

Conceptual Study of Infertility in Ayurveda W.S.R. to Anovulation

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Abstract: Now a days more and more couples are showing up at fertility clinics around the world, searching for answers, hope and eventual parenthood. Despite the enormous growth in population it should be noted that humans are not very efficient at producing babies. Infertility is a significant global health concern affecting approximately 10-15 % of couples of reproductive age. Among the various causes anovulation is one of the most common factor contributing to female infertility. In Ayurveda infertility can be correlated with Vandhyatva. Anovulation can be understood in terms of Artava Dushti and imbalance of Doshas leading to improper follicular development and release. The failure to ovulate is the major problem in approximately 40% cases of female infertility. This can be anovulation or severe oligo-ovulation. In the latter case even though the ovulation does occur, its relative infrequency decreases the woman's chance of pregnancy. The spectrum of ovarian dysfunction also includes development failure of an adequately functioning corpus luteum subsequent to ovulation. Hence the infertility and especially ovarian factor induced female infertility needs an immediate attention from alternative medicines.

Keywords: Infertility, Anovulation, Vyandhyatva.

I. INTRODUCTION

God has boosted both male and female with capacity of reproduction, but a woman shares the major responsibility. Women are considered as one of the most essential factor for continuity of race¹.

Women's health is primary factor to be considered for wellbeing of family, society and culture. Any physical or mental disorder disturbs her educational, social and economic life. Menstruation has dual significance for women. From one perspective it defines the start and the end of reproductive potential an affirmation of women hood. On the other perspective it has sociocultural significance.

Infertility is defined as a failure to conceive with in one or more years of regular unprotected coitus.² Infertility besides being health issue is more of social problem which affects personal, social and mental health of the affected person. Female infertility is caused by various factors including ovulatory dysfunction, tubal factors, peritoneal factors, uterine factors, cervical factors, vaginal factors and due to coital error also. According to International Federation of Gynaecology and Obstetrics (FIGO) manual, ovarian factor contributes 30-40% in causes of the female infertility. Thus, it is the main common cause of Infertility.³

Ayurveda is a holistic science and thus views each aspect of its contents from all the directions and that is why it is a complete medical science. Acharya Sushruta has described four essential factors for conception i.e. Rutu, Kshetra, Ambu and Beeja⁴. According to Ayurvedic classics, this condition can be correlated with Kshetra and Ambu Dushti.

The system of modern medicine has discovered many of its etiological factors and provides measures for its management. The school of Ayurveda mentions few principles about Vandhyatva and describes some measures to combat the same. As the subject matter is discussed in Ayurveda, it becomes necessary to study, understand and prove



them particularly in light of modern scientific parameters in the present era. So, the field of research in the Vandhyatva opens a broad scope for a worker.

II. METHODOLOGY

Review on *Vyandhyatva* –

GENERAL DESCRIPTION OF VANDHYATVA:

VYUTPATI:

Vandhya:

बन्धधातोः यक् प्रत्यात्मकं रूपं बन्ध्य।

The word Vandhya is derived from the root “Vandh” with “Yak” Suffix, which means barren, unproductive, fruitless and useless.

NIRUKTI:

यस्या गर्भधारण मार्गरूप बन्धनं संप्रति सा वन्ध्या। (Shabdakalpadruma)⁵

The woman in whom there is a hindrance of any kind to the normal process of conception is called Vandhya.

DEFINITION:

बन्ध्या नष्टातंवा विद्यात् । (Su. U. 38/10)⁶

A woman, in whom Artava has been destroyed, is termed as vandhya.

SYNONYMS: (Shabdakalpadruma)⁷

१. वंशा वशा वन्ध्यवेति ॥

The woman who does not conceive.

२. अवतोका आवपतितं तोकं अपत्यं वा गर्यो वा अस्याः इति अवतोका ।

The woman who has missed abortion is called Avatoka.

३. अवकेशी अवच्युतं के सुखं पुत्रसुखं प्रसवासुखं वा तरीशां तु शीत मात्रा इति अवकेशी।

The woman who is devoid of Putrasukha and Prasavasukha is called Avakeshi.

४. सावद् गर्भा खवद् गर्भा यस्याः सा स्रवद्रर्भा।

The woman who miscarries frequently is termed as Stravad Garbha.

५. अफला फलम् नास्ति यस्या सा अफला।

The woman without progeny is Aphala.

CLASSIFICATION:

The Classification of Vandhyatva has not been given separately in any classics except Harita Samhita, Rasa Ratna Sammucchaya and Vandhya Kalpadruma.

HARITA SAMHITA⁸:

Harita has described six types of Vandhya with special clinical features.

(Ha Tiritiya Sthana 48)

1. Kakavandhya: The woman who has one child but second time she is not conceived
2. Anapatya: The woman who has no child or primary infertility.
3. Garbhasravi: The woman who has repeated abortion.
4. Mritvatsa: The woman who has repeated still births.
5. Balakshaya: Infertility due to loss of Bala (strength)
6. Unexplained Infertility due to idiopathic cause.



NIDANA OF VANDHYATVA:

Many factors are responsible for Vandhyatva. They are classified into two types

[A] Essential factors

[B] Causative factors

[A] ESSENTIAL FACTORS FOR FERTILITY:

Charaka and Sushruta have mentioned essential factors of conception.

According to Acharya Charaka:-

मातृतः पितृतः आत्मतः सात्म्यतो रसतः सत्वत इत्येभ्यो भावेभ्यः समुदितेभ्यो गर्भः संभवति ॥ (Cha/Shu/4/4)⁹

Matrutah and pitrutah - The normalcy of Shonita and Shukra

Aatmatah and Satvataha:

Aatma is always encircled with Satva, which descends in the fertilized egg, and forms Garbha (embryo) without them the formation of Garbha is not possible & established idiopathic infertility.

Satmyataha & Rasataha:

The normalcy of Shonita and Shukra greatly depend upon the use of Satmya Aahar & Vihar. The nourishment of mother and embryo depend upon the Rasa Without Rasa even mother can not survive, so there is no question about embryo.

[B] CAUSATIVE FACTORS:

Without Vata the Yoni never gets spoilt. Vandhyatva has also been described in eighty types of Vata vyadhi (Cha. Chi. 30/115). So, Vata is the prime causative factor of Vandhyatva.

Acharya Charaka has clearly described the Nidans of Vandhyatva which are almost similar to causes of infertility according to modern science.

योनिप्रदोषान्मनसोऽभितापाच्युकासुगाहारविहारदोषात् ।

अकालयोगात् बलसंक्षयाश्च गर्भं विराद्विन्दति सप्रजाऽपि ॥ (Cha. Sha. 2/7)¹⁰

A] YONI PRADOSHAT:

The word “Yoni” refers to entire reproductive system. Thus under this heading, congenital or acquired disease of anatomic components of reproductive system te. Vagina, cervix, uterus, fallopian tubes can be included.

It includes,

- 1] Yonivyapada:
- 2] Injury to Artavavaha Srotas
- 3] Yoniarsha
- 4] Garbhakoshabhanga
- 5] Bhagasankocha
- 6] Sphalita Mutratva:
- 7] Utkshipta Yoni.
- 8] Aticharana Yoni Yyapada

B) MANSIKA ABHITAPA

पुरुषस्यानुपहृतेतसः स्त्रियाश्चाप्रदुष्योनिशोणितगर्भाशयाचा यदा
भवति संसर्गः ऋतुकाले उवाच भगवानात्रेयः। (Ch. Sha. 3/3)¹¹



Normal psychology of the Couple is very important for achievement of pregnancy. Fear of doing sex, marital disharmony and infrequent coitus affect the fertility.

According to Acharya Charaka (Sha. 2/40)¹² प्रज्ञापराध, परिणाम् काल are 3 causes for all the diseases. Here प्रज्ञापराध as Manasika Abhigata affect the fertility.

Due to Stress, Bhaya, Shoka, Krodha, Lajja etc., Vata will be vitiated. So, it increases hypothalamic activity of CRH (corticotrophin releasing hormone) and further it inhibits normal GnRH pulsatile secretion and ultimately anovulatory cycles occur.

C) BEEJADUSHTI:

यस्य यस्य ह्यवयवस्य बीजे बीजभागे वा दोषाः प्रकोपमापद्यन्ते, तं तमवयवं विकृतिराविशति ॥

(Ch. Sha 4/30)¹³

When in Ovum, the gene concerned with uterus is damaged, the progeny becomes sterile

D) SHUKRA DUSHTI:

वातपित्तलेष्मशोणितकुणपगंधिग्रंथिपूतिपूयक्षीण-मूत्रपुरिषरेतसः प्रजोत्पादने न समर्था भवन्ति ॥ (Su Sha. 2/5)¹⁴

Quantitative and qualitative abnormalities of sperms along with spermatid fluid cause infertility Pitruja Bhavas described under six factors are carried to the embryo through sperms.

E) ARTAVA DUSHTI:

आर्तवमपि त्रिभिर्दोषैः शोणितचतुर्थैः पृथग्द्वन्द्वैः समस्तैथोपसूष्टमबीजं भवति ॥ (Su Sha. 2/4)¹⁵

The word Artava refers to ovum, menstrual blood, and ovarian hormones Abnormality of ovum and ovarian hormones produce infertility.

F) AHARADOSHA:

Dietetic abnormalities cause infertility in two ways:

1. By producing loss of Dhatus and that of Dhatvagni, thus they influence hormones.

2. By vitiating Doshas which cause various gynecological disorders, leading to infertility

Dietetic abnormalities influence nourishment of the body or cause loss of Dhatus which influences normal secretion of hormones:

G) VIHARA DOSHA:

Abnormal mode of life and suppression of natural urges aggravate Doshas, which produce various gynecological abnormalities.

Other than the supine posture of the women during coitus, discharge of semen on Samirana Nadi or outside the vagina comes under defective practice. In all these conditions probably semen is not properly deposited inside the vaginal canal. Thus sperm fail to enter uterus causing infertility.

Abnormalities of mode of life also produce infertility in two ways.

1. By vitiating Doshas, they cause gynecological disorder

2. By preventing proper entry of sperm due to faulty deposition of seminal ejaculation.

H) AKALA YOGA:

The word "Kala" refers to period of age and Rutukala both.

In adolescent girls & old ladies due to premenarche and menopause stage respectively and before or after Rutukala due to absence and destruction of ovum respectively, the conception does not take place.



I) BALA KSHAYA:

Bala refers to physical strength and capacity to become pregnant. Here, probably Bala refers to infertility due to unknown cause or premature aging or any systemic disorder.

SAMPRAPTI -

PROBABLE SAMPRAPTI

The Samprapti of Vandhyatva has been not described in text but it can be understood in following two ways

1) Santarpanotthajanya Samprapti

2) Aptarpanotthajanya Samprapti

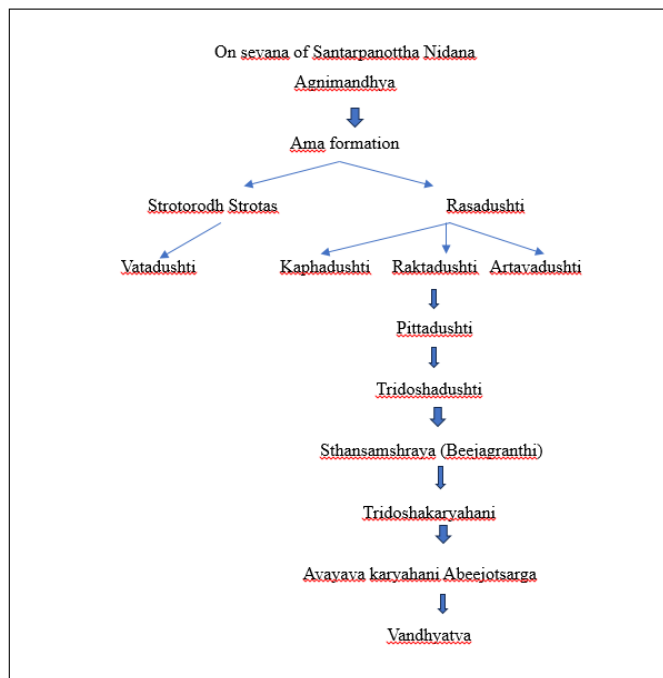
1] Santarpanotthajanya Samprapti

Due to Sevana of Santarpanotthajanya Nidana, Agni is affected and causing Agnimandhya. In such a condition, a person still takes Guru, Snigdha Ahara. It is not digested and causing Ama formation. This Ama is assimilated as Annarasa and it is taken into blood circulation. It will cause Strotorodha and Rasadushti.

Due to Strotorodha, Vata Dushti occurs. Rasa Dushti also causes its Uttarotar Dhatu Dushti i.e. Rakta Dushti along with its Updhatu i.e. Artavadushti and its Mala kapha Dushti. Further due to Rakta Dushti, Pitta is also vitiated.

So, over all resulting into Tridosha Dushti. These Dushti three Doshas get Sthana Sanshraya into Beejagranthi. Here, their normal function is hampered resulting into Avayavakaryahani i.e. Abeejotsarga. And ultimately cause Vandhyatva.

Chart no. 1 –



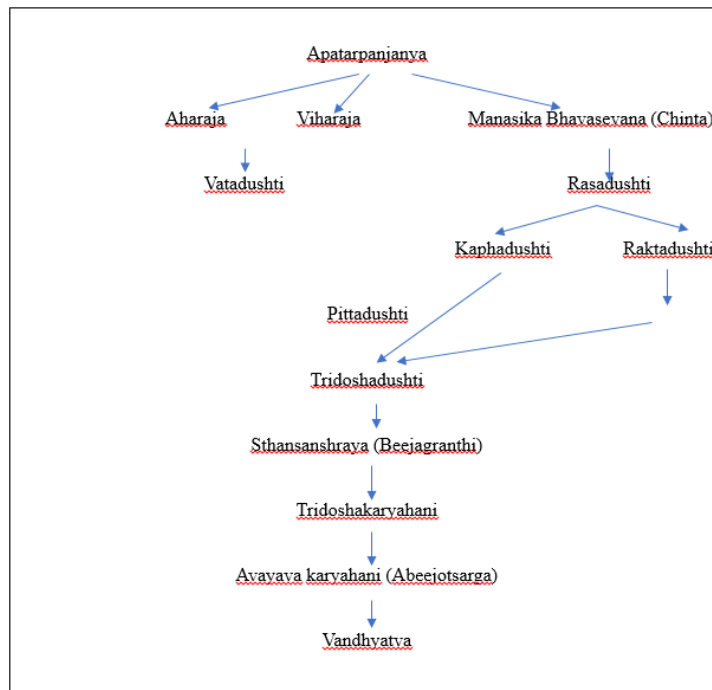
2) Aptarpanotthajanya Samprapti

Due to Aptarpanottha Ahara-Vihara Sevana, Vatadushti occurs, further due to Manasika Bhava chinta causes Rasadushti which leads to Uttarotardhatu Dushti i.e. Raktadushti and also its Maladushti i.e. Kaphadushti. Further Raktadushti will add to Pittadushti.



So overall resulting in to Tridoshadushti. As explained in Santarpanothajanya Samprapti, Dushita Dosha lodges in Beejagranthi Here their normal function is hampered resulting into Avayavakaryahani ie Abeejotsarga. And ultimately leads to Vandhyatva.

Chart no. 2 –



PURVARUPA:

In Kashyapa Samhita, Acharya Kashyapa has described "Vandhya Yoni" in context of Vataja Nanatmaja Vyadhi Avyakta Purvarupa of Vata Vyadhi has been mentioned by Charaka as per this quotation

RUPA:

अव्यक्तं लक्षणं तेषां पूर्वरूपम् ।

So, purvarupa of Vandhyatva is not described by any one, any where

बंध्या नष्टातंवा विद्यात् । (Su. U 38/10)¹⁶

A woman, in whom Artava has been destroyed, is termed as Vandhya.

CHIKITSA -

ACCORDING TO AYURVEDA:

Vandhyatva is described by our Acharyas in a very wide sense including the Nidanas and Chikitsa Regarding treatment, So many treatments have been given in our texts. But which type of infertility or on which factor like Rutu, Kshetra, Ambu, Beeja, it will act, it is not mentioned clearly. But treatment has been given according to the cause ie Yoni Vyapadas, Shukra Dushti, Artava Dosha etc. So it is very important to find out the cause which is responsible for Vandhyatva.

न हि वातादुते योनिः नारिणां सम्प्रदूष्यति । (Ch. Chi. 30/115)¹⁷

Vitiated Vata is the root cause of Yonirogas. So Vatadushti has to be treated first, following by other Prakupita Doshas. The treatment has been divided in to two types



- A. Shodhana Chikitsa
- B. Shamana Chikitsa

A. SHODHANA CHIKITSAS:

Panchakarma therapy (for Sharira Shodhana purpose) should be done.

Specially Basti, Uttarbasti because of its wide range and effective use for Vata Dosha.

. SHAMANA CHIKITSAS

- The therapeutic measures mentioned for Pradara, Raktatisara, Shonitapitta, Raktarsha can be adopted as Yoni Rogas Chikitsa (Cha. Chi. 30/327)¹⁸.
- Rasayana and Vajikarana drugs are also useful for treating Yoni Rogas (Su. Sha. 2/12-Dalhana commentary)¹⁹
- Mutradosha Pratishodhaka drugs can be used in Yoni Rogas. (Su. Su. 2/12).
- The line of treatment described for Shukra Dosha, Artavadosha, and Stanyaroga can be adopted for Artavadushti Chikitsa (Su. U 38/32)²⁰.
- Some specific Shamana drugs are also indicated.

III. DISCUSSION

Acharya Sushruta has described four essential factors for conception i.e. Rutu, Kshetra, Ambu and Beej. Rutu means period of ovulation. Kshetra means all the reproductive organs in healthy and normal condition. Ambu means proper nutrition (hormones and maternal nutrition both). Beeja means healthy ovum and spermatozoa. It is obvious that abnormality related to any of these four factors results into Vandhyatva. The cervical cause of infertility can be considered under Kshetra and Ambu dushti. The term "Artava" also denotes ovarian hormone-oestrogen. Less production of cervical mucus, poor quality of cervical mucus in appropriate time due to inadequate hormonal level is the main symptom of Vandhyatva caused by cervical factor. Cervical mucus is produced as the part of Prasada Rasa and Rakta Dhatu by proper Sthanika Agni and secreted by Anulomagati of Apana Vayu. Ruksha Guna of Vata and Ushna - Tikshna Guna of Pitta are the two main etiological factors of the cervical factor. In Vandhyatva w.s.r. to cervical factor, mainly there is dushti of Vata Pitta Doshas. The treatment should be directed to the Vata Pitta Shamana and eradication of causes. Yoni does not spoil without Vata. So first of all, Vata Samana treatment must be done and then the treatment of other doshas. As mentioned earlier, Ruksha Guna of Vata and Ushna - Tikshana Guna of Pitta are two main etiological factors of the cervical cause of infertility. So, Ghrita has been selected for the present study because it is the best samana drug for Vata Pitta dushti.

IV. CONCLUSION

Motherhood completes the female's life and infertility hinders her pathway of it. According to recent data, Infertility due to Anovulation factor prevails of almost 40% (Sperrof) And still it is growing problem due change in lifestyle, faulty food habits, environments, stress increasing works, etc. In Ayurvedic classics, Vandhyatva has been not described as a separate disease but all the gynaecological disorders are undertaken twenty Yonivyapadas. so, Vandhyatva can be understood from Yonivyapada only Vandhyatva has been long standing problem of human community right from the ancient period up to this modern era and leading cause of marital upset, personal unhappy and so many psychological problem.

REFERENCES

1. Amarkosha, Shri Narayanrao Acharya, Chaukhambha publication, Varanasi, Reprint, 2011.
2. Dutta D.C. Textbook of Gynecology, 7th edition, New Delhi, Jaypee brothers, 2016; 220pp.
3. Dutta D.C. Textbook of Gynecology, 7th edition, New Delhi, Jaypee brothers, 2016; 118 pp



4. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, Sutrasthan, adhyaya 2nd, shlok no.33, Vol.1, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.
5. Raja Radhakantadeva, Shabdakalpadruma 3rd Part; Edited by Shivaradaprasadvasuna and Sriharicharanavasuna; Naga publishers; Delhi; Reprint 1987.
6. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, Sutrasthan, adhyaya 38th, shlok no.10, Vol.1, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.
7. Raja Radhakantadeva, Shabdakalpadruma 3rd Part; Edited by Shivaradaprasadvasuna and Sriharicharanavasuna; Naga publishers; Delhi; Reprint 1987.
8. Harita, Ramavalmaba shastri, Harita samhita, Trutiyasthan, 48th adhyaya, Prachya prakashan, Varanasi, 1st edition, 1985.
9. Vagbhatta, Kaviraj A. Gupta, Rajvaidya P. Sharma, Ashtang Sangraha, Sharira sthana, adhyaya 2nd, Shlok no.48, Vol. 1, Choukhambha Krishnadas Academy, Varanasi, reprint 2011.
10. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sharirasthan, adhyaya 2nd, Shlok no.7, Choukhambha Publications, New Delhi, Reprint 2017.
11. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sharirasthan, adhyaya 3rd, Shlok no.3, Choukhambha Publications, New Delhi, Reprint 2017.
12. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sharirasthan, adhyaya 2nd, Shlok no.7, Choukhambha Publications, New Delhi, Reprint 2017.
13. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sharirasthan, adhyaya 4th, Shlok no.30, Choukhambha Publications, New Delhi, Reprint 2017.
14. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, Sharirasthan, adhyaya 2nd, shlok no.5, Vol.1, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.
15. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, Sharirasthan, adhyaya 2nd, shlok no.4, Vol.1, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.
16. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, Uttarantra, adhyaya 38th, shlok no.10, Vol.2, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.
17. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsasthan, adhyaya 3rd, Shlok no.3, Choukhambha Publications, New Delhi, Reprint 2017.
18. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsasthan, adhyaya 30th, Shlok no. 327, Choukhambha Publications, New Delhi, Reprint 2017.
19. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, sharirasthan, adhyaya 2nd, shlok no.12, Vol.1, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.
20. Sushruta, Kaviraj ambikadutta shastri, P.M.Mehta, Sushruta samhita, Uttarantra, adhyaya 37th, shlok no.111, Vol.1, Choukhambha Sanskrit sansthan, Varanasi, reprint 2015.

