

**STUDY OF EFFECT OF *PHALAGHRITA ABHYANTARPAN* AND
FOLIC ACID IN THE MANAGEMENT OF *VANDHYATAVA*
(PRIMARY INFERTILITY): A CASE STUDY**

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ABSTRACT

Infertility is an everyday problem for gynecologist. The term Infertility is described as failure to conceive within one or more year of regular unprotected coitus. Primary Infertility denotes those patients who have never conceived. Conception depends on the fertility potential of both female and male partners. Female is directly responsible in about 40-55%, male in about 30-40% and both are responsible in about 10% cases and remaining 10% is unexplained. WHO estimates the prevalence rate of primary Infertility in India to be between 3.9 to 16.8%. According to Ayurveda term Infertility can be correlated with

Vandhyatava. In some cases there is no specific cause. In spite of normal anatomy, conception does not occur due to *Balakshaya* and *Dhatukshaya*. In such cases *Balavardhaka* and *Bruhana Dravyas* are to be given mentioned in Ayurvedic texts. *Sharangdhar* described *Abhyantarpan* of *Phalaghrita* for conception. Hence a case study was done in Stree rog and Prasuti Tantra OPD of Government Ayurved hospital, Nagpur. A 21 year female having no specific causes of primary infertility was treated with *Abhyantarpan* of *Phalaghrita* and Folic acid. Therefore we are presenting a case of Infertility treated with *Phalaghrita Abhyantarpan* and Folic acid on OPD basis.

KEYWORDS: *Phalaghrita*, *Vandhyatva*, Folic acid, Primary Infertility.

INTRODUCTION

Infertility is defined as a failure to conceive within one or more years of regular unprotected coitus.^[1] Primary Infertility denotes those patients who have never conceived, secondary

Infertility indicates previous pregnancy but failure to conceive.^[2] Subsequently conception depends on the fertility potential of both the male and female partner. Female is directly responsible in about 40-55% the male in about 30-40% and both are responsible in about 10% case and remaining 10% is unexplained.^[3] According to Ayurveda the term Infertility can be correlated with *Vandhyatva*. According to *Sushrut Samhita*, *Vandhya* is one among twenty Gynecological disorders. *Charak* and *Vagabhata* have referred *Vandhya* due to abnormality of *Bija*. Under description of *Jataharinis*, *Kashyapa* has mentioned *Puspaghni yonivyapad*. There is no conception due to unhealthy *pushpa* (ovum). Thus the conditions mentioned above are also responsible for Infertility. According to *Sushruta*, *Ritu* (season or fertile period) *Kshetra* (reproductive organ), *Bija* (sperm and ovum), *Ambu* or proper nutrient fluid, clarity or normalcy of *Hridaya* or psychology, properly functioning *Vayu* (normal nervous system) and *Sadbhawas* (mother, father, *Atma*, *Satwa*, *Satmya* and *Rasa*) are important for conception. Abnormality in any one of these can cause Infertility.^[4] In today's life, Infertility brings forth family unhappiness, marital disharmony which many ends in divorce. WHO estimate the prevalence rate of primary Infertility in India to be between 3.9% to 16.8%.^[5] The incidence is 10% in hospital statistics. In general population it is 2-5%. There are so many drugs and treatments have been explained in Ayurved text from which *Phalaghrita Abhyantarpan* with Folic acid was selected to evaluate its effect in female Infertility.

AIM AND OBJECTIVE

To study the effect of *Abhyantarpan* of *Phalaghrita* and Folic acid in *Vandhyatva* (Primary Infertility) – a case study.

MATERIALS AND METHOD

Place of work – OPD of *Stree Rog and Prasuti Tantra*, department Government Ayurved hospital, Nagpur.

CASE REPORT

- A 21 years married female patient came to OPD of *stree Rog and Prasuti Tantra* department of Government Ayurved hospital, Nagpur, on 11/01/2017 with the chief complaint of Inability to conceive.
- Past menstrual history- duration 3-4 days and interval 28 days, painful, scanty and regular.

- Present menstrual history-duration 2 days and interval 28 days, painful, scanty and regular.
- Obstetric History- G₀P₀A₀L₀D₀
- Family history- No any major complaints in the family.
- Past history- No any significant medical or surgical history.
- Last menstrual period – 02/01/2017

- **General examination**

BP -110/80 mmHg, P- 68/min, RR- 20/min, weight-57 kg, *Nadi* – *Vatakapha*, *Mala* – Irregular, hard, *Mutra* – *Samyak*.

- **S/E**

RS- Chest clear, CVS- S1 and S2 normal, CNS-conscious, well oriented

- P/A- soft, NT
- P/V- normal, retroverted, fornices- non tender
- Investigation

CBC, HBsAG, Sickling, urine examination, Blood sugar, HIV, TSH, and VDRL tests of wife and husband are showing normal result.

USG of abdomen and pelvis of wife – normal

Semen analysis of husband – normal

Treatment plan

Case was treated on OPD basis.

Properties of Phalaghrita and references

Phalaghrita described in *Sharangdhar*, *Yogratnakar*, *Vagabhata* and *Bhavaprakash*^[6,10] *Vandhyatva* is *Vata* dominated *Sannipataja Vyadhi*. *Phalaghrita* has properties like *Tikta*, *Madhura Vipaka* and also *Ushna* and *Sheetavirya*. It has also *Dipana*, *Pachana*, *Lekhana*, *Anulomana*, *Shothahara*, *Krimighna*, *Balya*, *Prajasthapana* and *Yoni Pradoshanashaka* properties which works mainly on female reproductive system. This *Phalaghrita* increases the thickness of endometrium and nourishes the endometrium for conception and decreases the chances of Miscarriage, Still birth, and Preterm baby. Hence *Phalaghrita* was selected for *Abhyantarpan* for the study.

Preparation of *Phalaghrita*

Phalaghrita is ghee based herbal preparation. The *Phalaghrita* Ideally mentioned in *Sharangdhar Samhita*. First of all taken 1 to 17 raw drugs listed in table no.1 made paste (Kalka Dravyas) of them. To add 768 gram of cow ghrita and 3.072 liters of cow milk in these this paste. All ingredients are cooked at low fire up to Ghrita Paka Siddhilakshana.

Table 1: Composition of *Phalaghrita*.

S.NO.	Name of contains	quantity of contains
1.	<i>Manjistha - Rubia cardifolia</i>	12gm
2.	<i>Kushta- Aussurea lappa</i>	”
3.	<i>Tagara- Valeriana Wallichii</i>	”
4.	<i>Sharkara- Sugar</i>	”
5.	<i>Vacha- Acorus Calamus</i>	”
6.	<i>Haridra- Curcuma longa</i>	”
7.	<i>Daru Haridra- Berberis Aristrata</i>	”
8.	<i>Madhuyathi- Glycirriza Glabra</i>	”
9.	<i>Meda- Polygonatum Cirrhifolium</i>	”
10.	<i>Triphala- Haritaki, Vibhitaki, Amlaki</i>	”
11.	<i>Dipyaka- Trachyspermum Roxburghianum</i>	”
12.	<i>Katurohini- Picrorrhiza Kurroa</i>	”
13.	<i>Payasya- Ipomeamauritiana</i>	”
14.	<i>Hingu- Asafoetida</i>	”
15.	<i>Kakoli- Roscoeaprocera</i>	”
16.	<i>Ashvajigandha- Withamnia Somnifera</i>	”
17.	<i>Shatavai- Asparagus Racemous</i>	”
18.	<i>Ghrita- Ghee</i>	768 gram
19.	<i>Kshir</i>	3.072 liters

Composition of Folic acid

Folic acid is a man-made form of B vitamin called Folate. Folate play an important role in the production of red blood cells and helps to prevents neural tube of baby's brain and spinal cord. The recommended daily intake level of folate is 400 micrograms from foods or dietary supplements.^[11]

Table 2: Management.

Drug	Dose	Duration
<i>Phalaghrita Abhyantarpan</i>	2 table spoon twice a day at morning and evening with milk	Throughout the treatment.
Tablet Folvite	5 mg OD dose at night	”

Table 3: Follow ups.

No. of follow up	Complains and t/t	Advice
1 st day(11/01/2017)	C/o -willing for child T/t– 1. Phalaghrita Abhyantarpan 2. Tab. Folvite 5 mg	<i>Advice all Investigation- CBC, Urine –R, BSL –R , Sickling E& L, blood grp, BT, CT, HIV 1 &2, HBsAG, VDRL, TSH, USG of Abdomen & pelvis</i>
1 st follow up(08/02/2017)	No any complaints All investigations - normal T/t – Same treatment	Advice Ovulation study- From the 14 th days of ovulation & advice Normal coitus during ovulation period.
2 nd follow up(16/02/2017)	No any complaints T/t- same treatment	On 14 th day Rt. Ovary NO DF Lt. ovary NO DF ET- 8.2 mm Free fluid – NO
3 rd follow up (18/02/2017)	No any complaints T/t- same treatment	16 th day Rt. Ovary 8*5 mm Lt. Ovary 9*5mm, 8*5mm ET- 9.7 mm Free fluid- NO
4 th follow up (20/02/2017)	No any complaints T/t- same treatment	20 th day Rt. Ovary 8*5 mm Lt. Ovary 9mm, 8mm ET- 10 mm Free fluid- NO
5 th follow up(08/03/2017)	H/O Amenorrhea since 1 month 7 days	Urine pregnancy test positive. USG of Obstetric advised

OBSERVATION

A female patient of primary infertility was taken for study after proper clinical and laboratory investigation. This case was thoroughly examined to rule out the cause of Infertility but there is no specific cause of Infertility. The effect of the treatment was studied to evaluate its efficacy in the management of *Vandhyatva. Abhyantarpan of Phalaghrita* was given in the dose of 2 tsf twice a day with milk and tab. Folvite 5mg once a day for one month and continued in second month also. In second month ovulation study was advised from 14th day of menses and this study is continued up to 20th day of menstrual cycle with advice of natural coitus during ovulation period. In third month patient was came with history of amenorrhea of one month seven days. Urine pregnancy test was positive. USG was advised which showed a single live intrauterine gestation of 5 weeks 5 days. Fetal pole and cardiac activity was noted. During treatment patient didn't have any complications.

DISCUSSION

- 1) *Phalaghrita - Abhyantarpan of Phalaghrita* is the most superior and acceptable drug in Infertility. It acts on *Vatadosha of Garbha ashaya*.^[12] It nourished the endometrium layer

of uterus for development of fetus. According to Ayurveda Ghrita is tridoshaghna due to its properties.^[13] Milk is also Vata pitta shamaka Jivaniya and Rasayana.^[14] These medicated *ghrita* i.e. *Phalaghrita* are used as *Balya*. Since *Balya* refers to gain in physiological strength which indicates in Atony of uterus and under developed uterus.^[15] Its action having *Prajasthapana* and *yoni Pradoshanashaka*. *Phalaghrita* was given *Abhyantarpan* in dose of 2 tsf with milk twice a day continuously. *Abhyantarpan* of *Phalaghrita* works as *Shaman Chikitsa* on *Dusta Dosha Dhatu of Garbhashaya*.

- 2) Folic acid – There have been studies done that show that healthy women who were having problems in conceiving due to ovulation problems had fewer problems when taking a folic acid supplements. Severe folate deficiency may cause infertility or even sterility. A long recognized reduction in the incidence of neural tube defects with folic acid supplementation before and during pregnancy.^[16] New evidence of increases risk of autism and diabetes associated birth defects with lack of folic acid supplementation during pregnancy.^[17]

CONCLUSION

Infertility is not a disease but a manifestation of some disease. Thus the treatment is directed to eradicate the root cause of underlying diseases. The basic principle of *Ayurveda* science is to removal of cause is the main treatment. Thus it can be concluded that *Abhyantarpan* of *Phalaghrita* is effective in treatment of Primary Infertility by suppression of kupita apan vayu and thus helps in conception. Folic acid helps fertility in women also called as prenatal vitamin because it gives before and during pregnancy. It also helps to prevent birth neural tube defects in babies. Thus Women who take folic acid supplements everyday have a better chance of getting pregnant. There is further study needed on a large scale to confirm the effect of *Phalaghrita* and folic acid in Vandhyatava (Primary Infertility).

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