



Female infertility and its treatment by alternative medicine: A review

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Abstract

Infertility in female is very often observed. It is inability to conceive and produce the child. ART (Assisted Reproductive Technology) has been carried out such as IVF, ICSI but common people cannot afford the cost of such procedures. Various allopathic, Ayurvedic and other alternatives medicines and physiotherapy with acupuncture are been effective to enhance the pregnancy and these drugs and exercises will even prevent the recurrent abortions. In this regard the present review is aimed to provide all the necessary information regarding the effective method for treatment of female infertility.

Keywords: Infertility, Acupuncture, Gonadotrophin, Clomiphene

Introduction

Infertility is the inability to naturally conceive a child or to carry a pregnancy to full term. There are many reasons why a couple may not be able to conceive, or may not be able to conceive without medical assistance. Common believes that it is easy to have a child and is often surprised when the woman does not fall pregnant as soon as they start trying for a baby. The chance of getting pregnant in each menstrual cycle (each month) is very high. However, it may take a long time to conceive, even if everything is looks normal, because some may just be a bit weak. Eight out of every ten women trying for a baby will fall pregnant within the first six months. Women who do become pregnant without any medical assistance generally do so within 8 months of trying [1]. It is common for couples to seek help and advice if there is difficulty conceiving. Overall, around 15 per cent (one in six) of all couples will seek help. The point at which they may want to seek help will depend on various factors. For example, if they are over 35 years of

age or if they have any worrying symptoms, such as infrequent periods and so on, the couple should seek help after about six months of trying [2].

Various Treatment of Female Infertility

Fertility Drugs

Fertility drugs are often used alone as initial treatment to induce ovulation. If they fail as sole therapy, they may be used with assisted reproductive procedures, such as in vitro fertilization, to produce multiple eggs, a process called *superovulation*. According to the American Society for Reproductive Medicine, fertility drugs can be divided into three main categories:

- Medications for Ovarian Stimulation. Clomiphene (Clomid, Serophene); letrozole (Femara), follicle stimulating hormone (FSH) [Follistim, Gonal-F, Bravelle]; human menopausal gonadotrophin (hMG) [Humegon, Repronex, Menopur]; luteinizing hormone (LH) [Luperis]
- Medications for Oocyte Maturation. Human chorionic gonadotropin (hCG) [Profasi, APL, Pregnyl, Novarel, Ovidrel]
- Medications to Prevent Premature Ovulation. GnRh agonists (Lupron and Synarel); GnRH antagonists (Antagon, Cetrotide) [3, 4].

Clomiphene

Clomiphene citrate (Clomid, Serophene) is usually the first fertility drug of choice for women with infrequent periods and long menstrual cycles. Unlike more potent drugs used in super ovulation, clomiphene is gentler and works by blocking estrogen, which tricks the pituitary into producing follicle-stimulating hormone (FSH) and luteinizing hormone (LH). This boosts follicle growth and the release of the egg. Clomiphene can be taken orally, is relatively inexpensive, and the risk for multiple births (about 5%, mostly twins) is lower than with other drugs [5].

Women with the best chances for success with this drug are those who have the following conditions:

- Polycystic ovarian syndrome (PCOS)
- Ability to menstruate but irregular menstrual cycle
- Women with poorer chances of success with this drug have the following conditions:
- Infertility but with normal ovulation
- Low estrogen levels
- Premature ovarian failure (early menopause)

One or two tablets are taken each day for 5 days, usually starting 2 - 5 days after the period starts. If successful, ovulation occurs about a week after the last pill has been taken. [6] If ovulation does not occur, then a higher dose may be given for the next cycle. If this regimen is not successful, treatment may be prolonged or additional drugs may be added. Doctors usually do not recommend more than 6 cycles. Clomiphene often reduces the amount and quality of cervical mucus and may cause thinning of the uterine lining. In such cases, other hormonal drugs may be given to restore thickness. Other side effects of clomiphene include ovarian cysts, hot flashes, nausea, headaches, weight gain, and fatigue. There is a 5% chance of having twins with this drug, and a slightly increased risk for miscarriage. [7]

Gonadotrophin

If clomiphene does not work or is not an appropriate choice, gonadotropin drugs are a second option. Gonadotropins include several different types of drugs that contain either a combination of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), or only FSH. Whereas clomiphene works indirectly by stimulating the pituitary gland to secrete FSH, (which prompts follicle production), gonadotropin hormones directly stimulate the ovaries to produce multiple follicles. Gonadotropins are given by injection. Gonadotropins include:

- Human Menopausal Gonadotropins (hMG), also called menotropins
- Human Chorionic Gonadotropins (hCG)
- Follicle Stimulating Hormone (FSH)
- Gonadotropin-releasing hormone (GnRH) analogs, which include GnRH agonist and GnRH antagonists.

This action helps prevent the premature release of the eggs before they can be harvested for assisted reproductive technologies. [10, 11]

GnRH agonists and antagonists:

- GnRH agonists include leuprolide (Lupron), nafarelin (Synarel), and goserelin (Zoladex).
- GnRH antagonists include ganarelix (Antagon) and cetrorelix (Cetrotide). GnRH antagonists suppress FSH and LH more than GnRH agonists, and they may require fewer injections [12, 13].

Table 1: Ovarian Failure Treatment for Female Infertility

History of Birth Control Pill Use	Fertility drugs may be used to induce ovulation [14].
Polycystic Ovarian Syndrome (PCOS)	Laser surgery may be used to destroy the cysts. This sometimes restores hormonal balance. Fertility drugs may be used to induce ovulation. If glucose intolerance is diagnosed, treating elevated blood sugar levels may improve fertility. Modest weight loss in women who are overweight proves beneficial in improving insulin sensitivity and glucose tolerance. Medication used to improve blood sugar control includes Metformin (glucophage), or insulin sensitizers such as Pioglitazone, Rosiglitazone, or Troglitazone [14, 15].
Elevated Prolactin Hormone Levels	CAT (computerized axial tomography) scans can determine if a benign pituitary tumor is the cause. A drug called bromocriptine can shrink the tumor. Hypothyroidism, if the cause, can be treated with thyroid medication. If a prescription drug is likely to be causing the problem, the physician can change medications [15].
Absence of GnRH	GnRH replacement.
Premature Ovarian Failure	Treatment is limited to Assisted Reproductive Technology (ART) using a donor egg, which is fertilized in the laboratory, and implanted into the uterus of the woman who cannot conceive naturally [16].
Luteal Phase Defect	Hormone replacement with/without fertility drug treatment [16].
Cervical Mucus Problems	Estrogen therapy to stimulate production of mucus that aids the sperm in

	reaching the egg. ART is another option. Sperm are collected and injected directly into the uterus (intrauterine insemination), bypassing the vagina and the cervix [17].
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Ovarian Failure

Between 20 - 30 % of female infertility can be blamed on ovulatory problems. Ovulation is regulated by hormone activity. Thus, several hormonal problems can prevent ovulation, fertilization or implantation of the egg. Below is a description of the most common hormone irregularities in women which cause reproductive difficulty.

➤ Mechanical Obstruction

Mechanical obstructions account for up to 25 - 40 % of female infertility problems. Adhesions, scar tissue and blockages that affect the fallopian tubes and uterine cavity can prevent fertilization and implantation.

Table 2: Mechanical Obstruction Treatment for Female Infertility

Pelvic Inflammatory Disease (PID)	The best treatment is prevention. The more sexual partners a person has, the more likely that person is to contract a venereal disease. Condoms provide a protective barrier which minimizes risk. Seek medical attention for diagnostic tests and evaluation if you have any symptoms, concerns or fear that you have been exposed. Most bacterial infections can be treated with antibiotics [18]. Scarring and damage can be seen with dye studies, a hysteroscopy (to view the inside of the reproductive organs) and a laparoscope (to view the outside of the reproductive organs). Repairing damage involves microsurgery or laser surgery to remove scar tissue and reconstruct damaged areas [19].
Endometriosis	Drug therapy can shrink the abnormal growths. Surgery can be performed to remove the abnormal endometrial tissue and growths [19, 20].

➤ Cervix and the Uterus

Other conditions can cause fertility problems with the cervix, fallopian tubes and the uterus. Up to 10-15 % of female infertility is a result of cervical problems, and a small percentage of infertility is due to uterine defects.

Table 3: Cervix and the Uterus Treatment for Female Infertility

Hostile Cervical Mucus	Many infections are treatable with drugs/antibiotics. Cough syrups that contain glyceryl guaiacolate can improve secretion of cervical mucus, in some cases, where trauma has decreased the production of cervical mucus. In the case of antibodies, or when other treatments don't resolve cervical mucus problems, sperm can be collected, and then with medical assistance, the sperm can be injected into the uterus through a process called insemination [21].
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Incompetent Cervix	An incompetent cervix can be sutured (stitched closed) in a procedure called a cerclage, to provide additional strength and support. Bedrest is often indicated to reduce pressure on the cervix. Once the cervix has been sutured, delivery of the baby may be done by cesarean section [22].
Fibroid Tumors	Microsurgery and laser surgery are used to remove tumors. Severe cases may require hysterectomy. (Removal of the uterus) [23].
Developmental Defects of the Uterus	Surgery to repair certain structural abnormalities can be done using a hysteroscopy. Other defects require major surgery [24].
DES Exposure (diethylstilbestrol)	DES daughters may need assistance in becoming pregnant, and once achieving pregnancy, they need to be monitored closely. Women are trained to spot the signs and symptoms of PTL [25].
IUD's Intrauterine Devices	Options depend on the type of problem imposed by the IUD use. Infections are usually treatable. Scar tissue may require surgical removal [25]

➤ Ayurvedic Treatment

Female infertility accounts for 35-40 % of overall infertility. Treatment depends upon the specific identifiable cause. Ayurvedic herbal treatment of female infertility is discussed below

Table 4: Ayurvedic Treatment for Female Infertility

Ovulation disorder	Chandraprabha Vati, Yograj Guggulu, Ashokarishta and Dashmoolarishta. Herbal medicines useful in this disorder are: Ashoka (Saraca indica), Dashmool (Ten Roots), Shatavari (Asparagus racemosus), Aloes (Aloe vera), Guggulu (Commiphora mukul), Hirabol (Commiphora myrrha) and Harmal (Paganum harmala) [25].
Ovulation problems caused due to polycystic ovarian syndrome (PCOS)	Latakaranj (Caesalpinia crista), Varun (Crataeva nuevula), Kanchnaar (Bauhinia variegata) and Guggulu. Thyroid gland disorders are treated using Arogya Vardhini, Kanchnaar Guggulu and Punarnava Guggulu [25,26]
Premature ovarian failure (POF)	Ashoka, Dashmool, Chandraprabha, Shatavari, Guduchi, and Jeevanti (Leptadania reticulata). These medicines can be given in addition to hormone replacement therapy [27].
Blocked fallopian tubes, adhesions (scar tissue) and pelvic inflammatory disease	Kaishor Guggulu, Triphala Guggulu, Guduchi, Kutki (Picrorrhiza kurroa) and Punarnava can be used in these conditions [27].
Cervical mucus	Vata (Ficus bengalensis), Ashwatha (Ficus religiosa), Udumbara (Ficus glomerata), Plaksha (Ficus infectora), Shirisha (Albizia lebec), Haridra (Curcuma longa), Yashtimadhuk (Glycerrhiza glabra), Saariva and Manjishtha (Rubia cordifolia).
Women who are underweight or have a small, undeveloped uterus or cervix	Shatavari, Ashwagandha (Withania somnifera), Vidarikand (Pueraria tuberosa), Ksheervidari (Ipomoea digitata), Bala (Sida cordifolia), Samudrashok (Argyria speciosa), Nagbala (Grewia hirsuta), Shrungatak (Trapa natans) and Yashtimadhuk [28].
Some women do conceive, but	Guduchi, Kantakari (Solanum xanthocarpum), Brihati (Solanum indicum),

are unable to retain the pregnancy till full-term	Gokshur (Tribulus terrestris), Bhrungraj (Eclipta alba), Yashtimadhuk, Pippali (Piper longum), Bharangi (Clerodendrum serriatum), Padmakashtha (Prunus cerasoides), Rasna (Pluchea lanceolata) and Manjishtha [28].
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Homeopathy Treatment

1. Fibroids and Polyps [29].

The formation of fibroids, which are benign growth of the muscles of the uterine cavity, can be a physical obstacle to the implantation of the fertilized egg and to the development of the embryo, thus preventing pregnancy. Fibroids are caused by sudden rise in estrogen levels, so creating hormonal balance is an important factor in their treatment. Here are some useful homeopathic remedies. It is always best to seek the advice of a homeopathic practitioner to have a more in dept analysis of your case and to restore fertility.

Table 5: Homeopathy Treatment for Fibroids and Polyps

Bufo rana	Burning in ovaries and uterus. Tumors and polyps of uterus.
Thuja occidentalis	Warts on vulva and perineum. Vaginal discharge is profuse, thick and green in color. Severe pain in the left ovary and left inguinal region. Menses are scanty and late. Polypi and fleshy growths. Profuse perspiration before menses. Ailments from vaccinations.
Fraxinus americana	Enlargements of the uterus, fibroid growths and prolapsed uterus. Uterine tumors with bearing down sensation and painful periods.
Salix nigra 3X	Bleeding with uterine fibroids. Irritability before and during menses. Pain in the ovaries and difficult menses.
Helonias	Very tired women with a weight and a dragging sensation in the uterus with tendency to prolapse especially after miscarriages. Back pain after miscarriages. Malposition of the uterus. This is a great remedy for infertility. The woman is very conscious of the womb. Itchy vagina and vulva with white discharges. Constant pain over the kidneys. Diabetes mellitus and insipidus
Lappa 3X	Uterine displacements. Lack of tone in the uterus. Worse standing and walking.
Ignatia	Hysteria, sobbing, and grief.
Phosphorus	Metritis. Menses too early and too scanty, lasting too long with hemorrhages from the uterus between periods. White discharges that are burning and come instead of menses. Uterine polyps and amenorrhea with bleeding in other parts of the body (nose bleeds).
Calcarea carbonica	This remedy helps for women that are very concerned about their health and develop infertility. Menses too early, too profuse, too long. Uterine polyps

	and sterility with heavy menstrual flow and cutting pain in the uterus during menses. Swollen breasts before menses. This is a great remedy to restore fertility.
Calcarea fluorica 6X	Tissue Salt preparation) Indurations and tumors of the uterus and ovaries. Best taken as a tissue salts for 3-6 months.
Thlaspi bursa pastoris 6X	Hemorrhages from uterine fibroids with aching in the back and a general bruised feeling. Heavy cots during uterine cramps. Bleeding between periods. Menses are too frequent and heavy. Every other period is very heavy. This remedy is suitable for women who have difficulty recovering from a period before another begins.
Trillium pendulum	This remedy is great for women who suffer from anemia and feel dizzy. There are uterine hemorrhages from fibroids with cramp-like pains and a sensation of broken hips. This remedy has also a great use for threatened miscarriages with gushing of bright blood on the least movement
Ustilago maydis 3X	Flabby conditions of the uterus with hemorrhages. Uterus becomes hypertrophied; the cervix bleeds easily, ovaries burn and become swollen. Profuse menses after miscarriage. Blood flow can be clotted forming long black strings.
Secale	Threatened abortions about the third month. Brown discharges. Menses irregular, heavy dark flow. Burning pain in the uterus. Hemorrhages. Menstrual colic.
Viburnum opulus	Often used to prevent miscarriages and aids in false labor-pains. This is a remedy for cramps and colicky pains in the pelvic region. Menses are too late and when they come they are scanty and last for a few hours. Bearing down pains before menses. Ovarian region feels heavy and congested. Aching in sacral area extending to the front of the thighs. Frequent miscarriage early on during a pregnancy may be due to luteal phase defect. This remedy can help restore fertility in some case
Cimicifuga	Profuse dark menses. Pain in ovaries and amenorrhea (absent menses). Hormonal acne. Pains immediately before menses which are profuse, offensive, dark coagulated blood with backache.
Caulophyllu	Weak uterus, painful small joints and thrush. The cervix is very rigid. False labor and failure to progress during labor. Needle-like pains in the cervix. Painful periods with pains flying to other parts of the body.
Erigeron canadense 3X	Hemorrhage from the uterus, profuse and bright red. Leucorrhea (white discharges) between periods with urinary irritation. Bloody discharges on exertion. Weak uterus. Nose bleeds instead of menses (vicarious menstruation).
Platina	Ovarian inflammation (ovaritis) with sterility. This remedy can restore fertility in cases where there is increase sexual desire. Vaginismus and itchy vagina. Menses too early, too profuse, dark clotted with spasms and bearing down pains.

2. Polycystic Ovarian Syndrome [30, 31]

If you are suffering from this condition and rarely ovulate here are some remedies your homeopathic practitioner can help select to assist your case and restore fertility. The following homeopathic remedies can be very useful in stimulating the ovaries when taken during the first 14 days of the menstrual cycle. If a woman rarely ovulates, it may be advisable to begin at anytime.

Table 6: Homeopathy Treatment for Polycystic Ovarian Syndrome

Lilium tigrinum 6C	Pathological conditions of uterus and ovaries. This remedy can restore fertility in cases of congestion and ante-version of uterus with bearing down sensation. Early, scanty, dark clotted menses with the flow only when moving about.
Senecio aureus 3X	Menses too late with recurrent amenorrhea (absent menses), bladder inflammation and congested kidneys accompanied by back pain. Nervous and irritable an unable to concentrate on one thing
Agnus castus 3X	Scanty menses, sterility, transparent discharges often staining yellow. Nervous palpitations with recurrent nose bleeds. Lowered sex drive.
Folliculinum	When the ovaries have exhausted their energy after undergoing a series of infertility treatments this remedy can help restore fertility. It can also help re-start a natural menstrual cycle after years of birth control pill use and excess hormones as a result of estrogen dominance syndrome. I first heard about this remedy while taking my course in women's health and homeopathy developed by homeopath Melissa Assilem with the British Institute of Homeopathy. The remedy is available at Heliox Homeopathic Pharmacy. It should be taken in small doses in order to regulate a woman's cycle and it will bring on the period especially in cases of polycystic ovarian syndrome (PCOS), endometriosis or where the uterine lining is overstimulated by excessive estrogen. According to Melissa Assilem, an optimum time to give Folliculinum is on the tenth to fourteenth day of the cycle. Also different potency work in quite different ways: 3X or 4C stimulates and can bring on menstruation, the 7C is a balancer, and the 9C is a menstrual retardant, where there may be very frequent periods. If you want to know more, here is a great article that talks about this remedy and how to restore fertility in women.

3. Ovaries [32]

Below is a list of homeopathic remedies that have an affinity with the ovaries and should be selected based on your most similar characteristic symptoms in order to restore fertility.

4. Endometriosis

Endometriosis is a condition that many women suffer from even at a very young age. It is associated with heavy and painful menses in the majority of the cases. A portion of the endometrial lining migrates to other areas of the abdominal cavity, like the fallopian tubes and the bowels. This tissue is stimulated to contract by the action of hormones during the menstrual period causing pain. The following remedies can help restore fertility caused by endometriosis.

Homeopathy can help in cases of endometriosis when the characteristic symptoms you are experiencing match the indication of the remedy: (Table 8)

Table 7: Homeopathy Treatment for Affinity with the Ovaries

Apis mellifica	This remedy helps in cases of ovaritis or ovarian inflammation which is worse on the right side with soreness and stinging pains. Painful menses with severe ovarian pains. Great tenderness of uterine region. It can help treat ovarian cysts.
Secale	Indicated for women that suffer from menstrual colic worse right ovary with dark and irregular menses with brown discharges during the entire cycle. It is indicated when there is continuing watery blood discharges until the next period. Never been well since a miscarriage or pregnancy
Baryta muriatica	This remedy can restore fertility in cases of underdeveloped ovaries.
Lachesis	Left ovary very painful and swollen (cysts). Swollen, burning uterus. Pain relieved by menstrual flow. PMS with inflamed and swollen breasts. This remedy works well when one dose is given at the beginning of the menses. Worse from suppressed menses caused by birth control pill or other hormonal therapies.
Colocynthis	Boring pain in left ovary. Round, small cysts in the ovaries or broad ligaments. Painful menses with bearing down cramps which are better by bending double.
Lycopodium	Menses too late, last too long and are too profuse. Right ovarian pain. Burning vaginal discharge. Painful intercourse
Borax	Vaginal discharges like egg white with sensation as if warm water was flowing. This remedy favors easy conception and it is well indicated in resilient cases of vaginal yeast

Table 8: Homeopathy Treatment for Endometriosis

Xantoxilum fraxineum	Menses too early and painful, thick and almost black. Yeast infection during menses. Ovarian neuralgia left sided with neuralgic pains going down the thigh (electric like pains). Neuralgic pains during menses with neuralgic headaches. Weakness and difficulty assimilating nutrients from the diet [34].
Apis	This remedy helps in cases of ovaritis or ovarian inflammation which is worse on the right side with soreness and stinging pains. Painful menses with severe ovarian pains. Great tenderness of uterine region. It can help treat ovarian cysts [34].
Medorrhinum	For women with chronic pelvic disorders. Itchy white vaginal discharge that smells like fish. Sterility, endometriosis, intense menstrual colicky pains. Warts on genitals, ovarian pain worse on the left side or that goes from one ovary to the other. Menses have an offensive odor and are dark. Ailments after suppressed gonorrhoea [35].

Folliculinum 7C	When the ovaries have exhausted their energy after undergoing a series of infertility treatments this remedy can help restore fertility. It can also help re-start a natural menstrual cycle after years of birth control pill use and excess hormones as a result of estrogen dominance syndrome. I first heard about this remedy while taking my course in women's health and homeopathy developed by homeopath Melissa Assilem with the British Institute of Homeopathy. The remedy is available at Heliox Homeopathic Pharmacy. It should be taken in small doses in order to regulate a woman's cycle and it will bring on the period especially in cases of polycystic ovarian syndrome (PCOS), endometriosis or where the uterine lining is overstimulated by excessive estrogen. According to Melissa Assilem, an optimum time to give Folliculinum is on the tenth to fourteenth day of the cycle. Also different potency work in quite different ways: 3X or 4C stimulates and can bring on menstruation, the 7C is a balancer, and the 9C is a menstrual retardant, where there may be very frequent periods. If you want to know more, here is a great article that talks about this remedy and how to restore fertility in women [35].
Lachesis	Left ovary very painful and swollen (cysts). Swollen, burning uterus. Pain relieved by menstrual flow. PMS with inflamed and swollen breasts. This remedy works well when one dose is given at the beginning of the menses. Worse from suppressed menses caused by birth control pill or other hormonal therapies [34, 35].
Nux-vomica	Very irritable. Menses are irregular, too early and last too long. The blood can be dark with fainting spells. Metrorrhagia (abnormal menstrual bleeding) with sensation of passing stool. Irritable bladder [36].
Pulsatilla	Weepy and moody before period. Cramping painful periods with cramps before period arrives. Nausea, vomiting before periods aggravated by eating fatty foods. Bloating feeling, swollen breasts and back pain before period. Weight gain before menses [36].
Sepia	Great constitutional remedy that fits well a picture of hormonal imbalance in women that are over worked and have sluggish constitution, due to a weak liver, pancreas and spleen. This remedy is excellent in restore fertility after birth control, miscarriages, abortions and pregnancy. Cramps before period with a dragging sensation as if the uterus would fall out. For this reason, they tend to cross their legs and suffer from poor circulation to the uterus and pelvic region. They feel tired and rather sit and do nothing but when they move around they feel better and actually tend to like dancing and activity. They also suffer from recurrent yeast infections with itchy, burning white, yellow-green discharges. They are worse after intercourse and dread having sex because it can be painful or they feel exhausted afterward. Violent stitching pains going upwards in the vagina, from uterus to umbilicus. Pain in left inguinal region extending to the back [35].
Calcarea carbonica	Painful uterus during periods. Heavy periods. Tendency to gain weight and difficulty losing weight. Hypothyroid. Painful swollen breasts with bloating feeling before menses. Fear about one's health [36].

5. Laparoscopy and Surgery [37, 38]

If you are going to have a laparoscopy consider the following remedies to help you heal faster from the procedure

Table 9: Laparoscopy and Surgery for Treatment of Female Infertility

Calendula 30C, 200C	This remedy has anti septic properties and speeds up healing.
Bellis perennis 30C, 200C	It has a great affinity for soft tissue trauma especially of pelvic organs. This remedy may restore fertility in cases where the pelvic organs have been traumatized by past abdominal surgery
Arnica 200C	This remedy helps ease the pain of a bruised, lame sore feeling after the procedure. It also prevent hemorrhages and helps healing
Carbo vegetabilis 30C, 200C	This helps in cases of distended abdomen after the procedure. It helps restore strength if you feel weak after loss of fluids or after drugs. There is coldness with weak pulse and faintness. Respiratory cough after anesthetic medication.
Phosphorus	Vomiting after anesthetic medication. Bright red blood loss.

Natural Fertility

1. Fertility Yoga [40]

Fertility yoga is a type of yoga that is designed to assist couples who are having difficulty getting pregnant. Adhering to the basic principles of yoga, fertility yoga combines traditional yoga postures with postures that have been specifically developed in order to improve individual is reproductive health, thereby increasing their chances of getting pregnant. Yoga for fertility improves both female and male infertility by minimizing stress, which in turn balances the hormones of the body as well as one is mental health, thereby increasing a couple is ability to conceive.

Table 10: Types of Fertility Yoga for Treatment of Female Infertility

Hatha yoga	This form of yoga includes slow, methodical postures and movements. Hatha yoga focuses on improving posture and relaxation breathing techniques, and is meditative in nature
Kripalu yoga	Improves the connection between mind and body through simple postures and deep breathing techniques
Couples yoga	An increasingly popular form of fertility yoga, couples yoga involves completing postures with the help of a partner. This type of yoga is especially beneficial for individuals experiencing fertility problems, as it helps to improve intimacy and communication between couples.

2. Naturopathy

Naturopathy is a multidimensional health care system that encompasses several areas that seek to improve an individual is health, including fertility. This is achieved by using natural fertility methods that include the following areas:

- diet
- exercise

- acupuncture
- yoga
- aromatherapy
- herbal medicine
- homeopathy
- massage
- The aim of naturopathic medicine is to improve the individual's overall health by enabling her to heal herself and to improve her resistance to disease, illness and infection. Naturopathy treatment is tailored to suit an individual's specific needs [41, 42].

Flower Remedies

Flower remedies may be taken on their own, in a prepared combination, or in a mix of your selection. Single essences are sold at what is known as stock strength, meaning that you should dilute them further before taking them. Purchased combinations are ready to take immediately. If you are mixing your own selection, you should fill a glass of water until it is three quarters of the way full, and then add 3 to 4 drops of a few different flower essences (although it is recommended you use no more than seven). Each dosage should involve 4 to 6 drops on the tongue, taking care to ensure the dropper doesn't touch your mouth. Alternately, you can add a few drops to a glass of water [43].

Some of the most helpful flower remedies when getting pregnant are [43, 44]

Table 12: Flower Remedies When Getting Pregnant

She Oak	She oak reduces stress caused by fertility issues and improves hormonal imbalances
Noni	Fosters feeling of nurturing and caring and reduces negative feelings
White Chestnut	Also promotes positive thinking
Vervain	A relaxing flower remedy that calms feelings of anxiety and hypertension, which can impede fertility
Wisteria	Promotes feelings of sensuality in the body and promotes calmness
Aspen	Aspen helps reduce feelings of anticipation and anxiety, thereby reducing your levels of stress and helping to promote better overall reproductive health which increases your fertility
White Chestnut	Another flower remedy helpful in getting pregnant, white chestnut reduces tension, stress and anxiety. Helpful in promoting mental health, white chestnut is particularly helpful in reducing feelings of bitterness and frustration which women who have difficulty getting pregnant often experience in their journey towards pregnancy

Aromatherapy

Aromatherapy can be beneficial in two ways when trying to get pregnant. Firstly, aromatherapy assists in regulating the menstrual cycle and promoting a healthy reproductive system. And secondly, aromatherapy helps you relax; reducing levels of stress and depression, and can even function as an aphrodisiac for you and your partner. In aromatherapy, essential oils are used in order to stimulate relaxation in the muscles and to relieve tension. Essential oil is

highly concentrated plant substances, distilled from roots, seeds, bark and leaves [45]. They are usually costly because of the tiny amounts of oil present in a plant and because of the difficulties in extracting it. Because essential oils are so concentrated, they should not be applied directly to the skin. Instead, try the following methods.

Table 13: Aromatherapy for Treatment of Female Infertility

Massage	Dilute the essential oil in a base such as grape seed oil, wheat germ or almond oil; the essential oil should be in the region of 1 to 3 per cent of the quantity of the base. Massage can also be an excellent getting pregnant aphrodisiac and you and your partner can take turns massaging one another. Daily massage can be especially helpful to your reproductive system starting on the final day of your period (45).
Oil Burner	Add 3 to 4 drops of essential oils to a container holding water that is heated by a small candle, allowing the aromas to gently fill the air. It is believed that the healing properties of aromatherapy enter the body through the capillaries of the nose (46).
Baths	Add 5 to 10 drops of essential oil to a warm bath in order to reduce stress, depression and anxiety. If you are sensitive to essential oils, try diluting them in some base oil or a little milk and allow the oils to disperse before entering the bath (46).

Acupuncture and Female Infertility

Many women chose acupuncture infertility treatment either on its own or in conjunction with assisted reproductive technology (ART) procedures, such as IVF. Studies have proved the effectiveness of acupuncture for infertility [47]. A 2004 study conducted by the Reproductive Medicine and Fertility Center in Colorado found that 51% of women who underwent both IVF and acupuncture treatment at the same time became pregnant, while only 36% of those who only underwent IVF did. The latter group also had higher rates of miscarriage stillbirth (20%) compared to those women who had received acupuncture (8%) [48].

Future Trends:

Letrozole and Aromatase Inhibitors. Aromatase inhibitors block aromatase, an enzyme that is a major source of estrogen in many major body tissues. These drugs include anastrozole (Arimidex) and letrozole (Femara). These drugs are used for treating breast cancer and are being investigated for stimulating ovulation in infertile women. Although letrozole is not approved for treatment of infertility, it has become widely used for this purpose in recent years. Progesterone is a hormone that is produced by the body during the menstrual cycle [14]. Progesterone drugs are sometimes given to women who have experienced frequent miscarriages (a possible sign of progesterone deficiency). A progesterone drug may also be given after egg retrieval during an in vitro fertilization (IVF) cycle to help thicken the uterine lining (endometrium) so it can better hold the egg following implantation. **Tamoxifen.** Tamoxifen (Nolvadex) is a drug known as a selective estrogen-receptor modulator (SERM). It is used to prevent breast cancer in high-risk women. It is also being studied in fertility treatments to induce ovulation [47]. Tamoxifen works in a similar to clomiphene but may pose more health hazards, including a risk for blood clots and uterine cancer. **Glucocorticoids.** Glucocorticoids are steroid hormones that are sometimes used in

combination with IVF and intracytoplasmic sperm injection (ICSI) to help make the lining of the uterus more responsive to egg implantation. However, recent reviews caution that glucocorticoids do not help improve pregnancy success rates and should not be used routinely with assisted reproductive technologies [48].

Conclusion

The review has successfully narrated all detail information regarding treatment of female infertility and prevention of recurrent abortions. The increased global warming, UV and cosmic rays, radiations of silicon medias, mobiles have generated the impairment of female infertility. Genetical disorder and hormonal imbalances are also can be rectified by drugs, alternatives medicines and physiotherapies. Hence there is effective treatment for female infertility.

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