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# **WORLD JOURNAL OF PHARMACEUTICAL RESEARCH**

SJIF Impact Factor 8.453

Volume 13, Issue 10, 779-790.

Case Study

ISSN 2277-7105

# EFFECT OF MATRABASTI IN MANAGEMENT OF INFERTILITY (ANOVULATION) - A CASE STUDY

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Article Received on 01 April 2024,

Revised on 21 April 2024, Accepted on 11 May 2024

DOI: 10.20959/wjpr202410-32443



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# **ABSTRACT**

Infertility is a problem related to inability of conception due to various causes. Ovarian dysfunction is one among them. Anovulation is a condition which explains the failure of ovulation due to the dysfunction of hypothalamus- pituitary- ovarian axis. Ovarian factor contribute 15-25% and is the second common cause of infertility.<sup>[1]</sup> Ovulatory factor is an important subset in infertility among women, accounting about 40% cases. [2] Artava is considered as stri beeja (ovum) as far as the conception is concern and nastartva, the condition where arthava nasha occurs can be considered as anovulation. Nastartava is one type of artava vikara the result of which is responsible for asambhava of prajotpadana that is vandhyatwa. [3] For the management of vandhyatwa there are good numbers of formulations and treatment modalities mentioned in ayurvedic classics. In this case study matrabasti with phalasarphi and shaman oushadhi as chitrakadi vati given to treat vandhyatwa (infertility) due to beeja dusti (anovulation).

## INTRODUCTION

Infertility is defined as a failure to conceive within one or more years of regular unprotected coitus. Conception depends on the fertility potential of both the male and female partner. The male is directly responsible in about 30-40 percent, the female in about 40-55 percent and

both are responsible in about 10 percent cases. The remaining 10 percent is unexplained.<sup>[4]</sup> Infertility causes could be internal and external female genetilia abnormalities, impairement in functions of hormones, environmental, psychological, and genetic factors. In this study the condition of polycystic ovaries which comes under ovarian factor plays very important role in fertility. one third of couples seeking assistance at fertility hospitals face infertility due to lack of ovulation with polycystic ovaries being the primary cause in 90 percent of these instances.<sup>[5]</sup>

Polycystic ovarian syndrome was initially documented in 1935 by medical professionals stein and levental, Defined pcos as a syndrome characterized by specific symptoms, including amenorrhea (absence of menstruation), hirsuitism (excessive hair growth), obesity and acanthus nigricans, all of which are linked to the presence of enlarged polycystic ovaries.<sup>[6]</sup> Infertility has emerged as a substantial disorder which linked to one of the factor of polycystic ovarian syndrome (pcos), is influenced by the demands of a stressful world, insufficient consumption of healthy foods and evolving lifestyle. The global prevalence of this condition lies around 5-10 percent in the general population.<sup>[7]</sup>

Initially treatment often involves to promote the ovulation by a medical management with clomiphene citrate. In complex cases, laproscopic ovarian surgery have been employed to manage anovulation and enhance the chances of conception in polycystic ovaries.

In Ayurveda susrutha Acharya has mentioned vandhya is destruction of artava inturn causing vandhyatwa.<sup>[8]</sup> In classics the concept of artava would be understood as srava rupa artava, dhatu rupa artava, and beeja rupa artava and all these are said to be important for conception. Acharya Sushrutha has said Ritu, kshetra, ambu, beeja are the garbha sambhava samaghri where Beeja is one among the prime factor that is arthava in females and shukra in males.In manusmriti it is mentioned that the beeja is more important than the kshetra as the progeny will possesses the qualities of beeja embedded and not that of the field. The beeja formed by the soumya bhava of the rasa gets agneyatwa after undergoing dhatu paaka by the influence of pitta. "artavam agneyam" any abnormalities in beeja, beejabhaga, beejabhagaavayava results in genetic abnormalities in the progeny. Abeejatha or anovulation may be one of such pathology which could be genetic inheritant. If twenty yoni vyapaths are not treated properly cause infertility (abeejata).<sup>[9]</sup> According to Ayurveda, Vandhyatva due to anovulation can be associated with various conditions outlined in Ayurvedic texts. These conditions include Granthi (cyst-like structures), Artavkshayam (scanty or absent menstruation), Nashtartavam

(missing menstruation), Pushpaghni Jathaharini, and Rakta gulma, Arajaska, Ksheenartava. Vandhyatva can be considered as Vata Pradhana Tridosha Dushti in which Vata Dosha responsible for Vibhajan (cell division property) and Pravartana karma which helps in rupture of mature follicle. Ushnata and Pachana are features of Pitta Dosha. Primarily, Pitta will boost up the local Agni followed by Pachana Karma of remained Ama and then gives proper atmosphere for maturation of recruited follicle. Kapha plays imperative role in Beeja Nirmana by Upachay Karma. Regarding the practice of Basti, as stated by Acharya Charaka, it is highlighted that once Vata, particularly its imbalances, is effectively managed through the administration of Basti, the female is likely to experience a swift attainment of conception. This underscores the significance of balancing Vata Dosha through this therapeutic procedure as a means to enhance the chances of successful pregnancy. [10]

## **CASE REPORT**

A female patient of age 25 years complaints of inability to conceive. visited to sri kalabyraveshwara swamy ayurvedic medical college, hospital and research centre Bengaluru. In 3 years of married life, irrespective of unprotected sexual life, she has not conceived. On interaction with the couple it was found that female patient had the history of irregular cycles and pcod. And male partner has no contributing factors for not having conception.

# Past history

Medical history- nothing significant Surgical history- nothing significant

# Menstrual history

Age of menarche- 13 years

Menstrual cycle- irregular

Interval- 35-40 days

Lmp- 29/01/2024

Amount- 2-3pads/day

Duration- 4-5 days

Amount- 2-3 pads per day

White discharge- absent

Foul smell- absent

Clots- minimal

Dysmenorrhea- absent

# **Obstetrical history**

Nill.

# **Personal history**

Diet- vegetarian.

Appetite- reduced

Bowel- 1time per day

Micturition- 4-5 times per day

Sleep- disturbed.

## **Examination**

# Asta sthana pareeksha

Nadi- 80 bpm

Mala- 1 times per day

Mutra- 4-5 times per day

Jivha- lipthata

Sparsha- prakrutha

Drik- prakrutha

Akruthi- madhyama

# Dashavidha pareeksha

Prakruti- vata pitta

Vikruti- vata pradhana tridoshaja

Sara- madhyama

Samhanana- madhyama

Satva- madhyama

Satmya- madhyama

Ahara Shakti- jarana Shakti- avara

Abhyavarana Shakti- avara

Vyayama Shakti- avara

Vaya- madhyama

Pramana- madhyama.

# On general examination

Built- moderate

Pallor/ icterus/ cyanosis/ clubbing/ lymphadenopathy/oedema- absent

BP-120/80 mmhg

Pulse rate- 80 bpm

Height-149cm

Weight- 54 kgs

BMI-24.3 kg/m2

# **Systemic examination**

Cvs-S1, S2 heard, no murmur

Cns- conscious, well oriented about time, place and person

Rs- normal bronchovesicular sound heard

p/a- soft, non tender, no organomegaly

per speculum and pervaginal examinations were normal.

# **Breast examination**

Bilateral breast- no abnormality detected.

# **Investigations**

- 1. Seminal analysis report of husband revealed normal.
- 2. All the routine investigations were done to female patient -

Hb %- 13.3gm %

TSH- 4.06 microIU/ml

Prolactin-9.3ng/ml

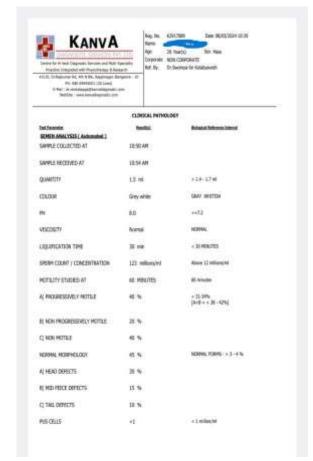
AMH- 4.40 ng/mL

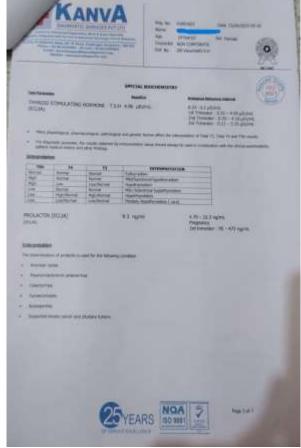
Usg- pelvis report shows-

Impression- findings suggestive of polycystic ovaries.













# **Planned Intervention**

# Rukshana with udhvarthana

# Vamana karma

# Basti karma

Uttara basti and Matrabasti with phalasarpi 75ml for 10 days

Chitrakadi vati thrice daily after food

SL. No.	Dates	Treatment	Medication	Observation
1.	11/10/2023 to 25/10/2023	Udwatana Followed by bashpa sweda	Kolakulattadi choorna+triphala choorna+yastimadhu choorna Tab chitrakadi vati 1bd after food.Tab agnitundi vati 1 bd before food.	
2. a.	27/10/2023 to 30/10/2023	snehapana	Guggulutiktaka gritha	Got cycles
2. b.	23/11/2023 to 27/11/2023	Snehapana	Guggulutiktaka gritha	Got cycles
3.	From 8/02/2024 to 10/02/2024	Uttara basti	Phalagritha 5ml	
4.	From 11-02-2024 to 20/02/2024	matrabasti	Phala gritha 75 ml	

Shamana oushadhis advised are

Tab stree vyadhi hara ras 1-0-1 after food

Tab pushpadhanwa ras 1-0-1 after food

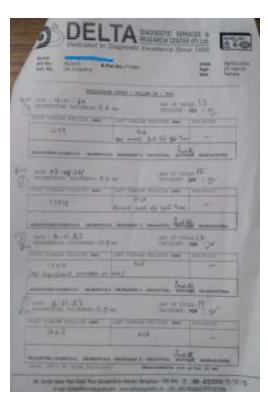
Phalagritha 1ts -0- 1tsp with one glass of milk.

Tab folivite 1-01 after food

# **RESULT**



December - No dominant foliicle present Even after 19<sup>th</sup> day of cycle.



January- No dominant follicle seen



HI STORIGHT February- dominant follicle 21\*15mm ruptured

14412

January

On 22<sup>nd</sup> day of cycle. Free fluid seen present in Pouch of dougles.

## DISCUSSION

Tridoshas have an impact over all the process involved in ovulation. Vata stands for proliferation and division of cells (granulosa and theca cells), rupture of the follicle.<sup>[11]</sup>

Pitta is associated with its conversion power, like conversion of androgens to estrogen in graffian follicle maturity of follicle by its function of paka karma. [12] Kapha stands as a building and nutritive factor. It binds all the cells together and gives nutrition for growth and development of the cells.

Among the three doshas, vata plays a major role in physiology and pathology of reproductive tract. [13] and basti is considered to be the best treatment for vataja disorders. [14] In addition to basti, and shamana oushadhi as been given in cases of vandhyatwa. [15]

In Ayurveda beeja is one among garbhasambhava samagri has been considered as antahpushpa that is ovum. Chakrapani says during rutu kala beeja prarohana takes place, this denotes ovulation. Rutu sadharmya denotes the ovulatory cycle. This occurs with the help of vata especially through apana vata. Considering vata dushti predominantly, basti is considered, matrabasti a type of sneha basti is given. As vandhyathva is bahu dosha avastha, initially rukshana and vamana was considered but the patient had spotting and bleeding during snehapana. This happened twice due to which the patient was not ready to take the the shodhana and Uttara basti was planned directly with phalagritha and later matra basti was continued for more than 10days. On the 22<sup>nd</sup> day the patient ovulated as her cycles were irregular and ovulation also occurred in the same cycle.

# Basti karmukata

While appraising the significance and utility of basti, charaka Acharya enumerates the gunas and karmas of basti. Basti helps in balakrit(provides strength, endurance and immunity) agnikrit (stabilizes the digestion and metabolism), shukrabala prada(strengthens the shukra (semen, reproductive fluid), and anuvasana basti is totally antagonistic to the qualities of vata, does bala prada, and vatahara, does improves veerya, bala and agni.

Kashyapa Acharya tells that basti is equal to the amrita(nector of life) and does normalizes the vata dosa.

"Tatra aasthaapana anuvaasanam tu khalu sarvatra upakramebhyo vaate pradhaanatamam manyate bhishajaha"<sup>[16]</sup>

Phalagritha which is considered as one of the best medicines in treating you and shukra dosha is selected. Here the you denotes the female reproductive tract which includes ovary.

Chitrakadi vati having agni deepana and pachana properties considering artava is agneya in nature and upadhatu of rasa dhatu and impairement in agni leads to uttarottara dhatu kshaya which causes anovulation.

Shaman oushadhi are Stree Vyadhihara rasa contains Sootikabharana rasa, latakaranja beeja, Shatahva beeja choorna, Karpasa moola churna, Shunthi, Maricha, Pippali Sootikabharana rasa includes Swarna Bhasma, roupya Bhasma, Tamra Bhasma, Pravala Bhasma, Shuddha gandhaka. Vatashamaka property is found in all the Bhasmas. Thus, Vata dushti, the pivotal cause for Artavavaha Srotasa dushti is acted upon by the Vatashamaka property of all the bhasmas. Thus, the Prakruta karmas of Vata like Vyuhana, Sanghatakara, Vibhajana, Rasarakta samvahana, Utsarjana karma are all restored resulting in proper Beejotpatti and Beejotsarga, Swarna and Roupya bhasmas with their Madhura, Snigdha properties bring about Dhatu poshana and Bala vardhana.

Kustha, Tagara, Vacha, Haridra, Daruharidra, Madhuka, Meda, Triphala, Katurohini, Payasya, Hingu, Kakoli, Vajigandha, Shatavari, Ghrita, Ksheera are the contents of Phalaghrita which are mainly Tikta, Madhura and Katu rasa, Laghu, Snigdhaguna, both Katu and Madhuravipaka and also Ushna and Sheetavirya drugs. It also has Dipana, Pachana, Lekhana, Anulomana, Shothahara, Krimighna, Prajasthapana and yoni Pradoshahara actions.<sup>[17]</sup>

Pushpadhanwa rasa contains Dhatura, Bhang, Yashti Madhu, Shalmali, Nagavalli, Abraka Bhasma, Rasa Sindhoora, Naga Bhasma All the Bhasmas in Pushpadhanva Rasa have Tridosha shamaka, Deepana and Pachana properties due to which the basic step of Agnimandya involved in the Samprapti is relieved. Hence, correction of Dhatvagni occurs leading to proper formation of Rasa dhatu. This results in proper formation of Upadhatu ie Artava.<sup>[18]</sup>

Thus, chitrakadi vati orally and matrabasti with phalagritha effective in improving the condition of anovulation. The treatment of infertility comprises of administration of matrabasti followed by shamana oushadhi which does the dhatuposhana, stimulates ovaries for folliculogenesis and producing healthy ovum. Phalagritha is the best formulation for

treating vandhyatwa. Matrabasti normalis the apana vayu dushti and does helps in ovulation and inturn helps in conception.<sup>[19]</sup>

Tablet folivite contains Folic acid is a B vitamin which is water soluble vitamin, is needed for the formation of heme, the pigmented, iron containing portion of the hemoglobin in red blood cells (erythrocytes). Studies suggest that folic acid along with multivitamins are more likely to ovulate.

# **CONCLUSION**

Beeja is considered as important factor among the garbha sambhava samagri., due to agni mandhya leading ama causes rasadhatu dusti vata kapha pradhana tridosha prakopa leads to srotorodha and interferes with production of beeja leading to beeja dusti. Thus in this case study can be concluded that through matrabasti with phalasarphi and chitrakadi vati orally helps in managing infertility due to anovulation.

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