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# ROLE OF UTTARBASTI IN STRI VANDHYATVA W.S.R. FEMALE INFERTILITY IN DIFFERENT RESPONSIBLE FACTORS

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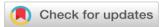
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## **ABSTRACT**

Failure to conceive after one or more years of regular, unprotected coitus is known as vandhyatva. The female component accounts for 40-55% of the cases, making it a significant problem in the modern day, given the rising number of occurrences brought on by a confluence of unhealthy environmental, social, psychological, and nutritional variables. The most frequent reasons for infertility in women are uterine, tubal, and ovulatory factors, among others. According to Ayurveda, Vata is the primary cause of all illnesses about the female reproductive system, including Vandhyatva. A key component of treating female vandhyatva is panchakarma. In the old literature of Ayurveda, Basti Karma is regarded as the most significant treatment for Vataja diseases; consequently, Uttarbasti is highlighted here.

**Keywords:** ovulatory factors, tubal factors, Yava kshara, Hormones, Beejotsarga

#### INTRODUCTION

The term *Vandhyatva* is described in *Ayurvedic* texts as failure to acquire successful pregnancy, which is described as Infertility in modern texts. *Vandhya* as consequences of abnormality in *Bijamasa*, *Ritu*(season or fertile periods), *Kshetra*(uterus), *Ambu*(proper nutrition) *Bija*(sperm, ovum) are significant elements involved in the process of conception followed by healthy pregnancy. Therefore, for any abnormalities, avoidance of these factors can lead to the condition of *Vandhyatva*.

Ayurveda regards Vata as a physiological force because it is in charge of the bodily systems operating normally. Vandhyatva, being a Vataja disorder, demands Basti karma, which is having Sthanika Snehana and Brimhana action. In various gynaecological disorders, Basti karma has been advised through an intrauterine route in the form of Uttarbasti. Uttarbasti helps in expelling the vitiated dosha of garbhashaya and its associated structures, thereby eradicating the morbidity and *yonivyapada* of female urogenital system. It rectifies female Vandhyatva along with the factors associated to it. The formulations used in Uttarbasti i.e. Ghee or medicinal oil have the ability to strengthen and energize the reproductive organs while also purifying the uterus. Because of the medications' localized effects as well as its rapid penetration and dissemination capabilities, it enters the little passageways and is readily absorbed. It is the best medium for the drug to cleanse the uterus, to reach the tubal lumen and remove the blockage, to strengthen and activate the

ovulatory function receptivity and to increase the hormone sensitivity necessary for the reproductive system's regular operation.

# As for Figo (International Federation of Gynecology and Obstetrics) main three factors responsible for infertility are:-

1. Ovulatory dysfunction - 30-40%

2. Tubal disease - 25- 35%

3. Uterine factors - 10%

Due to these factors, ART (Assisted Reproductive Technology) is increasing nowadays.

<u>AIMS:</u> To study the Comprehensive collection of different *Uttar basti* in Stri *Vandhyatva* w.s.r female infertility in different responsible factors.

### **OBJECTIVE**

- 1. To thoroughly comprehend *Vandhyatva* by reviewing *Ayurveda*.
- 2. To collect more about the role of *Uttarbasti* in *Vandhyatva* main factors responsible for female infertility.
- 3. To collect and compile the medications/*Aushadha* in increasing cases of the main factors of *Vandhyatva* nowadays.

## **METHODOLOGY**

1 To review thoroughly about *Vandhyatva*, especially in women, various *Ayurvedic* classic like *Nighantu*, *Samhita*, and Journals, and web sources is screened thoroughly.

2. Literature is collected from different classic text-books of *Ayurveda*, Journals and dissertations.

## Role of different *Uttarbasti* in Main3 factors of female infertility.

1 Ovarian factors	1. Lasunadi taila Uttarbasti.
	2. Shatavari taila Uttarbasti.
(Vrithapushpa /	3. Shatapushpa taila Uttarbasti.
Anovulation)	4. MahaNarayana taila Uttarbasti
	5. Krishna tila
	6. Arkapushpataila
	7. Prajasthapana gana siddha Ghrita
2 Tubal factors	1. Apamarga Kshara taila Uttarbasti
	2. Kumari taila Uttarbasti
(Artavavahasrotas)	3. Yavakshara taila Uttarbasti
	4. Narayan taila

	5. Panchgavya Ghrita
	6. Dhanvantari taila
	7. Kasisadi taila
3 Uterine factors	1. Bala taila
	2. Phala Ghrita
(Kshetra)	3. Kshara taila
	4. Brihatshatavari Ghrita
	5. Varanadi Ghrita
	6. Palasha Kshara taila

# **Outcomes of different formation Uttarbasti**

# 1. Ovarian factor

1. Lasunadi Taila Uttarbasti.	• Ovulation factors—Lasunadi taila has Deepana, Pachna ,Vatanulomaka,
	Ushna property which enhance ovulation.
	• Lasunadi Taila in menstrual disorders—Lasunadi taila is known for its Ushna and Teekshna qualities as well as Pitta Vardhaka by these qualities Agni will be stimulate which helps in digestion of Ama and free radicals . Formation of Ahara Rasa which later on forms the Rasa Dhatu from which the Artava formed which is very effective in case of menstrual abnormalities. Lasunadi Taila is rich in antioxidants, which can protect the ovaries from oxidative stress.
2. ShatavariTailaUttarbasti.	• Shatavari taila has Tikta Madhura Rasa, Guru, Snigdha Guna Madhura Vipaka and Sheeta Virya. It also has properties like Rejuvenative and Adaptogenic Enhances overall reproductive health, supports ovarian function, and improves the quality of the reproductive tissues. Shatavari is known to balance the hormones support the menstrual cycle and enhance fertility by improving the health of the uterus and ovaries. which may remove Sanga and Avarana leads to proper function of normalize Dhatu Updhatu Nirmana and regulating function of Beejakosha and Beejotsarga.
3. ShatapushpaTailaUttarbasti.	• Shatpushpa taila having Katu ,Tikta Rasa and Laghu ,Rukshna ,Tikta Guna effect in anovulatory cases Kapha is associated as Avarana on Vata. The Ushna Guna of drug also regulate Vata a ovulation occurs .shatpushpa taila having Deepana ,Pachna and Shaman and Grahit Kapha fight against Agnidusti and increase Dhatu Agni.
4. MahaNarayana Tai- laUttarbasti	• <i>Mahanarayana taila</i> promotes the ovarian hormones that lead to ovulation and activates <i>Vata's</i> natural activity
5. Krishna Tila Taila Uttarbasti	<ul> <li>The name Artava means "two," referring to Antah Pushpa and Bahir Pushpa, respectively.</li> <li>Both pushpas are the verbal expression of the suitable labor of Anahpushpas, which is essential for conception</li> </ul>
	• There are <i>Madhura</i> and <i>Tikta Rasa</i> . in <i>Krishna tila</i> help in nourishing and cleansing the body. <i>Krishna Tila</i> has a <i>Ushna Virya</i> . This property helps in Stimulating circulation and increasing metabolic acitivity which can help in normalizing menstrual flow.
6. Arkapushpa Taila Uttarbasti	• Arkapushpa taila has a Madhura Rasa and Ushna Virya. Arkpushpa taila balancing the doshas Improving circulation and promoting healthy menstrual function.

7. Prajasthapana Gana Siddha Ghrita	<ul> <li>Prajasthapana gana is support reproductive health and hormonal balance .I might contribute to the regularity of the menstrual cycle, potentially aiding in ovulation. They are thought to have properties that nurture and strengthen the reproductive system.</li> </ul>
8. Sheet kalyanaka Ghrita	• Sheet Kalyanaka Ghrita impacts ovarian health and help regulate hormonal levels which is crucial for regular ovulation and menstrual cycles.the nourishing and rejuvenative properties help enhance the function of ovaries, supporting the development and release of healthy eggs.

## 2. Tubal factors

I. ApamargaKshara TailaUttarbasti	• ApamargaKshara TailaVata Kapha Shamaka ,Tridoshagna having Ushna,Tikshna and Sukshma properties so that it could remove the tubal blockage.
2. Kumari Taila Ut- tarbasti	• Tubal blockage was considered as <i>Vata Kapha</i> dominated <i>Tridosha</i> condition <i>Vata</i> responsible for <i>Samkocha</i> , <i>Kapha</i> for <i>Shopha</i> and <i>Pitta Paka</i> , <i>Kumari taila</i> are highly efficacious and established for their role on manstual disorders and hormonal imbalance. <i>Kumari taila</i> that remove Tubal blockage and correct ovarian function.
3. Yavakshara Taila Ut- tarbasti	• Yavakshara taila is Katu Rasa, Ushna Virya KatuVipaka Tridoshaghna mainly alleviates Kapha Vata dosha and Sukshma properties the components have Lekhana Shodhana and Ropaka properties that is helps in removing the unhealthful tissue causing obstruction causes healing with replenishment of healthy tissue lining of uterus.
4. Narayana Taila	• The Narayanataila with its Katu, Tikta Rasa, Laghu, Ruksha Guna Ushna Virya and Katu Vipaka and Vata Kaphashamaka Doshaghnata ultimately leads to Karmas such as Deepana, Pachana, Vilayana, Anulomana, and Srotoshodhana, which produce Amapachana and Vatakapha shamana. These may re-move Sanga and Avarana, enabling Vayu to regulate Beejagranthi Karma, which in turn causes (ovulation).
5. Panchgavya Ghrita	• The Vata Kapha Shamaka and lekhana qualities of Panchagavya Ghrita led to its selection.
6. Dhanvantari Taila	• Ruksha, Daruna, and Khara gunas of Vata can cause anomalies of the fallopian tube, which can be relieved by Dhanvantari taila. All this management not only helps to get tube patency but also restores its normal physiological function. The anti-inflammatory properties of Dhanvantri taila can help reduce inflammation in the reproductive organs, enhancing blood flow, and clearing obstructions in the fallopian tubes
7. Kasisadi Taila	• Kasisadi taila properties like Ushna, Tiksha, Snigha, Lekhana and it also corrects the vatadushti by regulating the normal flow of Apanavata. Itis also mentioned that it corrects the obstruction by its kshara properties without affecting the normal anatomy of the local area. Kasisadi taila effective role in removing tubal blockage and restoration of its normal Function.

# 3. Uterine factors: - Uttarbasti Act as uterine detox causes specially with Implantation Defect.

1. Bala Taila	• Bala tail has a property of Vatshamak and AamPaachan because of its Ushna	
	Veerya. Also due to its Vyavayi and Sukshma Gunait enters into the small channels	
	and removes obstruction and clears srotas.	
	• Bala taila Brimhaniya(increases the body bulk), Balya (strengthens the body), Pra-	
	jasthapan(herbs used to cure infertility) and Vata samshaman(herbs which normalize	
	vatadosha). It has Laghu, Snigdha, Pichchhila Gunas, Madhura Rasa, Madhura	
	Vipaaka and Sheeta Virya. Because Snigdha and Madhura GunaBala taila has	

	<ul> <li>Vatashamaka properties so it is used to treat the infertility as vitiation of Vata Dosha is one of the leading factors for infertility. Due to its Snigdha and Pichchhila Guna it might be helpful to facilitate the movement of sperm in fallopian tube. Being Sheeta Veerya Bala taila also has antiflammatory property. These mentioned properties of Bala taila make it as a promising therapy for infertility basically by bringing up the fertilization and implantation.</li> <li>Bala taila might support hormonal balance, which is crucial for a healthy menstrual cycle and optimal endometrial recepetivity.</li> </ul>
2.Phala Ghrita	• Phala ghrita and its components have Deepana ,Pachna Vatanulomaka, Vrishya, Rasayana ,Ropaka properties.Phala ghrita is thought to enhance the health of the uterine lining (endometrium)making it more receptive for embryo implantation.
3.Kshara Taila	• Kshara Taila have Tridoshaghana properties ,laghu ,sukshma,vyavayi, vikasi,katu vipaka and Ushna virya and should have effective role in normal function of uterine detox.
3. Bhrihatshatavari Ghrita	• <i>BhrihatShatavari ghrita</i> nourish the reproductive tissues ( <i>Artava Dhatu</i> ) improve uterine health, and balance hormonal functions.
4. Varanadi Ghrita	• It is useful in increase Endometrium receptivity. <i>Varunadi Ghrita</i> helps in balancing the <i>Vata and Kapha dosha</i> which are often implicated in reproductive health issues. A balanced dosha state is essential for optimal uterine function.
5. Palasha Kshara Taila	• Palasha Kshara taila has the action of Ksharan and Lekhan. Therefore, it might be resulting into Kshara and Lekhan of nodular growth Taila has property of Vatashamak, Sleshmaha ,Yonishulaprashma, Yonivishodhanand the Ushna and Snigdha Guna of the taila pacifies Srotoshodhana is brought about by the enlarged Rukshatva, Kartava Guna of Vayu returning to its regular function. When instilled into uterine cavity a known place of Apanavayu, which gives direct access to the seat of Dosha Dushya Sammorchana. This directly acts on Vikrata vayu and Kapha dosha which causes Ksharan and Lekhana of Vikrutamamsa and Medodhatu and breaks the Samprapti.

# Collection of previous work done on Uttarbasti-

Sl.No.	Role of Ayurveda in Uttarbas-	Place	Topic
	ti (Dr.)		
1	Dr. Preeti Agarwal <sup>1</sup>	UttaraBasti of NarayanaTaila is help-	"Role Of Lasunadi Ghrita Oral and
		ful in	Lasunadi Taila Uttarbasti In
		Quadra Institute of Ayurveda, Roorkee,	Bandhyatva(Female Infertility)"
		Utta-rakhand, India.	
2	Dr. Rajput Shivshankar <sup>3</sup>	IPGT & RA, Gujarat Ayurved Universi-	"Effect of ApamargaKshara Tai-
		ty.	laUttarbasti in the Management of
		Jamnagar, Gujarat, India.	Infertility w.s.r. Tubal blockage"
3	Dr. KamayaniShuklaUpadh-	Ayurvedic Gynaecologist& obstetrician,	"Effect of KumariTaila Uttar Basti
	yay <sup>4</sup>	Pratapgarh, Uttar Pradesh, India	on fallopian tube blockage"
4	Dr. Hetal P. Baria, Dr. Shilpa	Institute for Post Graguate Teaching and	"Efficacy of Yavakshara Taila Utta-
	B. Donga <sup>5</sup>	Research in Ayurveda, Gujarat Ayurved	rabasti in the management of fallo-
		University, Jamnagar, Gujarat, India	pian tube blockage"
5	Dr. Suman kumari <sup>6</sup>	National Institute of Ayurveda Jaipur,	"Effect Of Panchgavya Ghrita on
		India	Fallopian Tube Blockage: A Single

			Case Report"
6	Dr. KamidiVijaya Kumari <sup>7</sup>	Dr. BRKR GovtAyurvedic College, Er-	"Study of Uttarabasti with dhan-
		ragadda, Hyderabad, Andhra Pradesh,	vantari taila in female infertility"
7	Dr. Biala Shalini <sup>8</sup>	Major S.D. Singh P.G. Ayurvedic Medi-	"Efficacy Of Phala- Ghrita on Fe-
		cal College, Farrukhabad (U.P.), India.	male Infertility"
8	Dr. TrivediRujuta	Institute for Post Graduate Teaching and	Role of 'Krishna Tila' and
		Research in Ayurve-	'ArkapushpaTaila ' Uttarbasti in the
		da, Gujarat Ayurved University, Jamnager	Management of Artavakshaya
9	Dr. Swati R.Ubarhande	ASPM AyurvedCollege,Hosital and Re-	Role of prajasthapana Gana Sid-
		search Institute, Buldhana, Maharastra	dha Ghrita Uttarbasti and oral yoga
		,India	in the management of Vandhyatva
			with special reference to Bijotsar-
			ga(ovarian factor)
10	Dr. Bheesham Lata	Abhilashi Ayurvedic College and Re-	Management of Tubal Blockage with
		search Institute Chaichowk Mandi	Uttarbasti– A Case Report
		Himanchal Pradesh	
11	Dr. Anjali Verma	All India Institute of Ayurveda, Delhi	A Clinical Study on Uttar Basti of
			Bhrihat Shatavari Ghrita and Baladi
			Churna in the management Female
			Infertility w.s.r. to Endometrial Re-
			ceptivity

#### DISCUSSION

## 1. Ovulatory factor

Beeja is one of the important factors of Garbha Sambhav Samagri therefore the process of Beejotsarga is very important for the fertilization to take place. Vata is responsible for division, ejection, and differentiation. Therefore, vata is responsible for the formation and rupture of follicles resulting in ovulation. As per the 8 clinical works, it can be analyzed tha tLasunadi taila, Shatapushpa taila, Mahanarayana taila, Krishna tila Taila, Arkapushpa taila Uttarbasti showed significant result in achieving ovulation. Shatavari taila and prajasthapana gana siddha ghrita also showed effective results on ovulation, Sheet kalyanaka ghritaorally and in Uttarbasti form had higher conception rate . Sheet kalyanaka ghrita impacts ovarian health and help regulate hormonal levels.

Mode of action: Uttarbasti given in intra uterine route in the ghrita and taila medium such prajasthapana gana siddha ghrita, sheet kalyanaka ghrita, Lasunadi taila, shatavari taila, shatapushpa taila and mahanarayana taila ,Krishna tila taila and Arkapushpa taila activates the normal function of

vata and stimulates the ovarian hormones, ultimately achieving ovulation. The brain and pituitary gland produce hormones, which are received by receptors in the ovaries. *Uttarbasti* stimulates these receptors, so that proper maturation of follicles and ovulation occurs in each cycle. Those all medications via, Uttarbasti works on PCOS, Low anteral folicles and anovulation factors.

## 2. Tubal factor

It can be correlated with Artavavaha Srotas dusti which leads to Vandhyatva, as we know Fallopian tubes play major role in the transport of gametes and embryo. Any abnormality in the form of adhesions or obstructions hampers the patency leading to Infertility. Among the 7-research works carried out on formulations, Uttarbasti with Apamarga Kshara taila, kumari taila and yavakshara taila, Narayana taila, Dhanvantari taila, Kasisadi taila and Panchgavya ghrita had maximum effect achieving tubal patency and showed significant conception rate.

**Mode of action:**-Correlating fallopian tubes with the *artavavaha (artava-bija-vaha) srotas*, its blockage compared with the *sanga srotodushti* of this *srotas*. *Vata and Kapha*are the prime *dosha* involved in tubal blockage as vata is responsible for every move-

ment. Thus administering intrauterine *Uttarbasti* with drugs like *Apamarga Kshara taila*, *kumari taila*, *yavakshara taila*, *Narayan taila*, *Dhanvantari taila*, *Kasisadi taila and Panchgavya ghrita* having scraping, penetrating, uterine cleansing, wound healing *kapha-vata* alleviating properties does *vata* alleviation, act locally on tubes and removes the blockage of tubal lumen by directly flushing obstruction. It also does the lysis of adhesions and restores thenormal function of tubal cilia by its rejuvenating and soothing effect. *Uttarbasti* cause local uterine contractions which stimulate the endometrium and ovarian receptors which stimulate the receptors and HPO axis regulating the normal menstrual cycle with ovulation.

## 3. <u>Uterine factor</u>

Endometrium acts as bed for fertilized ovum where it gets embedded for further development. Unresponsive endometrium may cause implantation failure or abortion in early stages. From the 6 clinical studies on Uterine factor, it can be evaluated that Bala taila ,Kshara taila,Phala ghrita Bhrihat shatavari ghrita ,Varunadi Ghrita, Palasha Kshara taila was beneficial in increasing endometrial layering and endometrial blood flow and had higher conception rate. Phala ghrita was beneficial to enhance the healthof uterine lining. Bala taila has a property of Vatashamak and Aam paachan its vyavayi and sukshma Guna it enters into the small channels and remove obstruction and clear srotas. Both drugs were equally effective Improving myometrial echogenicity and myometrial blood flow.

Mode of action:-Uttarbasti with drugs like Bala taila, Phala ghrita, Kshara taila and Brihat shatavari ghrita, Varunadi Ghrita ,Palasha kshara possessing oleating, nourishing and phytoestrogen properties gets easily absorbed through the mucous membrane glands and vessels. They proliferate and nourish the endometrium and rejuvenate the local tissues potentiating the endometrial receptors which may finally improve the implantation rates by promoting fertilization & nidation of embryo. Varunadi Ghrita and Palasha Kshara taila gets in lining Endometrial polyp, uterine fibroid, which is cause of Kshetra Dushti,

those medications help in providing proper blood supply to endometrium.

### CONCLUSION

This review summarizes the evidence underlying the usage of *Uttarbasti* for managing female infertility.In case anovulation it stimulates the process of follicular development and ovulation, in tubal blockage it relieves obstruction and establish the patency and normal function of the tubes in endometrial factor. It Increases blood circulation, helps in proliferation and increases the receptivity of endometrium and resulting in improvement of conception rates.so intra uterine *Uttarbasti* with appropriate drugs is effective in treating all the factors causing female infertility and is a great contribution to Ayurveda gynecologist in the management of Female infertility. It can be considered as pre-requisites for Assisted reproductive techniques like, IUI and IVF for better pregnancy. As well as the success rate of ART can also be increase by using Ayurveda miraculous but main point should be consider is that Uttarbasti is most complicated procedures. It needs high skill and aseptic measures for administration. The desired effect of Uttarbasti depends on dose, medicine, method and time administration and post effective management. That's why *Uttarbasti* should be done by expert Ayurveda physician.

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