

Understanding the aetiology of Infertility in women

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ABSTRACT

There is no chance for the welfare of the world unless the condition of women is improved.” says Swami Vivekananda. One in every four couples in developing countries had been found to be affected by infertility. **The inability to conceive following unprotected sexual intercourse for 1 year (age < 35) or 6 months (age >35).Affects 15% of reproductive couples. Men and women equally affected.** Ayurveda has unique approach towards the infertility. Various Ayurvedic literature has explain in details about female genitalia with a deep knowledge of its functions and the importance of it towards the production of new progeny in healthy manner, it not

only deals with the healthy conceptions but also have mentions the care and its management after the birth about both mother and her result of love.

Keywords- Infertility, Women's Health, life style disorders, Ayurvedic approach

INTRODUCTION

Now days due to busy lifestyle and hectic work schedule people are more prone to disease.. Due to increased stress factor daily routine regimen are ignored which later on develops into many disorders. Infertility in both men and women is among them.

Infertility has been a neglected area of research when compared to research on

fertility. Globally between 50 to 80 million couples at some point in their reproductive lives suffer from infertility problems (World Health Organization. Challenges in Reproductive Health Research: Biennial Report 1992-1993. Geneva, WHO 1994.) It is estimated that around 13-19 million couples are expected to be infertile in India at a given point of time. (World Health Organization, Progress in Reproductive Health Research). **Infertility can be defined in two ways: as inability to conceive after a year of regular sexual intercourse without contraception, or as repeated ectopic pregnancies, miscarriages or perinatal loss. Male and female specific factors account for about 30% of the infertility causes (individually); the combination of male and female causation leads to an additional 20% and the remaining 20% are caused by uncertain origins.**

Concept of *Vandhyatava*

While practicing Ayurveda it is very essential to consider patients physical as well as mental health status and treat accordingly. The Ayurvedic literature has explained conditions as long year back with its all aspect about women's health and diseases. Under the topic *Vandhyatva* and *Yonivyapad Chikitsa*

mention in *Charak Chikitsa Sthana* , *Acharaya* Covers all the aspect towards the women 's Health and diseases related to it with its line of management in systemic ordered.

Infertility according to ayurveda explain in terms as failure to achieve child rather than pregnancy, *Harita* term it as *Bandhyatava*. *Kasyapa* has mentioned *puspaghniyataharini* or other *jataharini* with repeated expulsion of fetus of different gestational periods. Since in these conditions also, the woman fails to get a successful conception and child, these conditions can be included under female infertility, the other term used to mention is *Shandya* (person or lady who can't produce a progeny), *Garbha strava* & *Mrutavastha* is also included in types of infertility.

Acharaya Harita mentions around 6 types of *vandhyatva*, which seems to be related with clinical specifications, they are- *Garbhasravi* (repeated abortions), *Kakvandhya* (secondary infertility), *Anaptya* (no child bearing), *Mrutavastha* (repeated still births), *Balakshaya* (loss of strength) and *Bandhya* due to *Balaavastha*, *Garbhkoshbhanga* and *Dhatukshaya*.etc.

Fertilization is complex chemical reaction which involves interaction between eggs and sperm.

Ayurvedic text mentions some factors those responsible for fertility, any abnormality and any disturbance in these factors will leads to infertility. They are Ritu (Fertile period), Kshetra (reductive organ Uterus womb), Ambu (nutritive fluids), Beeja (ovum).

According to Ayurveda, just as proper season, good field, enough supply of water and minerals and good seed are essential to produce a good crop, the *Rutukala*, *Kshetra*, *Ambu* and *Beeja* are essential factors of conception. Imbalance of any of these features leads to infertility.

- *Rutukala* is a period of *Kapha-Pitta* predominance and when affected by *Vata* or *Pitta* causes fertility.
- Disorders of *Ambu* can cause issues in amniotic fluid and nutritional insufficiency after conception.
- Disorders of *Beeja* can also cause fertility.
- Disorders in *Kshetra* can cause *margavarodha* (obstruction in fallopian tubes), *Vyapanna yoni* or *Garbhasaya* (uterine, cervical

or vaginal pathology causing hostility to spermatozoa).

- *Ama* ,one of the toxin of body produced by undigested food in stomach, due to imbalance in *agni*, mental instability ,bad eating habits ,those *ama* can circulate in body and cause imbalance in *dosha* and abnormalities in body tissue functioning.

Concept of infertility

- **Infertility can be Primary infertility where in a couple that has never conceived and Secondary infertility in that occurs after previous pregnancy regardless of outcome.**

Aetiology: Infertility in women has a [range of causes](#).

I. Primary Causes:

- Age: The ability to conceive starts to fall around the age of 32 years.
- Being obese or overweight: This can increase the risk of infertility in women as well as men.
- **Ovarian factors: ovulatory problems are the most common**

causes of infertility; they can be due to Hormonal imbalance, Polycystic ovaries, malfunctioning of the hypothalamus, Damage to the ovaries caused by previous surgeries, Premature menopause, Anovulation or oligoovulation, Turner's syndrome, Hypothyroidism, Ovarian tumors, X ray/ radioactive exposure, General ill health, Poor diet, BMI <20/>24, Use of easily digested carbohydrates (white bread), PCOS, High insulin or glucose levels. Premature ovarian failure: The ovaries stop working before the age of 40 years.

Polycystic ovary syndrome (PCOS): The ovaries function abnormally and ovulation may not occur.

- **Tubal factors:** Improper functioning of fallopian tubes. Chronic salpingitis, History of tubal ligation, PID, STDs, IUCD, Multiple sexual partners
- **Uterine factors:** Fibroids, Congenital deformation, Low estrogen /progesterone from ovary, Endometriosis in ovaries/ fallopian tubes (Cells that normally occur within the

lining of the uterus start growing elsewhere in the body).

- **Cervical factors:** Coitus after 12 – 72 hours after ovulation, Infection, Stenotic cervical os, Obstruction of os, Repeated cervical surgeries, Anti sperm antibodies
- **Vaginal factors:** It includes infections, sperm immobilisation or agglutinating antibodies.
- **Sexually transmitted infections (STIs):** Chlamydia can damage the fallopian tubes in a woman and cause inflammation in a man's scrotum. Some other STIs may also cause infertility.
- **Mental stress:** This may affect female ovulation and male sperm production and can lead to reduced sexual activity

II. Secondary Causes:

- **Smoking:** Smoking significantly increases the risk of infertility in both men and women, and it may undermine the effects of fertility treatment. Smoking during pregnancy increases the chance of pregnancy loss. Passive smoking has also been linked to lower fertility.

- Alcohol: Any amount of alcohol consumption can affect the chances of conceiving.
- Eating disorders: If an eating disorder leads to serious weight loss, fertility problems may arise.
- Diet: A lack of folic acid, iron, zinc, and vitamin B-12 can affect fertility. Women who are at risk, including those on a vegan diet.
- Exercise: Both too much and too little exercise can lead to fertility problems.
- Exposure to some chemicals: Some pesticides, herbicides, metals, such as lead, and solvents have been linked to fertility problems in both men and women. A mouse study has suggested that ingredients in some household detergents may reduce fertility.

DISCUSSION & CONCLUSION

Determinants of Declining Fertility with Advancing Age in Women:

- Declining oocyte number and ovulatory disturbances
- Declining oocyte quality and increasing chromosomal and genetic mutations
- Luteal phase dysfunction
- Impaired fertilization rates
- Implantation failures
- Poor-quality embryos and genetic abnormalities
- Impaired endometrial receptivity
- Higher incidence of age-related gynecologic problems, including uterine fibroids and polyps
- Declining sexuality
- Increased pregnancy wastage
- Early implantation failures and preclinical losses
- Increased incidence of general medical problems accompanying aging (e.g., type 2 diabetes mellitus, hypertension)
- High incidence of obstetric complications and poor pregnancy outcomes

REFERENCES

1. Sharma PV. Charaka-Samhita. Agnivesha's Treatise, Refined and Annotated by Charaka and Redacted by Dridhabala, Vol II., (Chaukhambha Orientalia, Varanasi, 1981-1994), Chapter XXX, Page 502, Verses 1-40.
2. Prof. K.R. Srikantha Murthy, Astanga Hrdayam Volume 3 (Krishnadas Ayurveda Series, 2010), Chapter 4.

3. Sushruta Samhita-KL Bhishagratna Translator (Chaukhamba Orientalia, Varanasi, India, 1991), Pages 3-23 (I), 45-49 (II).
4. Sharma PV. Charaka-Samhita. Agnivesha's Treatise, Refined and Annotated by Charaka and Redacted by Dridhabala, Vol I, (Chaukhambha Orientalia, Varanasi, 1981-1994), Chapter 1, Page 6, Verse 42.
5. Dr. David Frawley, Dr. Subhash Ranade, Ayurveda – Nature's Medicine (Lotus Press, 2001), Pages 3-7.
6. David Frawley, Yoga and Ayurveda, (Lotus Press, Twin Lakes, Wisconsin, 2000): Pages: 112-115.
7. Maya Tiwari, Women's Power to Heal through Inner Medicine (Mother OM Media, 2007), Chapters 1-5.
8. Dr. Marc Halpern, Textbook of Clinical Ayurvedic Medicine, (Sixth Edition), Second Volume (Grass Valley: California College of Ayurveda, 2008), Pages 5-7.
9. <https://www.who.int/reproductivehealth/topics/infertility/burden/en/>)
10. (Hull MG, Glazener CM, Kelly NJ, Conway DI, Foster PA, Hinton RA, et al. Population study of causes, treatment, and outcome of infertility. *BMJ*. 1985;291:1693–7. [PubMed])
11. Dr. Nirmala Joshi, Ayurvedic concept in Gynecology (Chaukabha Sanskrita Pratisthana, Delhi, 2006), Chapter VIII, Pages: 92-111.

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