



Understanding Female Infertility in Ayurveda: Exploring Management Strategies with Emphasis on Uttar Basti

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ABSTRACT:

Infertility is defined as the inability to achieve a clinical pregnancy after 12 months or more of regular, unprotected sexual intercourse. In Ayurvedic literature, infertility is referred to as *Vandhyatva*. Infertility can arise due to various factors affecting both males and females. According to Ayurveda, four essential factors—*Ritu* (season), *Kshetra* (field), *Ambu* (nutrient fluid), and *Beeja* (seed)—must be in optimal condition for conception and a successful pregnancy.

Numerous factors can impact fertility, including weight, diet, smoking, medical conditions, substance abuse, environmental pollutants, medications, family medical history, and infections. Infertility can stem from issues in either partner. In men, infertility typically results from a low sperm count or poor sperm quality. In women, infertility often occurs when regular ovulation does not happen, or the fallopian tubes are damaged or blocked, preventing sperm from reaching the egg.

Ayurvedic texts recommend both *Shodhana* (purification) and *Shamana* (pacification) therapies, including *Panchakarma*, for the treatment of *Vandhyatva*. This article explores the concept of *Vandhyatva* from an Ayurvedic perspective, detailing the Ayurvedic principles and management strategies employed to address female infertility.

In Ayurveda, *Uttar Basti* (the administration of medicated oil or decoction through the vagina and uterus) is recommended as a treatment for the *Kshetra* (reproductive field) after undergoing *Shodhan* (purification). The classical texts outline various indications for *Uttar Basti*. *Vata dosha* is identified as the primary cause of *Vandhyatva* (infertility), and *Uttar Basti* is particularly effective because it pacifies *Vata dosha* and possesses *Ropan* (healing) and *Shodhan* (purifying) properties. Therefore, *Uttar Basti* is considered an optimal treatment for managing infertility (*Vandhyatva*).

Keywords: infertility, *Uttar basti*, *Vandhyatva*, Infertility, *Shodhana*, *Shaman Chikitsa*

INTRODUCTION

Infertility is defined as the inability of a healthy couple to achieve pregnancy after one year of regular, unprotected intercourse.⁽¹⁾ Ayurveda has been effectively treating infertility since ancient times, using natural methods without the need for modern medicine. Ayurvedic treatments not only help infertile women or couples to become fertile but also enhance the overall health of the woman, enabling her to conceive naturally without the assistance of Western medicine.⁽²⁾

The term "*Vandhya*" is derived from the root "*vandh*" with the suffix "*yak*," meaning barren, unproductive, or fruitless. A woman in whom there is any hindrance to the normal process of conception is referred to as *Vandhya*.⁽³⁾ According to *Sushruta*, a woman in whom *artava* (menstrual blood) has been destroyed is termed as *Vandhya*. In Ayurveda, *Uttar Basti* (administration of medicated oil or decoction through the vagina and uterus) after *Shodhan* (purification) is recommended as a treatment for *Vandhyatva* (infertility). The indications for *Uttar Basti* are well-documented in classical Ayurvedic texts. *Vata dosha* is identified as the primary cause of *Vandhyatva*, and *Uttar Basti* is particularly effective because it pacifies *Vata dosha* and possesses *Ropan* (healing) and *Shodhan* (purifying) properties. Therefore, *Uttar Basti* is considered the most effective treatment for managing *Vandhyatva*.

In his description of *Jatharinis*, *Kashyapa* mentions a condition called *Pushpaghni*, characterized by ineffective menstruation and recurrent fetal loss at various stages of gestation. These conditions, resulting in the failure to have a child, can be included under *Vandhyatva* (infertility).⁽⁴⁾ In the *Sushruta Samhita*, *Vandhyatva* is listed among the twenty gynecological disorders.

Harita defines *Vandhyatva* not just as the inability to conceive but as the failure to achieve a child. His classification includes conditions such as *Garbhastravi* (recurrent abortions) and *Mritvatsa* (repeated stillbirths). However, this broader definition is not commonly considered in the present era.⁽⁵⁾

Acharya Charaka states that any abnormality in one of the *Shadbhavas* (six essential factors) can lead to infertility.⁽⁶⁾ Coitus with a woman who is very young, old, chronically ill, hungry, unhappy, or suffering from psychological issues, as well as certain positions during intercourse, can hinder conception.⁽⁷⁾ Additionally, if semen falls over the *Samirana Nadi*⁽⁸⁾ or the outer part of the *Yoni*, it may fail to impregnate the woman⁽⁹⁾ Conception is also impeded when the *Yoni* (vagina) is vitiated, causing rejection of the *Bija* (sperm) or *Garbha* (embryo) in various *Yonivyapad* (gynecological disorders) and the destruction of *Bija* in *Artavadashti* (menstrual disorders).

According to *Acharya Bhela*, there are two primary causes of infertility: affliction with various *Vata* disorders and abnormalities of the *Yoni*⁽¹⁰⁾ Aggravated *Vayu* (*Vata dosha*) can expel *Shukra* (semen) from the uterus and destroy *Raja* (menstrual blood), leading to infertility.

Material and Methods:

In this article literary reference was collected from Ayurvedic classics, commentaries, modern literature, other recently published books, research journals and internet.

Modern Review:-

DEFINATION:-

1. WHO-ICMART Glossary Definition⁽¹¹⁾

Infertility is defined as "a disease of the reproductive system characterized by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse."

2. General Clinical Definition:⁽¹²⁾

Infertility is described as "the inability of a sexually active, non-contracepting couple to achieve pregnancy within one year."

Both definitions emphasize the timeframe (12 months or one year) and the condition of regular, unprotected sexual intercourse without conception, which is critical for diagnosing infertility.

Types of infertility:-⁽¹³⁾

1. Primary Infertility:

It denotes patients who have never conceived despite having regular, unprotected sexual intercourse for one year or more.

2. Secondary Infertility:

It indicates patients who have previously been pregnant but are unable to conceive subsequently within one year or more of regular, unprotected sexual intercourse.

These distinctions are essential for understanding and diagnosing infertility, as they help in identifying the specific reproductive challenges faced by individuals or couples.

Causes Of Female Infertility

The major causes of female infertility, as outlined in the FIGO Manual (1990), include:

1. Vaginal Factors:

Conditions or abnormalities within the vagina that impede the sperm's ability to reach the egg.

2. Uterine Factors:

Issues related to the uterus, such as fibroids, polyps, or congenital abnormalities, which can hinder implantation or growth of the embryo.

3. Tubal Factors:

Problems with the fallopian tubes, such as blockages or damage, which can prevent the egg from meeting the sperm.

4. Peritoneal Factors:

- Conditions affecting the peritoneum, such as endometriosis or pelvic adhesions, that can interfere with the reproductive process.

5. Ovarian Factors:

- Disorders affecting the ovaries, including ovulatory dysfunction or diminished ovarian reserve, which impact the release of healthy eggs.

6. Coital Errors:

- Issues related to sexual intercourse, including timing, frequency, or technique, that can affect the chances of conception.

7. Cervical Factors:

- Abnormalities or conditions of the cervix, such as cervical mucus problems or structural issues, that can prevent sperm from successfully passing through to fertilize the egg.

Management⁽¹⁴⁾

Depending on the underlying cause, the management of infertility can be divided into two main categories:

A) Medications or Surgery

Medications: For women with ovulation disorders, fertility drugs such as clomiphene citrate or injections of FSH and LH hormones can be prescribed. These treatments may be combined with intrauterine insemination (IUI), where sperm is directly injected into the uterus.

Surgery: In cases where infertility is caused by blocked fallopian tubes or endometriosis, surgical intervention may be necessary to remove obstructions or address endometrial tissue growth.

B) Assisted Reproductive Technologies (ART)

- These advanced techniques include procedures such as egg and embryo donation, in vitro fertilization (IVF), and intracytoplasmic sperm injection (ICSI), which involves the direct injection of a single sperm into an egg.

Ayurvedic Review:-

Types:-⁽¹⁵⁻¹⁷⁾

According to the Charaka Samhita, infertility is categorized into three types:

1. **Vandhya:** This refers to the absolute inability to conceive due to serious innate problems, such as beejopaghata (absolute congenital chromosomal abnormalities or Mullerian agenesis).
2. **Apraja:** This type of infertility occurs when a woman can conceive only after treatment (primary infertility) or has unsuccessful pregnancies even after conception.
3. **Sapraja:** This condition describes a woman in her active reproductive age who fails to conceive despite having a history of successful pregnancies.

According to the Harita Samhita, infertility is classified into six types:⁽¹⁸⁾

1. **Kakavandhya:** Inability to conceive after having one child.
2. **Anapatya:** Primary sterility where a woman never conceives.
3. **Garbhasravi:** Characterized by unsuccessful pregnancies due to repeated abortions.
4. **Mritavatsa:** Characterized by unsuccessful pregnancies due to repeated intrauterine deaths, stillbirths, and perinatal deaths.
5. **Balakshaya:** Infertility due to loss of Bala (strength) or Dhatukshaya (depletion of bodily tissues).
6. **Balya:** If coitus occurs with a girl before her menarche, it results in constriction of the uterus and Bhaga (vagina), leading to difficulties in conceiving or delayed conception with great difficulty.

Causes

- According to Acharya Charaka⁽¹⁹⁾:

Matruja and Pitruja: The female reproductive element (Shonita or Stribeeja) and the male reproductive element (Shukra or Pumbeeja) must be healthy and normal.

Aatmaja and Satvaja: The soul (Aatma), accompanied by the mind (Satva), enters the fertilized egg to form the embryo (Garbha). The formation of the embryo is impossible without the presence of both Aatma and Satva.

Satmyaja and Rasaja: The normalcy of Shonita and Shukra largely depends on the intake of wholesome food (Satmya Aahara) and lifestyle (Vihara). The nourishment of both the mother and the embryo relies on the nutrient essence (Rasa).

Therefore, any abnormality in these essential factors (Garbhakara-bhavas), which include the six bhavas, will result in difficulties in conceiving.

- According to Acharya Sushruta Failure of any of the following factor leads to Vandhyatva,⁽²⁰⁾

1. Ritu means season or fertile period
2. Kshetra means healthy Yoni, uterus and passage (reproductive organs)
3. Ambu means proper nutrient fluid
4. Beeja means Shuddha Shukra and Shonita

Management of Infertility in Ayurveda

1. Treating the Underlying Pathological Conditions (Nidanaparivarjana):

Addressing and eliminating the root causes of infertility.

2. Basic Treatment Methods for Vandhyatva:

- Dietary management- Ojas enhancing foods like milk, ghee, nuts, fresh organic fruits, vegetables, proteins etc
- Samshamana Chikitsa
- Shodhana Chikitsa- Snehana

Utilizing fundamental Ayurvedic approaches to manage and treat infertility.

3. Following the Regimen Indicated in Garbhadhana:⁽²¹⁾

Adhering to the prescribed regimen and guidelines for conception.

Ayurveda employs two main types of Chikitsa (treatment):

Shamana Chikitsa: Medicinal treatment aimed at balancing the doshas and managing symptoms. Agni Deepana and Ama Pachana

- Vatanulomana (correcting the functions of Vata)
- Use of herbs like Ashoka, Dashmoola, Shatavari etc

Shodhana Chikitsa: Purification therapies designed to cleanse the body and remove toxins. Snehana (oleation therapy), Swedana (steam therapy), Vamana (therapeutic emesis), Virechana (therapeutic purgation), Basti Anuvasana and Nirooha (enema given through rectal route), Uttar basti (enema administered through vaginal route) ⁽²²⁾

Uttar Basti

Definition:

Uttar Basti is a therapeutic procedure administered through the Uttar Marga, or superior pathways, known for its excellent properties. In males, Uttar Marga refers to the urinary and seminal passages, while in females, it refers to the urinary and vaginal passages. ⁽²³⁾

Properties of Uttar Basti:

Uttar Basti is effective in alleviating various conditions such as Artava Dushthi (menstrual disorders), Shukra Dushthi (semen abnormalities), Atya-artava (excessive menstruation), Kashtha-Artava (painful menstruation), Yoni Vyapads (gynecological disorders), and other factors contributing to infertility (Vandhyatva). ⁽²⁴⁾

Uttar Basti Yantra:

The Uttar Basti Yantra is an instrument used to administer medications through the urinary or vaginal passages. It can be employed as a Shodhan Basti (purifying enema) and is specifically given through the upper passage (Uttar Marga), hence the name Uttar Basti.

Uttar Basti Types:-

- **On the basis of form of drug to be administered**
 1. Snaihika uttar basti
 2. Niruhika uttar basti
- **On the basis of form of route of drug administered**
 1. Muttrashaya gata uttar basti
 2. Yonigatta uttar basti
 3. Grabhasayagatta uttar basti

Mode of Action of Basti in Female Infertility

- **Local Effects of Uttar Basti** ⁽²⁵⁾

The effectiveness of Uttar Basti largely depends on factors such as the method of administration, the instruments used, and the specific medication applied.

1. Cervical Factors:

When medication is administered into the cervical canal, it primarily acts on cervical issues. For instance, using a *katu ushna taila* (pungent and hot oil) is more beneficial for treating cervical stenosis, while a nutritive and *madhur-shita ghrita* (sweet and cool ghee-based) medication is more effective for enhancing mucus secretion from cervical glands.

2. Ovulatory and Tubal Factors:

The selection of medication varies significantly between ovulatory and tubal factors. For ovarian issues, the drug works by being absorbed and promoting the hypothalamic-pituitary-ovarian axis. In the case of tubal blockages, Uttar Basti acts locally. A drug with *snehan* (lubricating) properties is suitable for promoting ovulation, whereas a drug with *lekhana* (scraping) action is better for treating tubal blockages.

3. Endometrial and Vaginal Effects:

- Uttar Basti may stimulate specific receptors in the endometrium, helping to correct physiological processes within the reproductive system. Additionally, intravaginal Uttar Basti facilitates drug absorption due to the rich blood supply in the posterior fornix, which also serves as a reservoir for the medication.

Systemic Effects of Uttar Basti After Absorption

⁽²⁶⁾

Ayurveda has long recognized the distinct differences between oral and parenteral routes of drug administration. Once absorbed, Uttar Basti may influence the body by stimulating neuro-endocrine pathways. Understanding the systemic effects of Uttar Basti can be enhanced by considering the concept of systems biology.

Systems biology, a modern scientific approach, emphasizes a holistic view, acknowledging that all bodily systems and organs are interconnected at the molecular level. According to this concept, any molecular change in one organ can affect others. This aligns with the Ayurvedic principles of *Mahabhuta* (the five great elements) and *Tridosha* (the three fundamental bodily humors).

When Uttar Basti drugs are absorbed, they affect the reproductive system's physiology and, consequently, the physiological functions of other organs. This interconnected impact highlights the systemic nature of Uttar Basti and its broad therapeutic potential.

DISCUSSION

Infertility remains a complex and multifaceted issue impacting both males and females. From an Ayurvedic perspective, the primary focus is on the holistic balance of the body's *doshas* (*Vata*, *Pitta*, *Kapha*) and the essential factors (*Ritu*, *Kshetra*, *Ambu*, *Beeja*). Ayurvedic literature emphasizes the significance of a balanced and healthy lifestyle, diet, and environment in maintaining reproductive health. The detailed categorization of infertility in classical Ayurvedic texts provides insights into various conditions contributing to infertility and guides personalized treatment plans.

The use of *Uttar Basti* in managing *Vandhyatva* illustrates the importance of targeted therapies in Ayurveda. This procedure, which involves administering medicated oil or decoction through the vaginal or uterine route, directly addresses the reproductive organs, aiding in the purification and healing of the *Kshetra*. The pacification of *Vata dosha*, identified as the primary cause of infertility, through *Uttar Basti* and other treatments, showcases the tailored approach of Ayurveda in treating underlying causes rather than merely addressing symptoms.

The integration of modern diagnostic methods with Ayurvedic principles can enhance the understanding and management of infertility. While conventional medicine offers advanced reproductive technologies, Ayurvedic treatments provide complementary benefits by improving overall health and reducing stress, which are crucial for successful conception. The dual approach can potentially lead to better outcomes for individuals and couples struggling with infertility.

CONCLUSION

Infertility is a significant health issue that can be addressed effectively through a combination of Ayurvedic and modern medical approaches. Ayurveda's comprehensive framework for understanding and treating infertility, particularly through therapies like *Uttar Basti*, emphasizes the importance of balancing the body's internal environment to facilitate conception. The classical texts provide a wealth of knowledge on the causes and treatments of infertility, which, when integrated with contemporary medical practices, can offer holistic and personalized care for individuals facing reproductive challenges. Further research and clinical studies are needed to validate the efficacy of Ayurvedic treatments and explore their potential in complementing modern reproductive technologies.

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