, DU24, Yintang Herbal formula: Dao Chi San Tonify heart: HT7, Ren14, Ren15, Ren17, Ren6, Ren4, PC6, UB15, ST36, SP6 Herbal formula: Huan Shao Dan
Sawtooth erratic pattern on BBT graph	Related pattern: Liver qi stagnation	See above	See above Avoid massaging the lower abdominal and

			uterine points (including LI4 and SP6) which are contraindicated during pregnancy and during the luteal phase.
Biphasic, step form, slow-rising BBT during shortened phase 3	Related patterns: Liver qi stagnation, Excess heat see above	See above	See above
Elevated overall temperature in any phase	Related patterns: Liver qi stagnation, Excess heat see above	See above	See above
Phase 4: The premenstrual phase	Liver qi directs the transformation of yang back into yin. Related pattern: Liver qi stagnation	See above	See above Relax, breathe deeply, do not overeat, get adequate exercise. Avoid heavy hard to digest foods.
PMS symptoms	Blocked qi and blood Related patterns: Liver qi stagnation, blood stasis see above	Irritability, pain, constipation, diarrhea, headaches, bloating, night sweats, insomnia, depression, edema, nausea, appetite changes, nosebleeds, mouth sores, vaginal irritation, dizziness, muscle aches	See above
Phase 5 the blood phase	Yin and yang in balance	Yin and yang in balance	Rest for first three days. No TCM treatments unless there is severe pain
Blood flow scanty or only lasts for a day or two	Blood deficiency Not enough blood to nourish uterine lining: lack of estrogen in phase 1. Related pattern: Qi deficiency see above	Scanty periods, pale blood, delayed cycle, tiredness, depression, dizziness, pale complexion, blurred vision. T: Pale and Thin. P: Choppy or Fine.	Nourish blood and the essence, strengthen the liver and the kidneys. Ren4, SP6, KI13, ST36, UB17, UB20, UB23, Zigong, KI 11-21. Herbal prescription: Ba Zhen Tang
Blood is pink and watery	Related pattern: Spleen qi deficiency	See above	See above

Blood is scant and brownish in color	Blood needs tonifying and quickening Related patterns: Blood deficiency, blood stasis	See above	See above Tonify and invigorate blood Herbal prescription: Tao Hong Si Wu Tang Perform femoral massage to enhance blood flow to the uterus.
Menstrual flow abnormally profuse or lasts beyond seven days	Qi deficiency, insufficient qi to control menstrual cycle Related patterns: Spleen qi deficiency see above	Often accompanied by fatigue, cold hands/feet, digestive complaints, poor circulation)	See above Avoid refined carbohydrates, sweets, and dairy products.
Heavy flow appears dark and clotty, and is accompanied by pain	Related pattern: Blood stasis	See above	See above Use sanitary napkins rather than tampons.
Blood bright red and profuse, cycle shorter than 28 days	Excess heat (caused by too much yang or too little yin) Related pattern: Excess heat	See above	See above
No menstruation at all (amenorrhea)	Deficiency of blood Related pattern: Blood deficiency	See above	You may also need to tonify spleen qi and kidney yin and/or yang throughout cycle. See above
Male infertility			
Lack of sperm production, lack of sperm motility, seminal tract obstruction	Related patterns: Kidney yin or yang deficiency, Spleen qi deficiency. Excess of stasis, stagnation of qi, blood, body fluids or damp heat in the pelvic organs.	See above ignoring menses	See above herbal formulas: Take blood and qi tonics to increase sperm counts. Tonify qi and yang to improve sperm motility. Supplement kidney yin to improve liquefaction: Liu Wei Di Huang Wan or Zuo Gui Wan. Kidney yang deficiency: Wu Zi Yan Zhong Wan or You Gui Wan Damp heat: Long Dan Xie Gan Tang & Si Miao San

			Resolve varicoceles with a blood moving formula: Gui Zhi Fu Ling Wan
Table 7.0 - Adapted from Lewis. P. 70-76 – 2004 & Oswald. P.107-116 – 2008.			

TCM employs five phases for describing the development of forms, systems and events, everything in the matrix of creation can be categorized within parameters of elements: wood, fire, earth, metal and water. Within the human being, the same forces that organize the physical, sensory, and perceptual life of the organism (soma) affect the emotional, intellectual, and spiritual life of the person (psyche). Within this framework, the five-phase model has a diverse range of application (29).

Emotional stress can be a root cause of infertility or disease. Emotions take their influence by affecting qi and blood. Observing table 8.0 we see the five elements and their associated psychological and physiological manifestations relating with fertility.

Elements	Emotions /feelings & imbalances thereof	Physiological functions	Physiological dysfunctions
Wood: Liver/ Gallbladder virtues: benevolence, discernment, flexibility, esteem, patience	Anger, jealousy, frustration, resentment, grudges, irritation: cause liver qi to stagnate and are a major cause of menstrual problems such as PMS, irregular menses and dysmenorrhoea.	Regulate movement of qi, store and distribute blood.	Stagnation of qi and stasis of blood, pain distention, menstrual or digestive irregularities.
Fire: Heart/ Small Intestine virtues: propriety, insight, intimacy, mastery, sage, Wuwei	Joy, shock or fright: qi tends to get dissipated and scattered. Shock depletes the heart, spleen and kidney. May lead to amenorrhea or delayed menses.	Propels blood, houses the spirit (shen), maintains awareness.	Circulatory problems, anxiety, agitation or nervous exhaustion.
Earth: Spleen Stomach virtues: integrity,	Pensiveness, anxiety, worry: causes qi to bind, knots spleen qi, but also affects the lungs and heart. This may lead to qi stagnation of the liver and lungs.	Extract nutrients from food, transform them into qi, blood and distributes them.	Lethargy, indigestion, appetite disturbances, water retention.

altruism, reciprocity, engagement, integration, adaptability	Lung qi stagnation can cause breast lumps.		
Metal: Lung Large Intestine virtues: righteousness, balance, nonattachment, purity, inspiration, self-worth, receptivity	Grief, worry, sadness, sorrow: inability to overcome grief weakens qi and cuts one away from life. Sadness causes qi to dissolve, and affects the lungs and heart. Heart can affect the uterus via the uterus vessel and lung qi deficiency may fail to move blood or with concurrent spleen qi deficiency may fail to hold blood.	Establish a basic rhythm of an organism, incorporate the qi through respiration.	Respiratory disorders, shallow breathing, lack of energy or motivation.
Water: Kidney Urinary Bladder virtues: wisdom, contemplation, cleverness, concentration.	Joy, fright or a chronic state of anxiety: makes kidney qi descend. Chronic anxiety, especially when the heart is weak, makes qi rise in the form of empty heat.	Generate and store essence, govern reproduction, balance fluids.	Loss of libido, reproductive disorders, chronic back pain.
Table 8.0 - Classification of five elements table adapted from Oswald. P.14-15 – 2008, Beinfield & Korngold – 1991, Jarrett P.153 – 2004.			

Coherent wellness attitude of gratitude - consciousness shapes reality

Lifestyle changes of a nourishing diet, herbal supplementation, acupuncture, acupressure, massage and meditative exercises are effective TCM modalities for reclaiming fertility status. If we'd like to change something in our world, we start by changing ourselves. You are the reflection of your experiences of change, here and now. Change is constant. Our state of wellness and fertility is a mirrored reflection of our present moment coherent choices. Our outer world reality of physical matter is a reflection of our inner world of heart based coherent feelings, beyond belief. Our self perceptions are prescriptions of either fertility or infertility. Nourishment for our mind and spirit is equally important as nourishment for our physical body. The affirmations and feelings we choose to employ are ultimately what we create and embody. Anything less than positive life affirming thoughts and feelings are toxic. Ask yourself this question:

“what am I broadcasting, love or fear?” Pay attention to your body’s physical response to this question. Do you feel your body’s internal response is relaxed or do you feel this question initiated a response of discomfort somewhere in your body? Do you feel your muscles became tense after asking yourself this question? If you find that your jaw muscles contract or your stomach becomes uncomfortable from being asked this question, you may find the following information insightful.

It is counter-productive to anyone’s well-being to sabotage or belittle their own wellness with negative self talk, excuses and limiting beliefs. Examples of limiting beliefs are: “I’m not healthy enough to become pregnant, I don’t deserve it, I’m a victim of infertility, or infertility runs in my family.” If limiting thoughts and feelings arise, renounce them immediately and reclaim your wellness and successful pregnancy. For example: “I am completely willing to release all limiting patterns in my consciousness; that have created resistance to my successful pregnancy now.”

The next step in the process of reclaiming wellness is to claim your prosperous fertility as suggested in the following examples: “I deserve the best ever, I accept my successful fertility, pregnancy and beyond.” “I choose to be the embodiment of vital wellness always in all ways.” “I feel good, all life loves and supports my successful fertility, out of all my situations, only the best ever manifests.” “I am the embodiment of vital balanced wellness.”

Daily life affirming self talk with heart centered appreciative feelings employing an attitude of gratitude grows ever increasing abundance. Since energy flows where attention goes, we strengthen wellness by focusing on our best wellness ever in this present moment.

Through personal experiences of life, I have come to the realization that expectations, needing and wanting are the root causes of suffering and heartache because expectations usually result in disappointment. In order to transcend limitations of disappointment, I feel it is wise to live in the here and now, be ever present. Employ life affirming meditation in every action without expectations and life will mirror exactly this back in return. A good affirmation to employ and feel is: "I am divinely guided and protected, all my desires are met before I ask, I live in the present moment, joyous, relaxed, prosperous, vital, well and free."

In conclusion, TCM offers wonderful wellness opportunities, supporting both male and female fertility. TCM greatly compliments Western medical diagnosis and treatment. Integration of Eastern and Western medicine can facilitate the best wellness for all concerned. Truly, unity beyond duality is the altruistic understanding of the divine oneness within each of us.

References

1. Jarrett, Lonny S. Nourishing Destiny the Inner Tradition of Chinese Medicine. P. 338. Spirit Path Press., 2004.
2. The Free Medical Dictionary by Farlex. (2009). Infertility. <http://medical-dictionary.thefreedictionary.com/infertility> (29 June. 2009).
3. Health Reserve. (2003). Infertility http://www.healthreserve.com/infertility/female_infertility.htm (29 June. 2009).
4. Male Fertility Help. (2009).Some Infertility Statistics (2009). Infertility. <http://www.malefertilityhelp.com/stats.html> (29 June. 2009).
5. Oswald, Colton. Gynaecology. P.115. Alberta College of Acupuncture & Traditional Chinese Medicine., 2008.
6. BabyCenter. (2009). Major Causes of Infertility <http://www.babycenter.ca/preconception/suspectingaproblem/majorcauses> (29 June. 2009).
7. ehealthMD. (2005). Infertility. http://www.ehealthmd.com/library/infertility/INF_what.html (13 July. 2009).
8. The Free Medical Dictionary by Farlex. (2009). Infertility. <http://medical-dictionary.thefreedictionary.com/infertility> (29 June. 2009).
9. Lewis, Randine. The Infertility Cure. P. 177. Little, Brown and Company., 2004
10. Lewis, Randine. The Infertility Cure. P. 52. Little, Brown and Company., 2004
11. Meylan, J. (2008). Diagnostic Methods In Female Infertility. http://www.gfmer.ch/Books/Reproductive_health/Diagnostic_methods_female_infertility.html (13 July. 2009).
12. Lewis, Randine. The Infertility Cure. P. 9. Little, Brown and Company., 2004
13. Lewis, Randine. The Infertility Cure. P. 15. Little, Brown and Company., 2004
14. Lewis, Randine. The Infertility Cure. P. 35. Little, Brown and Company., 2004
15. Lewis, Randine. The Infertility Cure. P. 34. Little, Brown and Company., 2004
16. Oswald, Colton. Gynaecology. P.35-64. Alberta College of Acupuncture & Traditional Chinese Medicine., 2008.
17. Lewis, Randine. The Infertility Cure. P. 60-66. Little, Brown and Company., 2004
18. Lewis, Randine. The Infertility Cure. P. 58. Little, Brown and Company., 2004
19. Lewis, Randine. The Infertility Cure. P. 59. Little, Brown and Company., 2004
20. Lewis, Randine. The Infertility Cure. P. 60-61. Little, Brown and Company., 2004
21. Lewis, Randine. The Infertility Cure. P. 61. Little, Brown and Company., 2004
22. Lewis, Randine. The Infertility Cure. P. 61. Little, Brown and Company., 2004
23. Lewis, Randine. The Infertility Cure. P. 62. Little, Brown and Company., 2004
24. Lewis, Randine. The Infertility Cure. P. 62-63. Little, Brown and Company., 2004
25. Lewis, Randine. The Infertility Cure. P. 66. Little, Brown and Company., 2004
26. Lewis, Randine. The Infertility Cure. P. 66. Little, Brown and Company., 2004
27. Lewis, Randine. The Infertility Cure. P. 67. Little, Brown and Company., 2004

28. Lewis, Randine. *The Infertility Cure*. P. 88-89. Little, Brown and Company., 2004
29. Beinfield, Harriet., Korngold, Efrem. *Between Heaven and Earth*. P. 87. Ballantine Wellspring, Inc., 1991.