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Case Study

AYURVEDIC MANAGEMENT OF PRIMARY INFERTILITY W.S.R. TO OVULATORY FACTOR- A CASE STUDY

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ABSTRACT

Infertility is defined as an inability to conceive a pregnancy after one year of unprotected intercourse. The World Health Organization (WHO) estimates that 60 to 80 million couples worldwide currently suffer from infertility. Though the prevalence of infertility has been increased in the recent era, but the concept of *Vandhyatva* (Infertility) is recognized since the *Vedic* period. **Case report:** A 25-years female patient with her husband aged 28 years residing at Jamnagar reported the OPD of *Prasuti Tantra Evam Streeroga*, ITRA, Jamnagar with the complaints of failure to conceive since 6 years even after having unprotected coital history. She had associated complaints of irregular and delayed menstruation since menarche (13 years). Her menstrual cycle was of 1 day/ 35-40 days, painful, irregular and scanty. Obstetric history was nil. Ultrasonography reports revealed that uterus was slightly bulky in size with anteverted position. Poly cystic ovaries was significantly present in this patient. Patient was having anovulatory cycles. Hormonal profile was normal. Husbands' semen analysis was normal. Patients HSG report showed patent tubes. Patient was given *Deepana-Pachana* and *Koshtha Shuddhi* drugs for three days from the third day of Menses, after that *Rasnadi Niruha*

Basti was administered to patient for 16 days for 2 consecutive cycles. **Result:** Patient achieved ovulation in both cycles of treatment and conceived in the 2nd cycle. She was advised to follow *Garbhini Paricharya*. **Conclusion:** This case supports the importance of *Vata Dosha* in management of infertility and also emphasizes the significance of *Basti Karma* for ovulation. Further large-scale clinic trial scan be helpful for drawing further conclusions.

Keywords: *Vandhyatva*, *Rasnadi Basti*, ovulation, Infertility

INTRODUCTION:

Fertility is a shift into parenthood, as a couple, which comes well before conception. It begins with the first true desire to begin a new family. It is also called *Putreshana* in Ayurveda. This desire serves as an invitation to the new soul. The lens of Ayurveda broadens our vision to see that fertility is more than the physical act of becoming pregnant. God has blessed the female with the most valuable gift of motherhood. Mother is also called “*Janani*” who gives birth to a child. Motherhood is the cherished desire deep down in the heart of every woman which adds new meaning to her life and existence.

According to Ayurveda Infertility primarily refers to the biological inability of a woman of reproductive age to contribute to conception & also the state of a woman who is unable to carry a pregnancy to full term. According to modern science, Infertility is defined as an inability to conceive a pregnancy after one year of unprotected intercourseⁱ. It can either be primary where no previous pregnancy has occurred or secondary where there has been a previously documented pregnancy. *Vandhyatva* (Infertility) is neither a somatic problem nor a psychological problem but it is a psychosocial problem. The psychosocial trauma of prolonged infertility on the couple is enormous.

The World Health Organization (WHO) estimates that 60 to 80 million couples worldwide currently suffer from infertilityⁱⁱ. Infertility varies across regions of the world and is estimated to affect 8 to 12 per cent of couples worldwide.ⁱⁱⁱ Among Indian women reporting primary infertility and PID, STI prevalence was high.^{iv} As per the WHO data, the estimated prevalence of primary infertility among reproductive age group women in India is 11.8%. The rate of secondary infertile is 5.8% in India. Estimates of infertility vary widely among Indian states from 3.7 percent in Uttar Pradesh, Himachal Pradesh and Maharashtra,^v to 5 percent in Andhra Pradesh^{vi}, and 15 percent in Kashmir^{vii}. Within India, women's infertility rate was the highest in West Bengal (13.9 percent) and the lowest in Meghalaya (2.5 percent).^{viii} Moreover, the prevalence of primary infertility has also been shown to vary across tribes and castes within the same region in India. Both male and female infertility is common in India. While female infertility accounts for 40-50% of infertility cases, male infertility accounts for 30-40% of infertility cases. The percentage of male infertility has been growing over the last few years.

Though the prevalence of infertility has been increased in the recent era, but the concept of *Vandhyatva* (Infertility) is recognized since the *Vedic* period.

1. Case report

A 25-years female patient with her husband aged 28 years residing at Jamnagar reported the OPD of *Prasuti Tantra Evam Streeroga*, ITRA, Jamnagar with the complaints of failure to conceive since 6 years even after having unprotected coital history. She had associated complaints of irregular and delayed menstruation since menarche (13 years). Her menstrual cycle was of 1 day/ 35-40 days, painful, irregular and scanty. Obstetric history was nil.

2.1 Personal history- Patients bowel movement were satisfactory, with frequency of 1 time/ day, appetite was good, micturition was normal with frequency of 6-7 times/ day, sleep was sound. On general examination her pulse and BP was found to be 68/min and 110/70 mm of Hg. No pallor or oedema was found. BMI of patient was 22.2kg/m². *Prakruti* assessment revealed she was having *Vata Kapha* dominant *Prakruti* and no any relevant findings on systemic examination. As per abdomen examination no any abnormalities were detected. Per speculum examination revealed normal appearance of vagina and cervix. Per vaginal examination revealed normal sized anteverted uterus with free fornixes. Cervical motion tenderness was absent.

2.2 Investigation- General examination of patient including complete blood count, urine examination, biochemical and serological examination were within normal limits. Hormone profile reports revealed S. FSH = 5.43, S. LH= 5.75, S. TSH= 0.82, Prolactin= 10.90ng/ml. Patients HSG report showed patent tubes. 5th day Ultrasonography reports revealed that uterus was slightly bulky in size with anteverted position. Poly cystic ovaries was significantly present in this patient. Patient was having anovulatory cycles.

Husbands semen analysis (2021)- Total Sperm count 60mil/ml, 70% actively motile sperm, 1% abnormal forms, Auto agglutination- absent, pus cells- absent.

2.3 Hetus- Late awaking in morning (9am), day sleeping, intake of heavy breakfast like eggs and fried food articles, daily intake of packed, preserved food articles, dinner timing was late night, intake of excess of spicy and non veg food items, *Amla- Lavana-Katu Ahara Atiyoga*, frequently *Vega Dharana* of natural urges like urine and stool.

2.4 Samprapti – Due to the *Hetu Sevana*, *Agni Dushti* had taken place which led to *Vata- Kapha Prakopa*, *Rasa, Rakta* and *Artava* were the chief *Dushyas* in this case. The major site of vitiated *Dosha- Dushya* were ovaries which resulted in polycystic appearances of the ovaries. Due to PCOD, patients was having anovulatory cycles which was the causative factor for infertility.

2.5 Treatment -Patient was given *Deepana–Pachana* and *Koshtha Shuddhi* drugs for three days from the third day of Menses, after that *Rasnadi Niruha Basti* was administered to patient for 16 days for 2 consecutive cycles. The detailed posology of drugs administered is as shown in the table 1.

Table 1: Posology of Treatment given

Preparatory phase medicine (D4 to D5 of menses)

Treatment Modality	Drug	Dose	Duration
<i>Deepana- Pachana</i>	<i>Amapachana Vati</i>	2 Tablets (each of 500mg) b.i.d. with lukewarm water after meal.	3-5 days
<i>Koshtha Shuddhi</i>	<i>Erandabhrishta Haritaki</i>	5 gm. or as per <i>Koshtha</i> with lukewarm water at H.S.	3-5days

Posology of Basti (D6 onwards)

Drug	Route	Dose	Time	Duration
<i>Rasnadi Basti</i>	Rectal	700ml	At morning 8:30am to 10:00am	After cessation of menses for 2 consecutive cycles until ovulation or upto 16 days

2. Result:

After 1st cycle of *Basti*, patient achieved ovulation on day 16, the *Basti* was repeated in the 2nd menstrual cycle after cessation of menses. Patient achieved ovulation in 2nd cycle on day 16. Patient was advised for conception. *Garbhadhana Vidhi* was explained well to the patient. Patient missed her menses on the expected menstrual date. UPT when conducted showed pregnancy test positive. After conception patient was advised to follow *Garbhini Paricharya* strictly.

14.08.2022: (Before treatment)- Basic USG scan of 4 th day. Bulky ovaries with PCO++ present. Patient followed up for 2 cycles and anovulatory cycles was diagnosed.	09.01.2022 (1 st cycle : Evidence of ovulation after 1 st cycle of treatment.
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Gynaecological U.S.G.

Uterus : Size Ar (N)
 Endometrial Cavity 4mm mms

Ovary : Right goutley Size _____
 Left goutley Size _____

Any Pathology _____
 Fallopian tube Pathology : _____
 POD _____ Free fluid PCOTT
 Any other abnormality _____

Ovarian follicular study :

Date	Day	R.ovary	L.ovary	Endometrium	Cervical mucus
21/8	11th	-	-	4mm	
23/8	13th			5.2 mm	
26/8	16th			6.8 mm	
28/8	17th			7mm	Next cycle
4/10/22	11th	-	-	6.8 mm	
6/10/22	13th	-	-	7 mm	
8/10/22	15th	-	-	7.4 mm	
10/10/22	17th	-	-	7.8 mm	Mod. follicul.

LMP- 10/8/21 (4th day)

Gynaecological U.S.G.

Uterus : Size Ar (N)
 Endometrial Cavity 4mm mms

Ovary : Right goutley Size _____
 Left goutley Size _____

Any Pathology _____
 Fallopian tube Pathology : _____
 POD _____ Free fluid PCOTT
 Any other abnormality _____

Ovarian follicular study :

Date	Day	R.ovary	L.ovary	Endometrium	Cervical mucus
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28/8	17th			7mm	Next cycle
4/10/22	11th	-	-	6.8 mm	
6/10/22	13th	-	-	7 mm	
8/10/22	15th	-	-	7.4 mm	
10/10/22	17th	-	-	7.8 mm	Mod. follicul.
3/12/22	11th	Small	Small	6mm	
5/12/22	13th	14x14	14x14	6.4 mm	
7/12/22	15th	18x18	18x18	7mm	
9/12/22	17th	CLH	CLH	8.5 mm	ovulation

16.02.2022 (2nd cycle : Evidence of ovulation after 2nd cycle of treatment.

06.04.2022 (Scan for fetal well being): Single live intruterine fetus of 7.5 week of gestation and with cardaic activity present

Consultant's Advice :-

10/2/22 11th day small small 6.2mm

12/2/22 12th day - 14x14 6.8mm

Impression and Comments :-
 Obstetric U.S.G.

14/2/22 14th day - 19x20 7mm

16/2/22 16th day CHH ovulation

Impression and Comments :-
 Gynaecological U.S.G.

LMP- 30/1/22 3-4-22

Obstetric U.S.G.

Gestational Sac : Location fundal Volume : _____
 Cardiac Activity + CRL 12mm = 7.4 week
 Wks of gestation 7.5 week gestation
 Internal os : closed/open _____

-Gestation : Single/ Multiple-Presentation _____

-Biometry :

BPD _____ mms _____ wks
 FL _____ mms _____ wks
 HC _____ mms _____ wks
 AC _____ mms _____ wks

L.M.P. _____
 E.D.D. According to U.S.G. _____
 Congenital Malformation : _____
 Placental Site : _____
 Placental abnormality : _____
 Amniotic Fluid : Quantity : _____
 Foetal Weight : _____
 Umbilical Cord : _____
 Any other abnormality : _____

3.Discussion:

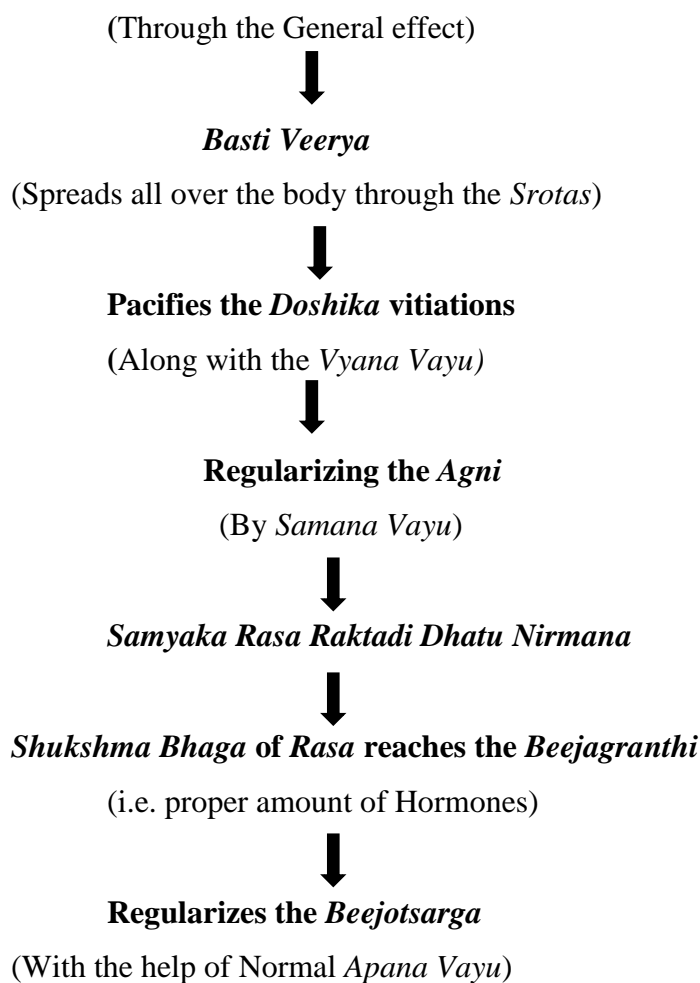
Deepana-Pachana & Vatanulomana: Deepana-Pachana with Amapachana Vati helps to bring the Niramata of Sama Doshas and thus aids in bringing the Shakhagata Doshas or Tiryaka Doshas back to Koshttha which can be easily removed by mild purgative like Eranda Bhrishta Haritaki. Eranda Bhrishta Haritaki also helps to alleviate constipation and thus may be helpful in bringing Pratimola Apana Vayu back to normalcy. The process of Deepana-Pachana also cures Agnimandya and thus prevents Ama formation which can further lead

to the process of *Avarana or Srotorodha* which is the main factor involving in the pathogenesis of anovulatory cycle.

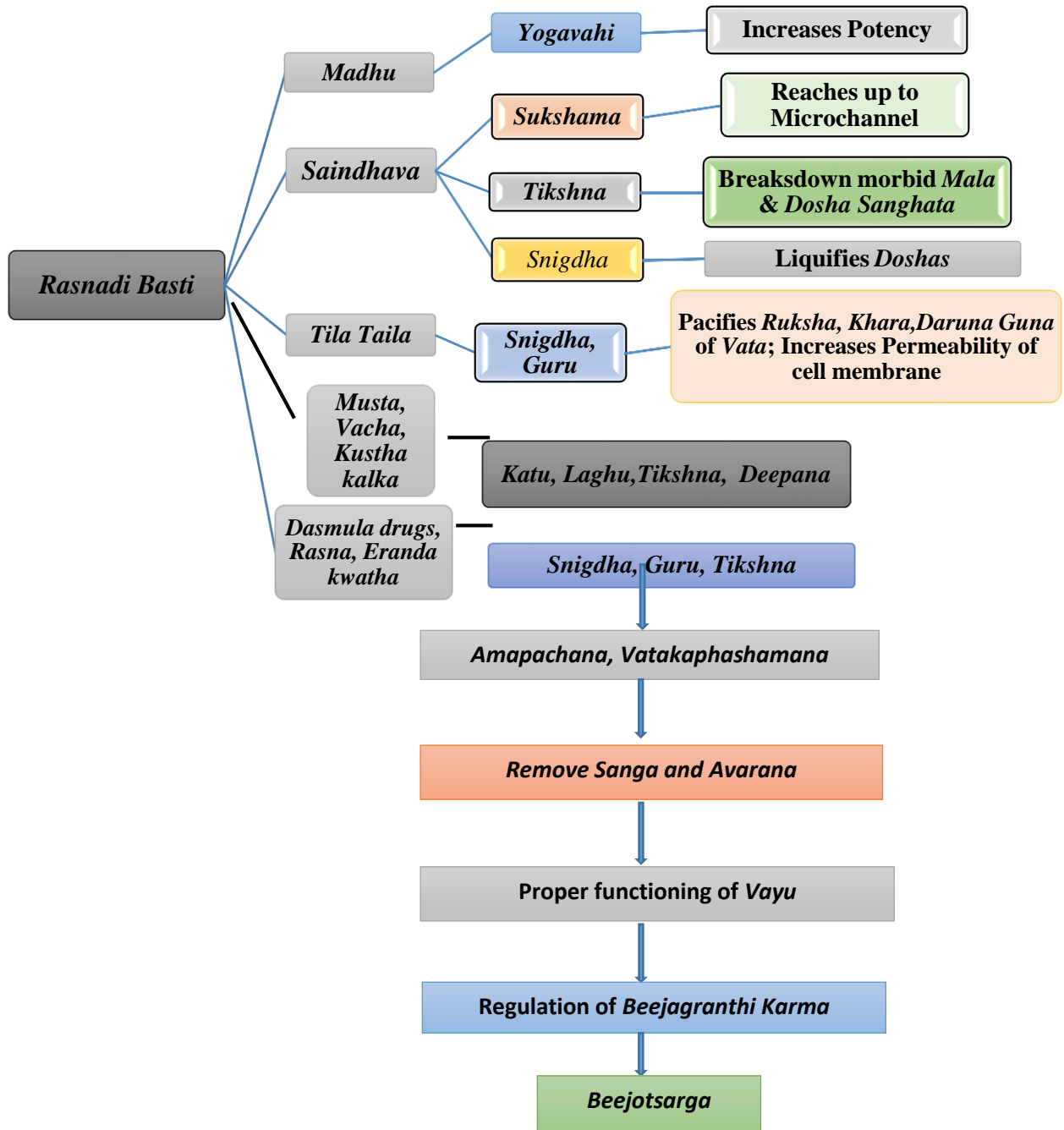
4.1 MODE OF ACTION OF THE *BASTIKARMA*: *Vata* is mainly responsible for all types of *Yonirogas* (all the gynaecological disorders).^{ix}*Prakrita Vata* is responsible for the *Beejotsarga* (Ovulation). *Vata* predominance *Tridosha Dushti* is responsible for *Abeejotsarga* (Anovulation). *Basti Chikitsa* is considered to be a prime treatment modality among the *Panchakarma* in *Ayurveda*. It has not only curative aspects but also preventive and promotive aspects. According to *Ayurvedic* physiology, *Pitta* and *Kapha* both are dependent on *Vata* as it governs their functions. *Basti* eradicates morbid *Vata* from the root along with other *Dosha* and in addition, it gives nutrition to the body tissue^x. Therefore, *Basti* therapy covers more than half of the treatment of all the diseases^{xi}, while some authors consider it the complete remedy for all the ailments. Though *Basti* is considered the best remedy for morbid *Vata*, it can also be used in *Kaphaja* and *Pittaja* disorders by using different ingredients^{xii}. Further, it has both *Samshodhana* as well as *Samshamana* effects.

Rasnadi Basti^{xiii} is prepared of multiple drugs and most of them having property of *Vata-Kapha Shamana* and *Amapachana* which ultimately helps in *Samprapti Vighatana*. Its probable mode of action is as follows:

4.2 *Rasnadi Basti*



4.3 PROBABLE MODE OF ACTION OF RASNADI BASTI



The Drugs, which are used in the preparation of *Rasnadi Basti* help in the regulation of Ovulatory cycle through their combined effect. Moreover, the advantages of *Basti* are also achieved here.

4. Conclusion:

Ayurveda looks deeply in to the individual constitution, finds out the specific cause of the disease, inspects the condition of all *Doshas* in the body, and aims to bring equilibrium within the *Doshas*, thus enhances the functioning of body systems. This case supports the importance of *Vata Dosh*a in management of infertility

and also emphasizes the significance of *Basti* Karma for ovulation. Further large scale clinic trial scan be helpful for drawing further conclusions.

Limitation of the study: This treatment was designed keeping in mind the individual constitution of the patient, history and investigation findings. This is mere a case report and further studies with proper research design is necessary for the scientific validation.

Declaration of patient consent: The authors declare that they have obtained consent form from patient for publication of clinical information blinding the identity of individuals.

Conflict of interest: Nil

Source of support: None

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