

FEMALE INFERTILITY: AN OVERVIEW

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ABSTRACT

Female infertility is the major disorder which has altered the mankind for lack of conception and reproducibility, stressful world, excess radiation, lack of biological food, genetically disorder, changing life style, increased electronic discharge have resulted the female infertility. Infertility/ childlessness cause great personal suffering & distress. Most of this agony & misery is hidden from the public gaze. Infertility is in approximately 90% of couple. i.e. Male related problems account for about 30%, female related problem account for another 30 %,in next 30% both are responsible.

Keyword: *Infertility, Yoga, Ayurveda.*

INTRODUCTION

Female infertility is the major disorder which has altered the man kind foe lack of conception and reproducibility, stressful world, excess radiation, lack of biological food, genetically disorder, changing life style, increased electronic discharge have resulted the female infertility. Infertility/ childlessness cause great personal suffering & distress. Most of this agony & misery is hidden from the public gaze

Incidence: Infertility in approximately 90% of couple i.e. Male related problems account for about 30%, female related problem account for another 30 %,in next 30% both are responsible.[15-17].

Ayurvedic concept of Vandhyatva (Infertility): *Ayurveda* is a science, having its own method of diagnosis & treatment based on it. According to *Ayurvedic* classics infertility is failure achieve a

child rather than pregnancy as *garbha strava* (repeated abortions) & *mrutvatsa* (having repeated still births) is also included in types of infertility. Important factors of constituents of *garbha* (foetus) are 1) *Rutu* (fertile period), 2) *kshetra* (reproductive organs), 3) *Ambu* (nutritive fluids), 4) *Beej* (Ovum) - Also healthy psychological status, normal functioning of *Vata* (one of the governing factor of body according to *ayurveda*), *shadbhava* (Six factors - mother, father, *atma*, *satva*, *satmya*, *rasa*). Any abnormality in these factors causes infertility.

In *Ayurvedic* classics six type of *vandhyatva* are noted, which seems to be specific clinical features, *garbha kosh bhanga* (injury to uterus), *kakvandhya* (one child sterility or secondary infertility), *anapatya* (no child or primary infertility), *garbhastravi* (repeated abortions), *mrutvatsa* (re-

peated still births), *balakshaya* (loss of strength) Prognosis of infertility (cited by classics) is depends on the cause, in *beejdosha*-(developmental abnormalities of reproductive organs) is incurable, *anapatya* & *kakvandhya* can be treatable, weaknesses in body parts for which the treatment includes appropriate diet, body therapies, herbs, sensory therapies, and lifestyle and yoga therapies.

Definition

Infertility is defined as the incapacity to fulfill pregnancy after a reasonable time of sexual intercourse with no contraceptive measures taken. The terms sterility and infertility are sometimes used interchangeably and at times define different populations. In contrast, the fertile population is defined as those who do become pregnant after some reasonable time of regular sexual intercourse.

Identifying the causes of infertility

The utero-tubal-peritoneal factor includes the study of tubal integrity, the uterine cavity and the presence of pelvic adhesions that compromise the anatomy of the female genital tract. Female infertility may be due to:

- Problems with a fertilized egg or embryo being able to survive once it is attached to the lining of the uterus
- Problems with the eggs being able to attach to the lining of the uterus
- Problems with the eggs being able to move from the ovary to the uterus
- Problems with the ovaries producing eggs

More and more women are waiting until their 30s and 40s to have children. Actually, about 20 percent of women in the United States now have their first child after age 35. So age is an increasingly common cause of fertility problems.

Types of infertility as written in classical texts

Vandhya: absolute sterility and incurable

Apraja: women can become pregnant and curable

Sapraja: women who become inflicted with infertility during her childbearing years after already conceiving one or more children

Menstrual cycle (an indication of the state of the health of the female) can be affected by many factors, such as diet, emotional instability, excessive physical exercise, lifestyle, and stress responsible for creating an imbalance of the Doshas (control the activities of the body-Vata, Pitta and Kapha). Causes of female infertility:

Anovulatory Infertility

An ovulation is defined as the condition in which follicular development and rupture is impaired and hence the oocyte is not released from its follicle. Several causes for an ovulation have been identified. These include intrinsic ovarian failure including genetic, autoimmune and other factors such as chemotherapy. Ovarian dysfunction secondary to gonadotrophic regulation is another cause. It can be subdivided into specific causes such as hyperprolactinaemia and Kallmann's syndrome, and functional causes including low body weight, excess exercise, the use of drugs and idiopathic in fertility. In women with a suspicion of ovulatory failure, the most frequent causes for an ovulation may derive from one of the following conditions.

Polycystic ovaries

This is the most prevalent endocrine pathology in women and the most frequent cause of an ovulation. Women with polycystic ovaries may exhibit a wide range of clinical symptoms and signs; however, an ovulation and hyper androgenism are considered prerequisites in this LH. Later on, the presence of this syndrome was associated with insulin resistance and during the ultrasound findings were described in women with polycystic ovaries.

Tubal-peritoneal infertility

Tubal-peritoneal factors account for ~30% of the causes of infertility. The functions of the Fallopian tubes are closely linked to the integrity of ciliated

epithelium responsible for oocyte uptake. Fertilization takes place in the outer end or ampullar section. The tubes are also involved in early embryo development and in the transport of the embryo into the uterine cavity. Consequently, any anatomical or functional alterations of the tubes are associated with

infertility. In contemporary society, cultural changes including the use of contraceptives have anticipated the onset of sexual activity several years before partner stability or fertility is even related to percentage incidence of tubero-peritoneal infertility.

Table 1:

<i>Dysfunction</i>	<i>Defective changes</i>
Ovarian function	Prolonged follicular phase Reduced rate of follicular growth Reduced pre-ovulatory follicle size Reduced pre-ovulatory serum oestradiol concentration Disordered and impaired LH surge Disordered early luteal phase patterns of oestradiol and progesterone Luteinized unruptured follicle
Tubal function	Alterations in normal tubo-ovarian relationships Hydrosalpinges Alterations in tubal motility by prostaglandins with accelerated tubal Motility
Sperm function	Phagocytosis by macrophages
Fertilization - embryo defects	Impaired fertilization Embryo toxicity, impairs early embryo development
Early pregnancy failure	Abnormal embryos Immune reaction Auto-antibodies Cytokines (interleukin I)

Dietary management

Diet plays a crucial and vital role in the prevention and cure of diseases and in maintenance of good health. As per Ayurveda, food affects the mind also by causing either an increase or decrease in the three qualities of mind, i.e., Rajo guna, Satva guna, and Tamo guna . It was believed in the ancient Indian literature that if dietetics is properly followed, medicine is not required but if dietetics is not observed, even medicines are not useful. Dietary management involves strict compliance and adherence to Ojas-building foods and to avoid the substances which diminish the Ojas. This is important to regulate ovulation and enhances fertilization. Eating whole foods provides all nutrients for the health of the body in addition to fiber that influences hormonal levels provides.

Ayurvedic treatment for infertility: [14]

1. Ashwagandha Churna and Kapikacchu: Both these medicines are known to increase sperm count and also improve its quality.

2. Phala Gritam: This is an Ayurvedic medicine to treat female infertility. Consumed in the form of liquefied butter mixed with milk, this medicine is touted to treat functional problems but does not treat structural deficiencies.

3. Guduchi, Gokshura, And Triphala Churna: These medicines are used to clear the blockages in the body, which prevents the production of the shukra dhatu.

4. Shatavari: This is only woman medicine, used female infertility treatment in Ayurveda.

➤ **Yoga For Female Infertility:**

1. Bee Breath (Bhramari Pranayama):

The Bhramari Pranayama, or Bee Breath, is a great asana for stress relief. A study by Fertility and Ste-

rility reports that psychological stress is a significant factor that results in infertility.

This Pranayama calms the body and relieves it of stress, anxiety, and worry. With a calm state of mind and body, you can increase your chances of conception to a remarkable extent.

Directions: Sit straight with your eyes closed and place your index fingers on the cartilage of your ears. Inhale deeply and gently press the cartilage when you exhale. Keep pressing the cartilage in and out as you inhale and exhale while making a humming sound.

Do 6-7 reps of this breathing pattern.

2. Seated Forward Fold (*Paschimottanasana*)

Paschimottanasana, commonly known as Seated Forward Bend, helps exercise the hamstrings, lower back, and hips. This asana even helps vitalize the ovaries and uterus, the key organs responsible for conception. This asana can also improve your psychological state.

Directions

Sit straight with your legs stretched out and your toes flexed towards you. Inhale and stretch both your arms above your head. Exhale and bend forward at the hip, touching the sides of your feet with your arms, while keeping your spine erect.

Breathe steadily and bend further towards your legs each time you exhale. Stay in this position for one to two minutes and then inhale deeply and come back to the sitting position with your arms stretched out.

Exhale and lower your arms.

3. Reclining Bound Angle (*Supta Baddha Konasana*)

This asana exercises your inner thigh and groin muscles. It also helps relieve stress, along with the discomfort of symptoms associated with IVF, menstrual cramps (bloating), and a medicated fertility cycle.

Directions

Exhale and lower your back towards the floor, with the support of your hands. Lie on your back, and rest your neck on a pillow if needed. Bend your knees, and place the soles of your feet on the ground. Slowly, let your knees drop open to the sides, such that

your soles touch each other. Place your hands beside you, with your palms facing up.

Stay in the pose for up to 10 minutes and continue to inhale and exhale. Press your thighs together with the help of your hands. Turn onto one side and gently rise from the position.

4. Shoulder Stand (*Sarvangasana*) Here's an asana that helps stimulate the thyroid gland, the dysfunction of which can lead to infertility. It also helps calm your mind and relieve stress.

Directions Lie with your back on the ground, your legs stretched out, and your arms on the sides of your body with your palms facing up. Now, raise your legs up to form a 90-degree angle. Press your palms into the floor and lift your waist up, bringing your legs forward, keeping them vertical to the ground.

With the support of your palms hold your waist and raise your legs to form a 90-degree angle to the floor. Hold that position for one and a half minutes. Gradually lower your legs and back and place your hands on the ground, as your entire body rests parallel to the floor.

TREATMENT

1. *Nashtartava*: According to *Acharya Sushruta*, it should be treated with *matsya*, *kulattha*, *amla padartha*, *tila*, *masha (udida)*, *sura (madya)*, *gomutra (cow's urine)*, *takra*, *dadhi (curd)* and *shukta*.
2. *Artavkshaya*: *Agneya dravyas* like *Agaru*, *Kaleyaka*, *Kushtha*, *Haridra*, *Sarala*, *Langali*, etc. should be used. *Panchakarmadi sanshodhana* should also be done. Here *Sushruta* commentator *Dalhanacharya* comments only *Vaman* should be considered for *shodhan*.
3. *Ashta Artavdushti*: *Sushrutacharya* has given *vidhivat snehan*, *svedana* and then *Vamana*, *Virechana*, *Niruhabasti*, *Anuvasan basti* and *Uttarabasti chikitsa* for *artavdushti*.
4. *Arajaska Yonivyapada*: *Charakacharya* has given treatment for *arajaska yonivyapada* as

Jivaniya gana dravya siddha godugdha. As *arajaska yonivyapada* is due to vitiated *Pittadosha*, the following treatment is also given by *acharyas - Vasaghrta, Shatavari Ghrita* (from *Raktapitta chikitsaddhyaya*), *Jivaniya Kshiraghrta* and *Uttarbasti* with *madhura rasa dravya* decoction with addition of milk i.e. *godugdha* (from *Pitta Yonivyapada chikitsa*).

5. *Rasayan Chikitsa*

Ayurveda offers *rasayana chikitsa* for *Indriya-bala-kshaya vyadhi*. So, *Chyavanprasha, Shilajatu rasayana* (*Loha Shilajatu* should be used), etc. are beneficial. TORCH infections can be dealt with immunomodulatory drugs like *Guduchi, Kantakari, Brihati, Gokshur, Bhrungraj, Yashtimadhuk, Pippali, Bharangi, Padmakashtha, Rasna, Manjishtha, Sariva, Ushir, Chandan*, etc.

DISCUSSION

Female infertility is the major disorder which has altered the man kind foe lack of conception and reproducibility, stressful world, excess radiation, lack of biological food, genetically disorder, changing life style, increased electronic discharge have resulted the female infertility. Infertility/ childlessness cause great personal suffering & distress. Most of this agony & misery is hidden from the public gaze *Charaka* has given space to understand the newly diagnosed diseases on the basis of *Prakriti (Doshas; root cause), Adhishthana (Dushya; seat), Linga (Lakshanas; features), and Aayatana (Ahar Vicharadi Nidanas* Discrepancy may arise in the mind as *Sushrutacharya* gives *Agneya dravyas* (of *ushna virya*), whereas *Charakacharya* gives *Rasayana chikitsa* (of *shita virya dravyas*). But as '*Artavam Agneyam*', *agneya dravya chikitsa* should be given in *rutukala*, while *rasayana chikitsa* should be given in *rutavyatita kala*.

CONCLUSION

Infertility is managed by looking at the reproductive system components. *Ayurveda* pays attention to each

individual body types, enhances the body systems participating in the process of fertilization and therefore serves as an excellent alternative for reaching fertilization. Last but not the least *Yoga* plays very important role in Fertility. One should also follow a healthy regimen along with a nourishing diet and undoubtedly God will reward you with the most desirable blessing.

REFERENCES

1. *Charaka Samhita* By Prof. Ravidutt Tripathi, Chaukhamba Sanskrit Pratishthan, Delhi, Edition: Reprint 2009.
2. *Sushruta Samhita* By Kaviraj Ambikadatta Shastri, Chaukhambha Sanskrit Sansthan, Varanasi, Edition: Reprint 2012.
3. *Vridhajivakiya Tantra* By Pandit Hemaraj Sharma, Caukhambha Sanskrit Sansthan, Varanasi, Edition: Reprint 2010.
4. Text book of Gynaecology By D. C. Dutta and Hiralal Konar, New Central Book Agency, (P) Ltd, London, 6 th Edition: 2013.
5. *Yoga and Fertility: A Journey to Health and Healing* By Jill Petigara, Lynn Jensen, 30 Jan 2013.
6. Female fertility, obstetric and gynecological history in coeliac disease. A case control study. By Sher KS, Mayberry JF, 1994; 55(4): Pages: 243-246.
7. *Fertility Yoga: A Natural Approach to Conception* Paperback By Kerstin Leppert, 10 Sep 2013.
8. *Charaka Samhita* By Sharma PV, Redacted by Dridhabala, Vol I., (Chaukhambha Orientalia, Varanasi, 1981-1994), Chapter 1, Page 6, Verse 42.
9. *Women's Power to Heal through Inner Medicine* By Maya Tiwari, Mother OM Media, 2007.
10. *Asthangha Hrudaya* By Dr. Brahmanand Tripathi, Nirmala Hindi commentary, Sootra Sthana 12.2007, p193.
11. A Comprehensive treatise on *Prasooti Tantra, Garbhavijnaniya* By Dr. Hemalatha Kapoorchand, 4.2046, p.119.
12. *Embryology in Ayurveda, Genetics in Ayurveda* By Prof. DG Thatte, 8.2011, p174-175.
13. *Sushruta Samhita-KL Bhashagratna* Translator (Chaukhamba Orientalia, Varanasi, India, 1991), Pages 3-23 (I), 45-49 (II).
14. David Frawley, *Yoga and Ayurveda*, (Lotus Press, Twin Lakes, Wisconsin, 2000): Pages: 112-115.

15. Occupational and Life Style Exposure on Female Infertility by Dr Jorgenten –The Open Reproductive Science Journal 2008. p. 16-21.
 16. Richard M Sharpe, Life Style and environmental contribution to Male Infertility.
 17. Narendra Malhotra, Jeffcot’s Principal of Gynecology- 8th new JAYPEE Brother’s medical Publisher 2014. p. 654.
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