



ROLE OF LASUNADI GHRITA ORAL AND LASUNADI TAILA UTTARBASTI IN BANDHYATVA (FEMALE INFERTILITY)

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ABSTRACT

Infertility is a worldwide reproductive health challenge that affects the personal, social, and mental health of the affected couple. In *Ayurvedic* classics, *Bandhyatva* has not been described as a separate disease, but it's the only symptom i.e., failure to achieve pregnancy has been described under various conditions like due to disease of *Yoni*, abnormalities of *Artava*, etc. *Acharya Sushruta* described four essential factors for conception: *Ritu*, *Kshetra*, *Ambu*, and *Beeja*. In the present study, all the factor is taken up for the clinical trial. *Lasunadi Ghritha* oral and *Lasunadi Taila Basti* which have been mentioned in *Kashyapa Samhita* "*Kalpa Sthana*" and "*Lasunakalpa Adhyaya*", are indicated in the treatment of *Bandhyatva*. We selected *Lasunadi Ghritha* oral and *Lasunadi Taila Uttarbasti*. The present study was designed to establish an *Ayurvedic* way of management of *Bandhyatva* (Female infertility). The treatment protocol included *Lasunadi Ghritha* 6 gm B.D. with *Bhojya* (routine diet) for 3 months with *Lasunadi Taila* intrauterine *Uttarbasti* was administered in each cycle for 5 days after cessation of menstruation for three consecutive cycles. The total study period was 4 months, during which treatment was given for 3 consecutive menstrual cycles, and follow up done for the next 1 month. For this study, 22 patients were selected on the basis of inclusion and exclusion criteria, in which only 17 patients completed the trial. In subjective parameters, a Statistically significant result was found in the Duration of menstruation, Quantity of bleeding on 2nd day of menstruation, and Pain associated with Menstruation while a statistically insignificant result was found in the Interval of menstruation, and objective parameters statistically significant result was found in Ovulation (follicular size), Spinnbarkeit test in the mid-cycle of menstruation, Endometrial thickness while the statistically insignificant result was found in Tubal factor. During the treatment, 3 patients got conceived.

Keywords: Bandhyatva, Lasunadi Ghrita, Lasunadi Taila Uttarbasti, Infertility.

INTRODUCTION

The existence of the human race revolves around the woman who is also assigned the name “Janani” because of her power to bring new life into the universe. Infertility is a worldwide challenge for millions of couples. Besides being a health issue, it is more of a social problem that affects the personal, social, and mental health of the affected couple due to changing social environment, professional life, and scholastic accomplishment. For women, motherhood is not just an establishment of status and power; it is the only opportunity for women to ensure their conjugal security. Infertility is defined as the inability of a couple to achieve conception after 1 year of unprotected coitus.¹ In recent years, the prevalence of infertility has increased up to an estimated 10-15% of a couple of reproductive age. In which female is directly responsible in 40-55% of cases.² In Ayurvedic classics, Infertility can be correlated with *Bandhyatva*. *Acharya Charaka* describes *Vandhya* under *Beejansha Dushiti*.³ *Acharya Sushruta* has used the term *Bandhya* for the woman whose *Aartava* is destroyed,⁴ and *Bandhyatva* have included in the clinical features of injury to *Aartavavaha Srotasa*.⁵ *Acharya Harita* has defined *Vandhyatva* as failure to achieve a child rather than pregnancy because he has included *Garbhasravi* and *Mritvatsa* also under the classification of *Vandhya*.⁶ Essential factors for conception are; *Ritu* (season or fertile period), *Kshetra* (healthy reproductive organs), *Ambu* (proper nutrient fluid), and *Beeja* (sperm/ovum) described in *Sushruta Samhita*.⁷ We can ensure motherhood when these four factors are fulfilled. *Ayurveda* is a holistic science that gives importance to lifestyle, regimens, prevention, and treatment modalities alike. It emphasises ways to maintain a healthy lifestyle, to prevent diseases through close attention to balance *Doshas*, performing the right deeds, taking proper diet, use of herbs, therapies like *Uttarbasti*, etc. *Acharya Kashyapa* says if a couple failed to get a progeny naturally after dynamic marital life, it should be considered also

as the effect of past life deeds and they should be treated.⁸ The *Ancient* system of *Ayurvedic* medicine advocated various therapies and oral drugs for the management of *Bandhyatva*. *Acharya Kashyapa* has quoted “A female who regularly consumes *Lasuna* never remains infertile.”⁹ *Lasunadi Ghrita* oral and *Lasunadi Taila Basti* which has been mentioned in *Kashyapa Samhita* “*Kalpa Sthana*” “*Lasunakalpa Adhyaya*”, indicated in the treatment of *Bandhyatva*.¹⁰ *Bandhyatva* is a disease in which the main vitiated *Dosha* is *Vata*.¹¹ Keeping the same in mind, we planned to carry out the research work in *Bandhyatva* with *Lasunadi Ghrita* for oral use and *Lasunadi Taila Uttarbasti* for intrauterine use, as a major ingredient of drug *Lasuna* is the best for treating *Vata Vikaras* by *Snigdha*, *Pichchhila*, *Guru* and *Ushna Guna*. *Uttarbasti* is considered to be the best treatment for *Vata*. *Acharya Charaka* has mentioned that *Ritukala* is the appropriate time for the administration of *Uttarbasti*, as during this period the *Yoni* or *Garbhashaya* remains *Aavarana Rahita*, thus receives the drug easily and hence normalizes the *Vata* by which the *Yoni* retains the *Garbha* quickly.¹² So; *Uttarbasti* was selected for the present study.

AIMS AND OBJECTIVES:

- To study *Bandhyatva* and infertility from various sources of *Ayurvedic*, modern medical science texts, previous and ongoing research work, journals, and publications.
- To study the effect of *Lasunadi Ghrita* oral and *Lasunadi Taila Uttarbasti* in

Materials & Methods:

□ PLAN OF STUDY

1. Conceptual study: All the literature regarding *Bandhyatva* from classical Ayurvedic textbooks and regarding infertility from modern textbooks were collected. Both literatures were also collected, studied, and documented from previous and ongoing research works, journals, and publications for the present study.
2. Clinical study:

Selection of patients: For the present study 22 patients were selected after bilingual written consent for study but only 17 patients completed the trial of the study and follow-up period of 1 month follow up. Details about the family history, past illness, menstrual history, obstetric history, and clinical findings relevant to *Dosha, Dushya, Agni, Srotasa*, etc were observed and records were maintained in a detailed Performa.

Drug source: Required raw drugs were collected and identified by the Department of Dravyaguna, Rishikul Campus Haridwar, Uttarakhand Ayurvedic University. The *Lasunadi Ghrita* and *Lasunadi Taila* were prepared in Hans Pharmacy of Premnagar Ashram (Sidkul), Haridwar.

□ CRITERIA FOR SELECTION OF PATIENTS:

• Inclusion criteria:

1. Married female patients of reproductive age (20-40 years) with the husband's normal Semenogram.
2. Female having complaint of failure to conceive within one or more years after regular unprotected coitus.
3. Patients of primary & secondary types of infertility were included in the study.

• Exclusion criteria:

1. Patients suffering from systemic diseases like anaemia (Hb<10gm/dl), Hypertension, Diabetes mellitus, T.B., Heart disease, Thyroid dysfunction, and Bleeding disorders.
2. Couple having H/O congenital anomaly, chromosomal defect.
3. Patient with H/O pregnancy with congenital anomaly, chromosomal defect.
4. Patient having abnormal uterine growth such as fibroids, polyps, and ovarian cysts (>3cm).
5. Patient having sexually transmitted diseases.
6. Secondary infertility with bad obstetrics history.
7. Excluding male infertility.

- Diagnostic criteria: Diagnosis made on the basis of the following criteria-

1. Detailed history according to Performa, *Prakriti Parikshana*, general and systemic gynaecological examinations, and investigations.
2. The patient has proper developed secondary sexual characters like breasts fully developed, and normal hair distribution on the axilla & pubis.
3. On P/S examination patient had a normal vaginal canal with no infection or lesion on the cervix.
4. On P/V examination patient has a position of the uterus either AV or RV, normal size of the uterus, mobility of the uterus, clear and non-tender fornices.

Criteria for withdrawal:

- Personal matters
- Associated or inter-current illness
- Other difficulties
- Aggravation of symptoms

INSTRUCTION TO PATIENTS: Counselling of patients done about the fertile period, the effect of drugs, and procedures, and instructed about *Aahara* and *Vihara*.

➤ *Aahara:* Patients were advised to take a normal diet, and to have more green leafy vegetables and fruits. To avoid spicy food, overeating, fried, junk, and fermented items during treatment.

➤ *Vihara:* During the study, patients were advised to LH kit test everyday morning in the mid-cycle, when the colour change in the test line was observed, then advised for intercourse on every alternate day including that day to achieve conception.

INVESTIGATIONS:

- Routine investigations-
- Semen analysis of husband for excluding male infertility.
- Haematological- Blood group, Hb%, TLC, DLC, ESR, RBS, Blood urea.
- Serological test- HIV I & II, HBsAg, VDRL, Lipid Profile.
- Urine Test: Routine & Microscopic.
- Specific investigations-

- Hormonal profile (Serological test): Thyroid Profile, FSH, LH, Progesterone, Prolactin.
- USG -TVS: Follicular study for ovulation, for the condition of the uterus and adnexa.
- HSG (Hysterosalpingography): For tubal patency
- LH kit for ovulation
- Spinnbarkeit Test (in the mid cycle) for cervical mucus consistency.

□ STUDY DESIGN: The patients with *Bandhyatva* were treated in following manner:

- Type of Study: A randomized open trial.
- Level of Study: OPD and IPD level.
- Period of Study: Total 4 months- treatment given for 3 consecutive menstrual cycles and follow-up done for next 1 month.
- Duration of treatment: 3 months.
Oral therapy for 3 months with intrauterine *Uttarbasti* was administered in each cycle for 5 days after cessation of menstruation for three consecutive cycles.
- Method of treatment:
 - Selected drugs: *Lasunadi Ghrita* and *Lasunadi Taila*. (का. लशुनकल्पाध्याय 93-97)
 - Form of medicine: *Ghrita* for oral use and *Taila* for *Uttarbasti*.

Composition of medicine: Contents of *Lasunadi Ghrita*:

Main ingredients: *Lasuna*

SCORING PATTERN FOR ASSESSMENT:

SUBJECTIVE PARAMETERS:

Table No 1: Duration of menstruation:

Grade	Duration of menstruation
Grade 0	3-5 days
Grade 1	2 days
Grade 2	1 day
Grade 3	spotting only for 1 day

Table No 2: Interval of menstruation:

Grade	Inter menstrual periods days
Grade 0	21-35 days
Grade 1	36-45 days
Grade 2	46-55 days

Other ingredients:

- *Gau-Ghrita*
- *Gau-Dugdh*
- *Deepaniya Dravyas*: *Pippali*, *Pippalimoola*, *Shringvera*, *Amlavetasa*, *Ajmoda*.
- *Jeevaniya Dravyas*: *Madhuka*, *Mudagparni*, *Mashparni*, *Jeevanti*, *Vidari*, *Shatavari*, *Ashvagandha*.
- *Vrishya Dravyas*: *Kapikacchu*, *Musli*, *Shatavari*, *Makhann*, *Taalmuli*.
- *Dashmoola*: *Bilva*, *Gambhari*, *Patla*, *Agnimantha*, *Shyonaka*, *Salaparni*, *Prishnaparni*, *Kantkari*, *Vrihati*, *Gokshura*

Contents of *Lasunadi Taila*:

Main ingredients: *Lasuna*

Other ingredients: *Tila Taila*, *Gau-Dugdh*, *Deepaniya Dravyas*, *Vrishya Dravyas*, *Jeevaniya Dravyas*, *Dashmoola*.

➤ Dose of medicine:

Lasunadi Ghrita: 6 gm B.D. with *Bhojya* (routine diet) at the time of breakfast and dinner.

Lasunadi Taila for intrauterine *Uttarbasti*: 5ml of *Taila* per sitting after cessation of menstruation for 5 days in each cycle.

➤ Route of administration: ~ Oral for *Lasunadi Ghrita*. ~ Intrauterine *Uttarbasti* for *Lasunadi Taila*.

- Follow-up: For another consecutive cycle after the completion of the treatment period.

Grade 3	≥56 days
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Table No 3: Quantity of bleeding on 2nd day of menstruation:

Grade	No. of pads used
Grade 0	3 pads
Grade 1	2 pads
Grade 2	1 pad
Grade 3	No pad (spotting)

Table No 4: Pain associated with menstruation:

Grade	Severity of pain
Grade 0	No pain
Grade 1	Bearable pain
Grade 2	Requirement of oral analgesics
Grade 3	No relief after analgesic

A. OBJECTIVE PARAMETERS:

❖ Table No 5: Ovulation (Follicular Size):

Grade	Follicle size/ Ovulation
Grade 0	Rupture of the follicle (ovulation)
Grade 1	18-23mm
Grade 2	12-17mm
Grade 3	<12 mm follicle

x Table No 6: Spinnbarkeit test (in mid cycle):

Grade	Length of cervical mucus thread in cm
Grade 0	≥9cm
Grade 1	5 to 8cm
Grade 2	1 to 4cm
Grade 3	<1cm

Table No 7: Endometrial thickness:

Grade	Endometrial thickness in mm
Grade 0	>8mm
Grade 1	8-6mm
Grade 2	<6-4mm
Grade 3	<4mm

Table No 8: Tubal factor (Hysterosalpingography for Tubal patency):

Grade	HSG for tubal patency
Grade 0	Both tube are patent, and free spillage from both tubes
Grade 1	Dye inserts bilaterally but there is spillage from either tube on delayed imaging
Grade 2	Blockage present on either side of the fallopian tube
Grade 3	Both tubes are blocked

The percentage improvement of individual patients was calculated as follows:

- All the BT scores of the above-mentioned parameters of the patient were recorded.
- All the AT scores of the above-mentioned parameters of the patient were recorded.

➤ The overall percentage improvement of each patient was calculated by the following formula: $\frac{\text{Total BT} - \text{Total AT}}{\text{BT}} \times 100$

➤

STATISTICAL ANALYSIS:

The obtained results were interpreted as follows:

Insignificant or not significant (NS)	p>0.05
Significant (S)	p<0.05
Highly Significant (HS)	p<0.001

Observation of subjective parameters and objective parameters were analyzed by Wilcoxon Signed Rank Test.

RESULTS:

EFFECT OF LASUNADI GHRITA ORAL AND LAUNADI TAILA UTTARBASTI IN SUBJECTIVE PARAMETERS

Table No 9:

Subjective	Mean		Median		SD		Wilcoxon W	P-Value	% Effect	Result
	BT	AT	BT	AT	BT	AT				
Duration of menstruation	0.88	0.29	1.0	0.0	0.68	0.46	-3.162 ^a	<0.05	66.67	Sig
Interval of menstruation	0.35	0.18	0.00	0.00	0.59	0.38	-1.732 ^a	>0.05	50.00	NS
Quantity of bleeding	1.71	0.53	2.00	0.00	1.07	0.61	-3.025 ^a	<0.05	68.97	Sig
Pain associated with Menstruation.	0.82	0.18	1.00	0.00	0.78	0.38	-3.051 ^a	<0.05	78.57	Sig

ASSESSMENT OF RESULT OF LASUNADI GHRITA ORAL AND LAUNADI TAILA UTTARBASTI IN OBJECTIVE PARAMETER

Table No 10:

Objective	Mean		Median		SD		Wilcoxon W	P-Value	% Effect	Result
	BT	AT	BT	AT	BT	AT				
Ovulation (Follicular size)	1.3	0.4	2.0	0.0	1.0	0.9	-2.889 ^a	<0.05	69.57	Sig
Cervical factor (Cervical mucus consistency by Spinnbarkeit test)	0.8	0.3	1.0	0.0	0.8	0.5	-2.714 ^a	<0.05	60.00	Sig
Uterine factor (Endometrial thickness)	0.9	0.2	1.0	0.0	0.7	0.4	-2.810 ^a	<0.05	68.75	Sig
Tubal factor (Tubal patency by HSG)	0.7	0.5	0.0	0.0	1.2	1.1	-1.000 ^a	>0.05	25.00	NS

Table No 11: OVERALL EFFECT OF THERAPY-BASED ON SCORING PATTERN

Overall effect	No. of the patient (N=17)	%
Completely cured. (Conception-100%)	3	17.6%
Marked improvement. (75% to <100% relief)	3	17.6%
Moderate improvement (50% to <75% relief)	6	35.3%

Mild improvement (>25% to <50% relief)	4	23.5%
Unchanged (Up to 25% relief)	1	5.9%

DISCUSSION

In our classics, *Acharyas* have not mentioned *Samprapti* of *Bandhyatva*, but on the basis of *Dosha* it can be highlighted the design of the following aspects:

Samprapti Ghataka in *Bandhyatva*: The specific aetiological factors cause the provocation of *Vata*, *Pitta*, and *Kapha*. *Vata* the main *Dosha* vitiates with its causative factors also. *Vata* on account of its *Sukshmatva Guna* is the impeller of the other two *Doshas*. Due to *Nidana Sevana*, *Kapha* and *Vata* get vitiated which causes *Agnimandya*. *Mandagni* is the main cause of *Ama* formation. It adheres to *Srotas* and forms *Avarodhatmaka Dushti*. *Ama* spreads throughout the body, propelled by the vitiated *Vata* along the *Rasavaha Srotasa*. The *Dhatvagnimandya* causes the *Kshayatmaka* effect on the *Rasa Dhatu* and its *Updhatu* i.e., *Artava* (*Bahipushpa* and *Antapushpa*). The vitiated *Vata* along with *Heena Pitta* also causes the *Artavakashya*.¹³ This *Ksheena Artava* (deficient hormones) leads to improper formation of endometrium thus leading to implantation failure and poor cervical mucus quality which hinder the penetration of sperms. The vitiated *Apanavayu* and vitiated *Kapha* can cause *Avaranatmaka Dushti* in *Beeja Granthi*¹⁴ causing *Abijotsarga*. Due to *Dosha Prakopaka Aahara Vihara Sevana*, the vitiated *Kapha* along with *Vitiated Vata* due to *Ruksha, Daruna & Khara Guna* of *Vata* and *Sthira Guna* of *Kapha* causes the *Avarodhatmaka Dushti* i.e., Tubal blockage.¹⁵ Vitiated *Vata* agitates the other two *Doshas* and throws them in the place having *Kha-Vaigunya* in *Aartavavaha Srotas*. These *Dushita Tridosha* may get *Sthana Samshraya* into *Garbhashaya* and *Aartavavaha Dhamaniya* and causes anovulation, implantation failure, poor cervical mucus quality, and tubal blockage which hamper the normal process of conception which leads to *to Bandhyatva*.

Discussion on the selection of Drug and therapy:

Talking about drug and therapy selected for the study as *Lasunadi Ghrita* oral and *Lasunadi Taila Uttarbasti* for the treatment of *Bandhyatva*. *Bandhyatva* is a disease in which the main vitiating *Dosha* is *Vata*. *Lasuna* is best for treating *Vata Vikaras* and all types of *Avarana* except *Rakta* and *Pitta*.¹⁶ *Uttarbasti* is considered to be the best treatment for *Vata*. *Lasunadi Ghrita* and *Lasunadi Taila* have *Katu-Tikta Rasa*, *Snigdha, Tikshna Guna, Ushna Virya*, and *Katu Vipaka* so, they have *Vata-Kapha Shamaka, Deepana-Pachana, Srotoshodhaka, Aartavajanana, Balya, and Rasayana Karma*.

INTERPRETATION ON THE BASIS OF THE RESULT:

Lasunadi Ghrita and *Lasunadi Taila Uttarbasti* have *Katu, Tikta Rasa, Tikshna Guna, Ushna Virya*, and *Katu Vipaka* so they have *Vata Kapha Shamaka, Amapachaka, Sroto-shodhaka, and Aartavajanana* properties. Due to its *Amapachaka* property, *Lasunadi Ghrita* helps to correct *Jatharagni* to normalize proper formation of *Aahara Rasa* and subsequently *Updhatu* i.e., *Artava* formation and by *Sroto-shodhaka* property of *Lasunadi Taila Uttarbasti Apana Vayu* function well leading to proper *Parvatan* of *Aartava*¹⁷ which normalize and regulate the menstrual cycle and by *Vata Shamaka* and *Vedana-sthapana* properties, results in the reduced pain during menstruation.

Effect of therapy on objective parameters:

- Ovarian factor (Ovulation and follicular size): Statistically analyzing the effect of treatment on ovulation and follicular size shows a statistically Significant ($p < 0.05$) result. This may be because of the removal of *Sanga* by properties of *Lasunadi Ghrita* and *Lasunadi Taila* by *Ama Pachaka* and *Srotoshodhaka* properties of *Lasuna*. After the removal of *Sanga* created by vitiating *Kapha* and *Ama* in *Artavavaha Srotas*. *Apana Vata* functions well after *Lasunadi Taila Uttarbasti* leading

to normal *Rajah Pravritti* which leads to maturation of follicle and ovulation.

- Uterine factor (Endometrial thickness): After treatment maximum of 70.6% of patients' endometrial thickness showed >8mm i.e., conceptive endometrium¹⁸ Statistically analyzing the effect of treatment on endometrial thickness shows statistically Significant ($p < 0.05$) result. An increase in endometrial thickness occurs during the proliferative phase which is related to *Kapha Dosha*. *Lasunadi Ghrita* and *Lasunadi Taila Uttarbasti* have *Snigdha* and *Pichchhila Guna* it increases these *Guna* of *Kapha* there by it enhances proper proliferation of endometrium and increases the quality of uterine receptivity so that correct further implantation.
- Cervical factor (cervical mucus consistency by Spinnbarkeit test): Statistically analyzing the effect of treatment on mid-cycle Spinnbarkeit test shows statistically Significant ($p < 0.05$) result. It may be due to *Lasuna* having phytoestrogenic properties.¹⁹ Thus, it exerts both estrogenic and antiestrogenic activity. It acts in both high estrogenic and low estrogenic conditions. so, cervical mucus becomes more favourable for sperm penetration due to the proper support of hormones.
- Tubal factor (Tubal patency by HSG): Statistically analyzing the effect of treatment on the tubal factor (Tubal patency by HSG) shows statistically Insignificant ($p > 0.05$) results but one patient got conceived during treatment. It may be due to *Lasunadi Ghrita* and *Lasunadi Taila* removing the obstruction due to its *Teekshna*, *Ushna*, and *Vatakaphahar* properties. So, it may be useful in infertility caused by tubal obstruction.

Probable mode of action of drug and therapy:

Probable mode of action of *Lasunadi Ghrita*: *Lasunadi Ghrita* is having *Deepaniya* & *Pachaniya Karma* due to *Katu*, *Tikta Rasa*, and *Ushna Guna* which helps to correct *Jatharagni* which normalize the proper formation of *Ahara Rasa* and subsequently *Updhatu*. Thus, *Updhatu Artava* also begins to produce from the properly formed *Rasa Dhatu*. Due to its *Tikshna Guna* and *Katu Vipaka*, it acts as *Sroto-*

shodhaka and removes the *Sanga* of *Artavavaha Srotas* i.e., *Garbhashaya* and *Artavavahi Dhamniya*. As *Artavavaha Srotas* become free from *Avarodh* or *Avarana* of vitiated *Kapha* and vitiated *Vata* comes to a normal state. Thus normalize *Apana Vata* then functions normally causing the proper formation of the endometrium, *Artava Pravritti* (menstruation), and normal *Beeja Nirmana* (ovulation). *Sheeta Guna* of *Gau-ghrita* compensates the *Tikshna*, *Ushna Guna* for its content. It antagonizes the adverse effect of *Tikshna Dravyas* and regulates the menstrual flow and due to *Rasayana*, *Jeevaniya*, *Balya*, and *Vrishya* properties of *Gau-ghrita* helps in *Dhatupushti* and in balancing *Vata Dosha*. Probable mode of action of *Lasunadi Taila Uttarbasti*: Mode of action of *Purvakarma* in *Uttarbasti*: *Snehana* and *Swedana* are very important procedures. *Uttarbasti* deals mainly with the *Apana Vayu*, as the nearby situated organ. *Snehana* and *Swedana* prior to *Uttarbasti* do its *Anulomana* and thus, *Uttarbasti* becomes more efficacious. Besides this, chances of any type of complications are also less, if *Vatanulomana* is done prior to the procedure. Other than it, *Snehana* and *Swedana* just prior to *Uttarbasti* relax the abdominal muscles, so that the uterus does not get irritated by the instillation of medicine from outside. If it is not relaxed adequately, it may contract at once and may not allow the instillation of any of the medicine. *Snehana* and *Swedana* before *Uttarbasti* also lessen the pain during and after the procedure. *Pradhana Karma*: *Acharya Sushruta* quoted that *Basti* acts by its *Virya*, i.e., the action of *Uttarbasti* is found by the *Virya* of drugs used for *Basti*. *Uttarbasti* may also stimulate certain receptors in the endometrium leading to the correction of all the physiological processes of the reproductive system. *Lasunadi Taila* has *Garbhashaya Shodhaka* property when entering through the intrauterine route, due to *Sukhsma* and *Tikshna Guna* of *Lasunadi Taila*, it enters in the microchannels (*Srotas*). It clears the *Srotosanga* of *Aartavavaha Srotas*. Thus, making normal functioning of *Apana Vayu* which regulates normal *Rajah Pravritti* (menstrual flow) and *Beeja Nirmana* (ovulation) thus; it enhances proper proliferation of endometrium and increases

the quality of uterine connectivity so that correct further implantation and due to proper support of hormones, it enhances the quality of cervical mucus consistency for sperm movement and penetration. *Uttarbasti* directs acts on *Garbhashaya*, so it removes the blockage of tubes due to its *Teekshna*, *Ushna*, and *Vatakaphahar* properties of *Lasunadi Taila*.

CONCLUSION

Artavavaha Srotas covers all the physiological, functions, and anatomical structures of female reproduction. *Vata Dosha* is mainly responsible for *Bandhyatva*. The composition has *Lasuna* with *Sneha* used on a systemic and local level. it corrects all responsible factors for female infertility and boon for female disorders. *Lasunadi Ghrita* and *Taila* work by its *Vrishya*, *Garbhashaya Shodhaka*, and *Vatanulomana* properties. Drugs facilitate the normal function of *Vata* predominantly *Apana Vata* resulting in proper *Artava Vahana* (*Antah pushpa* and *Bahipushpa*) and it is *Nishkramana* (ovulation and emmenagogue). It regularizes the metabolism of hormones due to its *Deepana Pachana* on *Jatharagni* and *Dhatvagni* levels resulting from folliculogenesis and ovulation. due to its *Artavajanana*, *Balya*, *Brimhana*, and *Rasayana* properties, it enhances proper proliferation which helps to regulate normal menstrual flow and increases the quality of uterine receptivity so that correct further implantation.

The drug has phytoestrogenic properties, it exerts both estrogenic and antiestrogenic activity. It acts in both high estrogenic and low estrogenic conditions. so, cervical mucus becomes more favourable for sperm penetration due to the proper support of hormones.

Tikshna, *Ushna* and *Vatakaphahar's* properties of the drug are useful in *Aavaranajanya Vyadi* So, so they may be useful in infertility caused by tubal obstruction.

Recommendation:

- To get more accurate conclusions and better results in conception, the study should be carried out with a large sample size with a longer duration.
- To get more results on tubal factor sample size and duration of treatment should be increased.
- Yoga should also be added for treatment to correct psychology as well as HPO-axis disturbances.

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