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BASTI IN FEMALE INFERTILITY (VANDHYATVA): A CRITICAL ANALYSIS

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ABSTRACT

Infertility is the global problem of presenting era. It is due to changed life style in urban India i.e. late marriage, professional and social stress on young couples, irregular working hours, sedentary lifestyle, genetic disorders etc. Infertility produces negative impact on person's life and society also. It reduces quality of life especially through the negative psychosocial consequences like marital instability, anxiety, depression, social isolation, deprivation, and loss of social status, loss of gender identity, ostracism and abuse. As we know that the gynecological disorders do not occur without vitiation of *Vata*, *Yoni* never gets spoiled, here the word "*Yoni*" refers to reproductive organs collectively. *Vata Dosha* is the governing factor of the whole reproductive physiology. *Vandhyatva* has also been described in eighty types of *VataVyadhi*. The reasons for *Vata* vitiation are *Srotorodha*, *Avarana*, *Dhatukshaya*, they may be the major in the pathogenesis of *Vandhyatva*. There is none other than *Vata* which is the most important causative factor of diseases in *Shakha*, *Koshtha*, *Marma*, *Urdhvagata*, *Sarvayava* and *Sarvanga*. When it is exceedingly aggravated there is no remedy other than the *Basti* for its alleviation. That's why *Basti* is glorified as *Ardha Chikitsa* by *Acharya Charaka* and Complete *Chikitsa* by some other *Acharyas*.

KEYWORDS: female infertility, anovulation, pcos, *Basti*.

INTRODUCTION

Infertility is the global problem of presenting era. It is due to changed life style in urban India i.e. late marriage, professional and social stress on young couples, irregular working hours, sedentary lifestyle, genetic disorders etc. Infertility produces negative impact on person's life and society also. It reduces quality of life especially through the negative psychosocial consequences like marital instability, anxiety, depression, social isolation, deprivation, and loss of social status, loss of gender identity, ostracism and abuse^[1]. Infertility by itself does not threaten physical health but has a strong impact on the psychological and social well-being of the couples. Infertility can result in severe emotional stress.

Globally an estimated 9% of women of reproductive age suffer from infertility. This equals to 80 million women^[2]. According to FIGO manual ovarian factor contribute 15-25% in

causes of the female infertility. So it is the second common cause of infertility. Ovulatory cause is an important subset in infertility among women, accounting about 40% of cases. (Infertility of Leon Sperrof et.al) anovulatory or inability to produce to fertile ovum is an important cause among the women for infertility. Ovulation refers to the physical act of rupture of the follicle with the extrusion of the oocyte. When the follicle does not rupture then ovulation fails and it is called anovulation. There are many reasons both which can be solved and which cannot be behind anovulation. 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. In such patients ovulation induction is a rescuer.

Identifiable factors affecting female infertility include: hormonal or endocrine disturbances (menstrual or ovulatory disturbances), tubal factors (occlusions, pelvic adhesions and other tubal abnormalities), acquired non-tubal factors (cervical or uterine disturbances), sexual dysfunction and congenital abnormalities. There is no demonstrable cause of infertility in the female partner for about one third of all infertile couples attending infertility clinics. The most common recognizable factors were endocrine disturbances (35 percent globally and 37 percent in Asia) and tubal factors (32 percent globally and in Asia). In contrast, sexual dysfunction, congenital abnormalities and acquired non-tubal factors accounted for no more than two percent, one percent and 12 percent globally and two percent, one percent and 15 percent respectively in Asia. Untreated reproductive tract infections, including pelvic inflammatory disease, sexually transmitted diseases, particularly chlamydia trachomatis and gonorrhoea, and botched or repeated abortions are also known correlates of infertility among women^[3].

IMPORTANCE OF THE PRESENT WORK

Infertility reduces quality of life especially through the negative psychosocial consequences. These range from fear to depression to stigmatization and lost dignity in death^[4]. *Vandhyatva* is like curse to the woman and society as it affects her physical and mental ill health and thereby the social life of the woman.

The school of Ayurveda mentions a few principles regarding causative factors and etiopathogenesis of *Vandhyatva*. *Acharyas* have also mentioned remedies for it but they have not mentioned the treatment according to the separate factor involved. So in this present era, when everything is going to be super specialized, it is very necessary to provide a particular etiopathology as well as remedy for the particular factor.

Hence, the infertility and especially ovarian factor induced female infertility needs an immediate attention from alternative medicines. Ayurveda may give a promising hand to cure this disease even though there is no specific treatment according to factors. So it's a time to convert the challenging problem of managing infertility into a rewarding one always. So, there is a ray of hope for giving her a 'NEVER-ENDING JOY' of motherhood through the Ayurvedic treatment.

The ancient system of *Ayurvedic* medicine advocated variety of natural medication, which may provide good results on this factor without any harmful effect.

Why Ayurvedic procedure Basti had been selected?

The ancient system of *Ayurvedic* medicine is the best treatment for chronic diseases and psychological diseases. It is because *Ayurvedic* medicines are not harmful if it applied in proper manner as compared to modern medicine.

In this aspect, *Basti* is considered to be the best treatment for *Vata*^[5]. *Basti* cures all the disease of *Vata*. *Basti Karma* controls *Vata* at its *MoolasthanaPakvashaya*, and thus all metabolic processes under the control of *Vata* are automatically regulated as, if the root of the diseased tree is destroyed; its branches, leaves, and flowers are automatically destroyed^[6]. Thus, it may act on anovulation by normalizing the pelvic reproductive physiology.

Hypothesis

\bullet Null Hypothesis:(H₀)

o *Ayurvedic* procedure i.e. *Basti*is not effective in the management of *Vandhyatva* Female Infertility.

❖ Alternative Hypothesis:(H₁)

o *Ayurvedic* procedure i.e. *Basti* is not effective in the management of *Vandhyatva* Female Infertility.

MATERIAL AND METHODS

Authoritative treatises on *Ayurveda*, Articles published Thesis, Internet, etc.

CAUSATIVE FACTORS FOR INFERTILITY:

Without *Vata* the *Yoni* never gets vitiated. *Vandhyatva* has also been described in eighty types of *Vatavyadhi*. So, *Vata* is the prime causative factor of *Vandhyatva*^[7].

Maharshi Charaka has clearly described the Nidanas of Vandhyatva which are almost similar to

❖ SAMPRAPTIGHATAKA

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Dosha	Vata Pradhana Tridoshaja
Dhatu	Rasa, Rakta, Meda
Upadhatu	Artava
Agni	Jatharagnimandya, Dhatvagnimandya, Sthanika (local) Agnimandya
	(local) Agmmunuyu
Srotas	Artavavaha
Srotodushti	Sanga
Udbhavasthana	Pakvashaya
Adhisthana	Trayavarta Yoni
Vyaktisthana	Beejagranthi
Marga	Abhyantara

MANAGEMENT

ACCORDING TO AYURVEDA:

निहेवातादृतेयोनिःनारिणासम्प्रदुष्यति [8]

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 Ayurvedic texts. But which type of infertility or on which factor like Rutu, Kshetra, Ambu, Beeja, it will act, it is not mentioned clearly. Yet treatment has been given according to the cause i.e. YoniVyapadas,ShukraDushti, ArtavaDosha etc. So it is very important to find out the cause which is responsible for Vandhyatva.

Vitiated *Vata* is the root cause of *Yonirogas*. So *Vatadushti* has to be treated first, followed by other *Prakupita Doshas*.

- (1) Samanya Chikitsa: Samanya Chikitsa means general management of Yonirogas which includes Shodhana and Shamana Chikitsa.
- (2) Vishesha Chikitsa: Vishesha Chikitsa includes Uttarabasti as the best treatment for Yoniroga, Artavadushti, and Vandhyatva.

(A) Shodhana Chikitsa:

 Panchakarma therapy (for Sharira Shodhana purpose) should be done. Specially, Basti because of its wide range and effective use for VataDosha.

- *Yoni Shukrasayaroga* are mentioned as *Virechana Sadhya* disease^[9].
- *Niruhabasti* is advocated for many diseases, one of them is "*Rajonasha*^[10].
- *Niruha* and *Anuvasana Basti* can be given for *Yonishoola*. *Niruhabasti* works as nectar for infertile women.(Bh.S.Si-6)
- Snehana, Swedana, Vamana, Virechana, Niruha, Anuvasana and specially Uttarabasti are to be employed in the treatment of Artavadushti^[11].
- *Yapana Basti* performs both the actions i.e. cleaning of *Niruha* and oleation of *Anuvasana*. By use of this couple gets progeny^[12].

.BASTI REVIEW

Among procedures of *Panchakarma*, *Purva Karma* mainly includes *Snehana* (Oleation therapy) and *Swedana* (Fomentation therapy). These are the preliminary procedures and also independent therapies for treating certain conditions. *Shadupakrama* described by *Acharya Charaka*, which includes these procedures in main six treatment domains. If major role of *Vata* is considered in the causation as well as in the production of disease symptoms as in *Vandhytatva* disease, management protocol leads towards the treatment of *Vata Vyadhi*^[13].

In present study *Abhyanga (Massage)* as *Snehana* (Oleation therapy) [14] and *Nadi Swedana* as *Swedana* (Fomentation therapy) have been selected for *Purvakarma*

PRADHANA KARMA-BASTI

- 1. BASTI REVIEW
- 2. YAPANA BASTI REVIEW
- 1. BASTI REVIEW

In Ayurveda, Chikitsa does not mean simply the relief from ailment or absence of symptoms; it is bringing back the normalcy specific to that person. Shodhana is the elimination of Dosha from the body and is an important part of treatment as it does not allow the disease to recur in the body^[15]. Thus the whole treatment concept can be simplified in to Shamana or Shodhana (followed by Shamana) and Nidana Parivarjana. Charaka Acharya in the context of Langhanahas mentioned that Shodhana is of 4 types. But according to some there is a slight difference between Panchakarma and Pancha Shodhana. In the commentary, ChakrapaniDatta clarifies that even Anuvasana removes Vata and Mala thus it can also be considered as a Shodhana procedure. Sushruta Acharya has clubbed both Basti types together and added Raktamokshana.

But unique advantage of *Basti* is that whether it is *Shad Karma* or *Shamana or Shodhana* it can singly perform all these. It produces *Brimhana* through *Yapana*, *Vajikara*,

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RasayanaBastis; Langhana, Rukshana through Lekhana Basti, Vaitarana Basti; Sthambhana through Pichchha Basti; Snehana through Anuvasana, Rasayana Basti etc. Thus Basti can be Shamana, Shodhana and Sangrahaniya, Santarpaniya and Apatarpaniya. Further it is Vajikara, Chakshushya, Vayasthapana, improves Bala, Varna, does ShariraUpachaya, Parivriddhi (increases growth), sustains Arogyaand even removes ValiPalita^[16].

Also due to various and innumerable *BastiKalpana*, it can be given in multiple disease conditions ranging from immunosuppressive conditions to hypersensitivity, degenerative, inflammatory, infertility, auto immune, endocrine and even infectious conditions.

Vayu is considered to be the main controller of the body. Now if Vayu alone or in combination with other Dosha get vitiated, then Basti by the way of evacuation or elimination normalizes the path of Vayu along with Pitta, Kapha and fecal matter.

As *Pakvashaya* is main site for *Vata Dosha*, *Basti* is primarily indicated in *Vata* predominant diseases. The main *Nidana* for *Vata Prakopa* are *DhatuKshaya* and *MargaAvarana*. *Nanatmaja Vata Vyadhi* are 80 in number and as compared to the 60 diseases combined under *Kapha* (20) and *Pitta* (40) it roughly comes up to half of the number thus *Basti* obviously is *Ardha Chikitsa*. Further by adding *Kapha* and *Pitta Hara* drugs, *Basti* can also mitigate these *Dosha* or *Sansarga and Sannipata Avastha*, thereby it may be considered even as *Purna Chikitsa*^[17]. *Basti* is primly acting on *Vata*; still it is equally helpful to alleviate *Pitta*, *Kapha*, *Rakta Dosha*, *Sansarga* and *Sannipata Doshas*. Though *Basti* stays in *Pakvashaya*, pelvis and organs below umbilicus get the actions through *Veerya* of the *BastiDravyas* transmitted all over the body. It sucks out *Doshas* from head to toe as, the sun though miles away with its rays, sucks the water from the plants on the earth^[18]. No other *Chikitsa* as capable as *Basti* to tolerate and regulate the force of *Vata*^[19].

There is no cause greater than *Vata* in the manifestation of diseases affecting the whole body or part of the body. Since the *Vata* is the motive force behind the function of elimination or retention of *Mala*, *Mutra*, *Artava*, there is no remedy other than *Basti*.

In female infertility *Basti* is the main line of treatment. *Acharya Charaka* clearly noted that *Basti* is an excellent therapy for women who are afflicted with the complication of *Vata* and who are unable to conceive despite their mating with male partners^[20].

According to *Ayurveda*, *Vata* plays key role in all types of *Yonirogas* including *Vandhyatva*. Moreover, Ovulation is under the control of *Vata*. *Basti* may have effect on *Vata* and would help to treat Anovulation.

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2. YAPANA BASTI

Why Yapana Basti?

The term 'Yapana' has certain specific implications. The different meanings given for 'Yapana' in different contexts are detailed below:

Acharya Charaka reported the special features of the Yapana Basti, That is

- ➤ This Basti can be given to normal healthy person, diseased person, old age person i.e. degenerative stage.
- It can be given in most of all diseases and can give in any season.
- ➤ It can be given in female infertility and male infertility also.

Complication and Treatment:

Continuous and long term administration of *Yapana Basti* may causes *Shopha*, *Agninasha*, *Pandu*, *Soola Arsha*, *Parikartika*, *Jvara* and *Atisara*^[21]. Conservative management is to be adopted is such conditions.

Retention of YapanaBasti

As *Niruha Basti* its retention time should not exceed *Muhurta* (48 minutes). But according to the opinion of *Kashyapa Acharya* being *Mridu* in nature it can be retained in the body for a longer time, but if it is not evacuated by 1day (24 hours) *Tikshna Basti* with *Gomutra*etc should be immediately administered. And depending on disease *Anuvasana Basti* can be administered on alternate days.

Effect of Basti^[22]

- (1) It purifies all the systems and makes a clear passage up to micro channel level.
- (2) It acts on various disorders because of the selection of the drug according to disease.
- (3) Curative.
- (4) Uncomplicated.
- (5) Basti can be administered at any age and at any stage of disorder after proper examination. It also can be given in normal persons too.

(1) Promotive aspects

Sustains Age, provides better life, improves strength, digestive power, voice and complexion, perform all functions normally, provide firmness, corpulence quality, brings lightness in viscera / systems because of removal of morbid matter from all over the body and restores normalcy.

(2) Curative aspects

Relieves Stiffness, relieves contractions and adhesions, effective in paralytic conditions, effective in dislocation and fracture conditions, effective in those conditions where *Vata* aggravated in *Shakha* / extremities, relieves pain, effective in disorders of GI tract, effective in diseases of *Shakha* and *Koshtha*, effective in the diseases of vital parts, upper extremities and localized or general parts, beneficial to debilitated and weak persons, arrests premature old age and the progress of white hair.

(3) Preventive aspects

It is beneficial in constipation and effective in purification of various systems of the body.

(4) Rejuvinative aspect

Increases the quantity and quality of sperm, effective in restoring the normal functions of blood and other *Dhatu* and it provides strength by increasing muscle power and is beneficial in geriatrics.

PROBABLE MODE OF ACTION OF BASTI THERAPY BASTI DRUGS:

Their role at the time of preparation:

Saindhava:

Due to its *Ushna*, *Tikshna*, properties, it is easily mixed with honey and forms homogenous mixture. It destroys the *Pichchhila*, *Bahula* and *Kashaya* properties of honey.

Madhu (Honey)

It forms the homogenous mixture with the *Saindhava* and it is best among the vehicles. When a solution of salt is brought into immediate contact with one containing sugar, the salt molecules and ions rapidly diffuse into the sugar solution and the sugar molecules into the salt solution until the whole mixture become homogenous. Each fractions of the solution finally is containing uniformly the same amount of sugar and salt^[23].

Sneha (Oil):

The qualities of *Sneha* like, *Snigdha* and *Guru* get mixed with above solution and form again a uniform mixture, it counterparts some of irritating properties of both *Madhu* and *Saindhava*.

Kalka (Paste):

This is one of the ingredients mainly according to the disease. *Kalka* gives thickness to the *BastiDravya*. We can use the fresh drugs in the form of *Kalka*, those, which we cannot use for the decoction. Again the drug containing volatile properties can be use in the form of dry powder or paste.

Kwatha (Decoction):

This is the main content of *BastiDravya*. The drugs used for decoction are mainly according to the disease and the stage of the disease. The drugs, which are water soluble we can use by this way.

Water base is always essential for the absorption of the drugs from the intestine. The *Kwatha* gives essential quantity to the *BastiDravya* for administration during preparation it gets mixed with above mixture.

Qualities of prepared BastiDravya:

- 1. A prepared *Basti Dravya* should be homogenous.
- 2. *Basti Dravya* should be of body temperature at the time of administration.
- 3. No oil drops should be floating on the surface of *Basti Dravya*.
- 4. Consistency of *Basti* should be not so thick and not so liquid.

Basti is not merely Enema One:

Thus, it can be concluded that, *Basti* is a highly complex, sophisticated and systemic therapy having wider range of therapeutic actions and indications. It has been considered as prime treatment modality of *Vata* Dosha. Innumerable *Basti* can be formulated using various drugs in different proportions for various diseases and for different patients. Specific rules and regulations are indicated for the administration of *Basti* which must be followed to obtain the desirable result. On contrary to this, enema is simply used for evacuation of colon and in some instances for dehydration and administration of medicine.

RESULT

It is probable that female infertility is occurring by *Tridosha* vitiation leading to *Aartavaha Srotas Dushti* and subsequent *Vata Vaigunya* because of irregular life style i.e. wrong habit of food, sleep, celibacy etc.

DISSCUSION

All the gynecological disorders are due to wrong regimen, menstrual morbidities, defective genes and *Daiva* or *Karma*. Infertility is the disease of *Tridosha Dushti* with pre dominance of *Vata Vatiation*. *Basti* is the main treatment of *Vata Vyadhi*.

Basti administered into Pakvashaya draws the Dosha/Mala (morbid matter) from all over the body from the foot to the head by the virtue of its Veerya (potency), just as the sun situated in the sky draws the moisture from the earth by its heat. As tree irrigated in its root level attains nourishment for whole tree, in the same way, Basti drugs given through Guda (Rich of blood

vessels, lymphatics & nerves) nourishes all the limbs & organs of the body. *Vandhyatva* being *Vata* dominant disorder, *Basti* holds mainstream in the management of the disease.

CONCLUSION

Basti cures the infertility by purifying the body and by destroying the root cause of infertility. In female infertility *Basti* is the main line of treatment. *Acharya Charaka* clearly noted that *Basti* is an excellent therapy for women who are afflicted with the complication of *Vata* and who are unable to conceive despite their mating with male partners.

REFERENCES

- 1. http://www.figo.org/news/resourses/FIGO_Fertility_Tool_Box
- 2. http://www.figo.org/news/resourses/FIGO_Fertility_Tool_Box
- 3. Wasserheit J: "The significance of scope of reproductive tract infection among third world women", International journal of Gynaecology and Obstetrics, Supplement (1989).
- 4. http://www.figo.org/news/resourses/FIGO_Fertility_Tool_Box
- 5. Agnivesha-Charaka Samhita with Ayurvedadeepikavyakhya, by Vaidya Jadavji Trikamji Acharya, ed. Chaukhambha, Varanasi,2011,Sutra Sthana 25/40;131
- 6. Ibidem-1 Ch.Su.20/13;114
- 7. Ibidem-2 Cha.Chi.30/115;639
- 8. Ibidem-2 Cha.Chi.30/115;639
- 9. Ibidem-27 A.H.Su.18/9;155
- 10. Ibidem-27 A.H.Su.19/3;162
- 11. Ibidem-27A.H.Sha.2/13;244
- 12. Ibidem-2 Ch.Si.12/20,22
- 13. Agnivesha, Charaka Samhita, revised by Charaka and Dridhbala with 'Ayurveda Dipika' commentary, by Chakrapanidatta, edited by Vaidya Jadavaji Trikamaji Acharya, Chowkhamba Sanskrit Sansthana, 'GopalMandir Lane, Varanasi :reprint 2011chikitsasthana, 28/81 page 620.
- 14. Ibidem, Charaka Sutrasthana, 13/24 page 83
- 15. Anonymous, Vagbhata's Ashtanga Hridayam, Text, translation, notes, appendix anindices, translated by Prof. K. R. Srikanta Murthy, Chaukambha Krishnadass Academ Chaukambha Press, Varanasi, 1st Edition, 2008, Vol. 1, *Sutrastana* 12/26, pp172.
- 16. Anonymous Sushruta Samhita, English translation of the text and Dalhana's Nibandhasamgraha commentary & Nyayachandrika Panjika of Sri Gayadasa Acharya along with critical notes, edited & translated by Vaidya Yadavaji Krikamji

- Acharya & Narayan Ram Acharya, ChaukambhaOrientalia, Varanasi, 7th Edition, 2002, ChikitsaStana 35/1-2, pp.525.
- 17. Anonymous, Charaka Samhita, 2nd edition, 2002, R.K. Sharma and Bhagvandas, ChaukhambhaBharati Academy, Varanasi, Volume 6, Siddhi Sthana 1/41-42, pp.165.
- 18. Ibidem-5 Su.Chi.35/27-28;527
- 19. Ibidem-5 Su.Chi.35/29-30;528
- 20. Agnivesha, Charaka Samhita, revised by Charaka and Dridhbala with 'Ayurveda Dipika' commentary, by Chakrapanidatta, edited by Vaidya Jadavaji Trikamaji Acharya, Chowkhamba Sanskrit Sansthana, , Gopal Mandir Lane, Varanasi :reprint 2011 sidhhisthana 1/34 683pp. and R. K. Sharma And Bhagwan Dash Charaksamhita reprint 2008 Si.1/34 volume VI Choukhambapakashan, Varanasi , 161pp
- 21. Agnivesha, Charaka Samhita, revised by Charaka and Dridhbala with 'Ayurveda Dipika' commentary,byChakrapanidatta, edited by Vaidya Jadavaji Trikamaji Acharya, Chowkhamba Sanskrit Sansthana, , Gopal Mandir Lane, Varanasi :reprint 2011 sidhhisthana 12/30,31 735pp.
- 22. Ibid Chakrapani Datta
- 23. Cushiny's Pharmacology and Therapeutics.