

FEMALE INFERTILITY & VYANDHATWA: CONCEPTUAL STUDY**Dr. Afreen Siddiqui*¹, Dr. Gitanjali Sasmal² and Dr. Vinay Bhardwaj³**¹P.G. Scholar, ²Reader & H.O.D. and ³Lecturer

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ABSTRACT

Infertility is the inability of sexually active couple, not using any birth control, to get pregnant after one year of trying. According to the Indian Society of Assisted Reproduction, infertility currently affects about 10-14% of the Indian population, with higher rates in urban areas where one out of six couple is impacted. Nearly 27.5 million couple actively trying to conceive suffers from infertility in India. *Ayurveda* has a detailed understanding about the cause, diagnosis and prognosis of infertility and here in this article spot light will be focused on only female infertility termed as *Vyandhatwa*. As it is a burning issue in the society and our science *Ayurveda* has a beautiful explanation over all types of infertility along with their treatment. So an attempt has been made to set a co-relation between *Vyandhatwa* in *Ayurveda* and female infertility in modern science.

KEYWORDS: *Ayurveda*, *Vyandhatwa*, female infertility.**INTRODUCTION**

Ayurvedic classic proclaims “*Srotamayan hi shariram*” means that living body is a channel system or is comprise of innumerable channels which are designed as inner transport system for divergent function, gross and subtle biological and energetic. *Charaka* has described *Srotamsi* as the channels which transport the *Dhatus* (*Asthyai* or *Poshyadhatu*) which are subjected to transformation and provide nourishment to the body.^[1] *Acharya Sushruta* in *Sharira Sthana 9th* chapter has very specifically mentioned about *Artavavaha Srotas* which are two in number and have their origin in *Grabhashaya* (uterus) and *Artavavahi Dhamni* (*Artava* carrying vessels). Vitiating of any *Srotas* results from improper indulgence of *Ahara* and *Vihara*, and because of these *Srotodushti* happens i.e. any abnormality in the *Srotas* which can be categorized as *Ati Pravritti*, *Sanga*, *Sira Granthi* & *Vimarga Gamana*, whatever disease will occur it will have at least one of the above *Srotodushti* types. And any injury to the *Mula* of the *Srotas* will cause infertility, dyspareunia, amenorrhea.^[2]

Infertility is defined as a failure to conceive with one or more years of regular unprotected coitus. Primary infertility denotes those patients who have never conceived. Secondary infertility indicates previous pregnancy but failure to conceive subsequently.^[3] Failure to achieve conception by a couple of mature age, having normal coitus, during appropriate period of menstrual cycle, regularly at least for one year is termed as infertility. It develops due to fault in either of the partner or both of them, however here only the female infertility will be discussed.^[4]

Acharya Sushruta has included *Vyandhatwa* in one among the twenty *Yoni Vyapatas*. *Acharya Charaka* & *Vagbhata* has referred *Vyandhatwa* due to abnormality of *Bijamsa*. *Acharya Kashyapa*, under the description of *Jataharinis* has mentioned *Phuspaghni* having useless *Phuspa* or menstruation and certain other characterized with repeated expulsion of fetuses of different gestational periods.^[4]

Acharya Harita has beautifully detailed the concept of *Vyandhatwa*, he has defined *Vyandhatwa* as failure to achieve a child birth rather than pregnancy, because he has included *Garbhasravi* & *Mrtvatsa* also under the classification. He has included childhood, *Garbhakoshabhanga* (injury to the uterus or prolapse of uterus), loss of *Dhatus* and constriction of uterus and vulva due to coitus having been done with the girl before her menarche also as the cause of infertility.^[4]

About one quarter of female infertility is caused by a problem with ovulation. This can be due to an imbalance of luteinizing hormone (LH) and follicle stimulating hormone (FSH), an injury to the hypothalamus or pituitary gland (where these hormones are produced), pituitary tumors, or too little or too much body weight. Other hormonal condition that can affect fertility includes thyroid problem, diabetes mellitus, PCOS, premature ovarian failure.^[5] Other factors are age, problem with reproductive tract (e.g.: blockage or damaged fallopian tube, endometriosis, pelvic adhesion, benign tumor, fibroids & complication from surgery or infection.) Smoking, alcohol consumption, using

recreational drugs. Medications such as antidepressant, tranquilizers, calcium channel blockers, narcotics and anti cancer drugs.

MATERIAL AND METHODS

Sources of Data

- Relevant Ayurvedic books
- Various National And International Journals
- Modern Medical books

Methods

A detailed review of *Vyandhatwa* w.s.r. to female infertility will be compiled from available classical literature as well as from research papers, journals and monographs.

DISCUSSION

Vyandhatwa is defined as a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (WHO-ICMART glossary)

For pregnancy to occur several things have to happen:

- An egg must develop in woman's ovary
- The egg has to be released each month into the fallopian tube (ovulation)
- A man's sperm must fertilize the egg in the fallopian tube.
- The fertilized egg must be able to travel through the fallopian tube and implants in the lining of the uterus.

If any of these events does not happen or is disrupted, infertility will result.

Here *Vyandhatwa* means both primary and secondary infertility. According to *Acharya Charaka* female infertility is caused due to any abnormality in (male or female) content of sperm and ovum.

According to *Acharya Sushruta Vandyatwa* happens due to pathological conditions like PCOS, systemic disease etc. He has included infertility in the clinical features of injury to *Artavavahasrotas*.

Acharya Harita in its *Tritya Sthana* 48th chapter has elaborated a detailed explanation on female infertility. He has explained 6 types of infertility on the basis of its causative factors and clinical features.^[6]

Following are the elaboration of *Harita's* classification of infertility.

➤ *Grabha Bhanga*

Vyandhatwa caused due to any injury in *Garbhakosha* mainly in *Balya Awastha*.

For easy understanding this condition can be categorized into two cases.

- Firstly Uterine Perforation:

- This condition in present world can be explained as infertility caused due to uterine perforation.

Perforation of the uterus occurs mainly during the operation of D&C. The intrauterine device may perforate the wall of the uterus, but remains within the myometrium. Uterine injury has been recently reported during hysteroscopic excision of the uterine septum. The uterine perforation can also occur during ablation of endometrium through a hysteroscope in the case of dysfunctional uterine bleeding.

- Secondary *Anuvanshik Garbhashiyaka Vikara*:

- This condition may include the case of septed uterus, so when laproscopic examination is done for the excision of uterus there might occur some injury (causing *garbha kosha bhangata*) which might lead to *vyandatwa* since the *balya awastha* of the female, and after this condition female does not get proper nutrition it might lead to uterine prolapsed or weakening of the uterine ligaments causing retroversion of uterus.

Hence because of the above reason female fails to conceive, so female experience primary infertility.

➤ *Kakavandhyatwa*

This condition is explained as a case in which females gets pregnant and able to deliver a child only once in her life time, and then fails to conceive the 2nd or further pregnancy.

- This condition shares similar clinical features with Erythroblastosis fetalis.

Erythroblastosis fetalis is defined as a condition where Rh- mother carries Rh+ fetus, usually the first child escapes the complication of Rh incompatibility. This is because Rh antigen cannot pass from fetal blood into mother blood. At the time of parturition the Rh antigen from fetal blood leaks into mother blood. When the mother conceives for second time and if the fetus happens to be Rh+ again the Rh antibody from mother blood enters the fetal blood. The Rh agglutinin which enter the fetus cause agglutination of fetal RBCs resulting in hemolysis.^[7]

Hence female fails to deliver 2nd child, as the fetus dies due to hemolysis, so here we can understand it as secondary infertility due to Rh incompatibility

➤ *Anapatya*

Vyandhyatwa caused due to any disease of female reproductive tract.

It is a primary infertility and which is present on a temporary base, once the cause for infertility is cured the female can conceive.

The word *anapatya* is used for females who does not have any child and fails to conceive due to any abnormalities in females reproductive system, which

once cured (conservative or manually) the females becomes able to conceive.

- We can relate many cases which act as an inhibitory factor for conceiving, like PCOS, Salpingitis, Tube blockages, Cervicitis.
- **PCOS** (Polycystic Ovarian Syndrome) is a heterogenous multisystem endocrinopathy in woman of reproductive age with the ovarian expression of various metabolic disturbances and a wide spectrum of clinical features such as obesity, menstrual abnormalities and hyperandrogenism.^[8]

• Fallopian Tube Blockage

When an obstruction prevents the egg from travelling down the tube, the woman has a blocked fallopian tube. It can occur on one or both sides. This is also known as tubal factor infertility, and is the cause of infertility in 40% of infertile women. If one or both fallopian tubes are blocked, the egg cannot reach the uterus, and the sperm cannot reach the egg, preventing fertilization and pregnancy.

• Salpingitis

Salpingitis is a type of pelvic inflammatory disease (PID). Salpingitis causes inflammation of the fallopian tubes.

• Cervicitis

Cervicitis is inflammation of the cervix- the lower end of the uterus that opens into the vagina.

➤ Garbhsravi

In this case of *Vyandhyatwa* the female experiences repeated *Garbha srava*.

- This condition shares the same clinical features with recurrent miscarriage.

Recurrent miscarriage is defined as a sequence of three or more consecutive spontaneous abortion before 20 weeks.

Causes can be genetic factor (3-5%), infections, or it can be due to autoimmune factors (15%)

➤ Mritvatsa

Here in this case the female completes her full term pregnancy i.e (9 months) but after the parturition the new born baby dies or even during the parturition the fetus dies. That means the female will be successfully able to complete her full term pregnancy but due to some reason the child born will be dead or if alive the child will die after some time.

- **Still Birth:** A still birth is typically defines as a fetal death at or after 20to 28 weeks of pregnancy. It results in a baby born without signs of life. The cause may include pregnancy complication such as pre-eclampsia, infections such as malaria syphilis, placental or umbilical cord complications, and poor health of a mother.

Females over age of 35, smokers, drug addicts are at great risk of experiencing such features.^[9]

➤ Bhanga Sankocha

Here in this condition female fails to conceive because of forceful intercourse she might had experienced in bala avastha (*Ajatrastaja Kanya*) or in *Bhanga Sankocha*. But once the treatment is done the cause is cured then the female can conceive easily.

- **Dysperunia** or *krichchra maithuna* can be compared with *Bhanga Sankoscha*

It is a most common sexual dysfunction defines as a status of painful or difficult intercourse.

CONCLUSION

Prognosis of infertility depends upon its specific causes such as infertility due to incurable diseases of *Yoni* or *Arthava* will automatically become incurable.

Vandhyatwa described by *Charaka* is a congenital disease in which the part of *Beeja* responsible for development of uterus and *Arthava* is absent or the women have congenital absence of uterus and *Arthava*, this is incurable. *Apraja* and *Sapraja* described by *Charak & Pushpaghni* described in *Kashyapa Samhita* are curable. And according to *Harita* out of 6 cases of infertility mentioned 5 are curable and the one i.e *Vyandhatwa* due to *Garbha Bhanga* is incurable.

Hence if the cause of infertility is understood from *Ayurvedic* point of view it will be a helping hand for supporting easy diagnosis and treatment of the most concern factor in the present society i.e infertility.

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