

**ROLE OF MEDICATED GHRITHA / TAILA IN FEMALE INFERTILITY w.s.r
ANOVULATION: A REVIEW**Cynthia Thakur¹, Arpana Jain²

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(Published Online: April 2023)

Open Access

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Article Received: 01/03/2023 - Peer Reviewed: 19/03/2023 - Accepted for Publication: 09/04/2023.

**ABSTRACT**

The rate of infertility is constantly rising, and the double-digit upsurge in the infertility rate has raised concern in India. Ovulation dysfunction, which accounts for 40% of female infertility, is the most significant cause of infertility. The absence of *beeja* in women is termed anovulation. *Beeja* (ovum) is the one which yields the *garbha* (pregnancy) and is one of the essential factors required for conception apart from *rutu*, *kshetra*, and *ambu*. Changes in lifestyle, bad eating habits (*apathya aahar vihaar*), stress, late marriages, obesity, etc. are contributing to the problem. In our classics, there are numerous formulations for the management of *vandhyatva* (infertility). *Acharyas* have mentioned *nasya*, *basti*, *virechana*, *vamana*, *uttar basti*, and oral administration with various medicated *ghritha/taila* formulations. This review study is aimed to ascertain the role, probable mode of action, contents, etc. of some medicated *ghritha/taila* formulations in the management of infertility w.s.r. Anovulation.

Keywords: ovulation, *artava*, *vatajroga*, *strotoshodhana***INTRODUCTION**

The greatest treasure in human existence is the continuation of progeny. From menarche to menopause, the female body undergoes transformations due to a

variety of internal and environmental influences. Infertility is the inability of a mature couple to conceive despite having regular coitus throughout the

right menstrual cycle and going at least a year without using any form of contraception. Due to bad eating habits, a sedentary lifestyle (*apathya ahara-vihara*), stress, environmental contaminants, late marriages, etc., infertility has been dramatically rising over the past few decades. One of the main ovarian causes of infertility-associated abnormalities is the pathology of ovulation. Ovulation is the cyclical release of an ovum that has reached maturity from the ovary and is regulated by a variety of circumstances, including the body's physiological, hormonal, and psychological state. Ovulation-related infertility can result from anovulation or oligo ovulation as a result of many underlying pathologies. The four most crucial elements—*rutu*, *kshetra*, *ambu* & *beeja* are necessary to have a healthy pregnancy. Infertility will result if any of these contain *dushti*. *Rutukala* is comparable to the ovulation period, during which endometrium proliferates. In the context of *garbha* production, *kshetra* should be understood as the location where the fertilised ovum adheres. *Ambu* can be used to provide the needed nutrients for a growing foetus. *Beeja* suggests a wholesome *shukra* and *artava*.

Incidence and prevalence- As per the National Health Portal of India, 15% of reproductive-aged couples are affected by infertility worldwide. World Health Organization estimated 3.9 to 16.8% of the overall prevalence of primary infertility in India^[1]. The failure to ovulate is the major problem in approximately 30%-40% of cases of female infertility^[2]. This can be anovulation or severe oligo-ovulation.

Aims & objectives- The review study is aimed to ascertain the role of medicated *ghritha/ taila* in the management of female infertility w.s.r to Anovulation. The objective is to determine the probable mode of action of medicated *ghritha/taila* for various therapeutic procedures.

Materials & methods

The different medicated *ghritha/taila* formulations were compiled from Samhitas, Ayurveda textbooks, research papers as well as previous dissertation

works were utilized to compile the study and a thorough analysis of all information.

REVIEW OF LITERATURE

In the ayurvedic text *beejotsarga* (ovulation) process is elaborated. Female infertility is referred to as *vandhyatva* in Ayurveda. Failure to achieve conception by a mature aged couple, having normal coitus during the appropriate period of the menstrual cycle, on regular basis, for at least a period of one year is termed as infertility^[3]. *Vandhyatva* is included as *vandhya yonivyapad* by *Sushruta*^[4]. *Harita* listed six different forms of *vandhyatva*, each with a distinct aetiology and prognosis^[5]. *Vagbhatas* specifically cited *abeejatva* as a cause of female infertility among other factors^[6,7]. The cause of *vandhyatva* has been discussed by *Charaka* in the *sharir* and *chikitsa sthana*^[8,9]. *Kashyapa* stated *pushpaghni*, which can be associated with the anovulatory cause of infertility with obesity and hirsutism, under the chapter *Revati Jataharini*^[10]. *Vandhyatva's* various types are described in *Madhav Nidana*^[11]. *Bhela* has mentioned the causes of *Vandhyatva* and classified it under *vata vyadhis*^[12]. After taking into account all the references, *Revati Jataharini (pushpaghni)*, *ash-taartava dushti*, *Yonivyapad*, *agnimandya*, vitiation of *vata*, *strotorodha*, *avarana*, *dhatukshaya* are contributory aspects of infertility due to ovarian factors^[13].

Narayana Taila^[14]

- Ingredients- *bilva*, *agnimantha*, *shyonaka*, *patala*, *paribhadra*, *prasarini*, *ashwagandha*, *bhrihati*, *kantakari*, *bala*, *atibala*, *gokshura*, *punarnava*, *shatapushpa*, *devadaaru*, *jatamansi*, *shaileyaka*, *vacha*, *rakta chandana*, *tagra*, *kushtha*, *ela*, *parni chatushtaya*, *rasna*, *shatavri*, *saindhav lavana*, *godugdha*, *tila taila*.
- *Doshaghnta*- *vata kapha shamaka*
- *Karma*- *Deepana*, *pachana*, *vilayan*, *anulomana*.
- Uses- oral, *nasya*, *basti*.
- Indication- impotency, spermatogenic, *yoni shool*, infertility, *vataj roga*.
- Probable mode of action- *Narayana taila* has phyto estrogenic components that control the activity of neuropeptide Y, which in turn controls

the activity of gonadotropin, as well as *balya*, *prajasthapana*, *brimhaniya*, and *rasayana* properties that may correct the functioning of the HPO axis, ultimately leading to proper *beeja granthi* function. As a result, the mixture affects the ovulation process ^[15].

Shatpushpa taila ^[16]

- Ingredients- *shatpushpa*, *guduchi*, *gokshura*, *guggulu*, *karpura*, *vacha*, *daruharidra*, *manjishtha*, *lavang pushpa*, *sariva*, *bala*, *bilva*, *gambhari*, *patla*, *brihati*, *kantakari*, *shalaparni*, *vasa*, *rasna*, *kushtha*.
- *Doshaghnta-pittavardhak*, *kapha-vata shamka*,
- *Karma- ritupravartini*, *yoni-shukra vishodhini*, *putraprada*, *veeryakari*.
- Use- oral, *basti*
- Indications- *artava dushti* (amenorrhea, oligomenorrhea, delayed menses), *asrigdara* (epimenorrhea, menorrhagia, metrorrhagia, DUB), infertility.
- Probable mode of action- It aids in follicle growth. The primary component of *shatpushpa taila* is a phytoestrogen. Depending on the target tissue, phytoestrogens have a mixed estrogenic and anti-estrogenic effect. According to a recent report, phytoestrogens act as a selective oestrogen receptor modulator (SERM). They function as both oestrogen agonists and antagonists thanks to this SERM-like activity. By virtue of its phytoestrogenic qualities, *Shatapushpa* also reduces insulin resistance in the body and corrects cellular imbalance, which is a key contributing factor to conditions like PCOS. *Katurasa* of it helps in *rutupravartan*, *yoni-shukra vishodhana*. *Shatapushpa* and *Shatavari* is a phytoestrogen, it acts in both high oestrogenic and low oestrogenic conditions. Thus, it increases the endometrial thickness. *Shatapushpa tail* & *Shatavari tail uttar basti* directly act on the uterus & HPO axis ^[17].

Phala ghritha ^[18]

- Ingredients- *Manjishtha*, *kushta*, *Tagara*, *triphalala*, *vacha*, *Nisha*, *darvi*, *madhuka*, *katurohini*, *payasa*, *hingu*, *kakoli*, *vajigandha*, *shatavari*, *sharkara*, *goghritha*, *ksheera*.

- *Doshaghnta- tridoshghana*
- *Karma- yonidosha hara*, *pumsavanam*, *pushpe peetam phalaya yat*, *vandhya api labhte sutham*.
- Use- oral, *basti*
- Indication- *Yoni pradasha*, menstrual disorders, vaginal discharges, infertility, *pumsavana*, recurrent abortion, IUGR, rejuvenator, tonic.
- Probable mode of action- this has an impact on hormone levels while also causing structural and functional modifications in the reproductive system. It also helps to normalise the cycles and correct hyper estrogenic activity. It has *deepana*, *lekhana*, *balya*, *prajasthapan*, and *yoni pradoshanashaka* action ^[19]

Shatavari ghritha ^[20]

- Ingredients- *jeevaniya gana*, *shatavari*, *draksha*, *parushka*, *priyala*, *yashtimadhu*.
- *Doshaghnta- vatapitta shamaka*
- *Karma- artavadosha*, *vrishya*, *pumsavana param*.
- Use- oral, *basti*
- Indications- vaginal discharge, oligomenorrhea, infertility, menstrual and seminal disorders.
- Probable mode of action- *Shatavari* contains natural phyto oestrogen. it exerts both estrogenic and antiestrogenic activity. therefore, it increases endometrial thickness & menstrual flow. It induces ovulation & increases follicular size.

Guduchayadi taila ^[21]

- Ingredients- *Guduchi*, *malti*, *rasna*, *bala*, *madhuka*, *chitraka*, *devdaru*, *nidigdha*, *gomutra*, *ksheera*
- *Doshaghnta- tridosha shamaka*, *rakta shodhak*.
- *Karma- streenam garbhada*, *pumsathwakarakara*, *vatahara*, *rasayana*
- Use- oral, *basti*
- Indication- *vataj yonivyapada*
- Probable mode of action- It contains phytoestrogens, which assist in regulating endocrine function and so create a healthy endometrial bed. The inner layer of the endometrium receives more blood as a result. The medication affects the oestrogen receptor. The principal element *guduchi*, has the qualities *balya*, *rasayana*, *vrushya*, *shukrakara* and *dourbalyahara*. All *dhatu*s, espe-

cially *rasa dhatus*, are rejuvenated by these *gunas* and their *updhatu artava* also promote follicular development, which leads to ovulation [22].

Kalyanaka Ghritha [23]

- Ingredients- *indravaruni, Triphala, devdaru, sariva, tagara, priyangu, neelautpala, manjishta, dadima, kesar, taleespatra, brihati, talispatra, kusum, vidanga, kushta, prishanparni, chandan, goghritha*
- *Doshaghnta- vata pitta shamaka*
- *Karma- shreshtha pumsavaneshu, saubhagyapushtidam, mangalayam.*
- Use- oral, *basti*
- Probable mode of action- the majority of drugs are having *tridoshamaka, rasayana, yonidosha-hara, and garbhasthpaka* properties. Some drugs like (shalapami, dadima, etc.) have *madhura rasa* and *brihana* property which is responsible for *upachaya* and thereby improves endometrial thickness [24].

Vishnu Taila [25]

- Ingredients- *shalaparni, prishniparni, bala, shatavari, eranda, brihati, kantakari, gavedhuk, sahachara, goksheera, tila taila.*
- *Doshaghnta- vata kapha shamaka*
- *Karma- sarvavyadhi nivarana.*
- Use- oral, *basti*
- Indication- *vata vyadhi*
- Probable mode of action- *Ushna veerya, madhura rasa, katu vipaka, and vrishya* make up the majority of medicines. The medication assists in follicular maturation, ovulation, and consequently regular menstrual cycles. Because *Vishnu Taila* contains medications like *agnyatva*, so *beeja roopa artava* is released. It results in proliferative alterations in the endometrium; this reflects the drug's estrogenic activity, which then follows a regular HPO axis pattern.

Sahacharadi tail [26]

- Ingredients- *Sahachara, dashmoola, sevya, nakha, kushta, hima, ela, sphrikka, priyangu, nalika, ambu, shaileya, lohita, nalada, loha, surahva, mishi, turashak, goksheera, tila taila.*
- *Doshaghnta- kapha vata shamaka*

- *Karma- artavjanan*
- Use- oral, *nasya, basti*
- Indication- *yoniroga*
- Probable mode of action- Excessive follicles can be removed using *sahachara*. As it promotes follicular maturity and aids in the elimination of ovarian cysts. It eliminates *sanga* and *apana vata* function normally as a result of the *kapha-vata shamaka* and *strotoshodhana* qualities, which results in *beeja nirmana* [27].

DISCUSSION

For the management of *vandhyatva*, *Acharyas* have mentioned *nasya, basti, virechana, vamana, uttar basti*, and oral administration with various medicated *ghritha/taila* formulations. As *Taila* alleviates *vata dosha*, promotes body strength and *agni*, and eliminates *pichhilata*. *Ghritha* is *tridoshaghna*. It is having *deepana, pachana, vrushya, vata anulomana, and rasayana* properties. *Vata* plays an important role in *garbhadharana*, normalization of *vata dosha* is the primary treatment in infertility because *vandhyatva* is considered *vata vyadhi*. *Basti* is said to be *paramoushadi* for *vataj roga*. When administered by the *guda marga* (rectal pathway) *matra basti* normalises *apana vata*, which in turn causes *vatanulomana*, which may aid in the extrusion of the ovum from the follicle and ovulation. *Matra Basti* has a quicker absorption rate because it rapidly enters the systemic circulation through the rectum. *Uttar basti* is considered as best administration mode for tubal factor, ovulatory factor, and endometrial factor. It stimulates the receptors so that maturation of follicles and ovulation or *beejotsarga* occurs in each cycle. It removes the *Srotosanga of artavaha srotas*, which regulates the menstrual cycle and *beeja nirmana*. It also prepares the endometrial bed for healthy implantation. *Nasya* may stimulate olfactory nerves and the limbic system, which in turn stimulates the hypothalamus leading to stimulation of Gonadotropin-Releasing Hormone (GnRH) neurons, regularizing GnRH pulsatile secretion, leading to ovulation. *Vamana /virechana* will lead to *strotoshodhana* (detoxification of the body), resulting in the elimination of the

doshas. Therefore, there will be an increase in *beeja* which can lead to ovulation.

CONCLUSION

Anovulation is the failure to produce a mature ovum (*beeja*) by the ovary. *Beeja* is the one which yields the *garbha* and it is one of the essential factors required for conception. *Abeejatvam* (anovulation) leads to *stree vandhyatva*, which is considered a *vataj vyadhi* and it can be subsided by *Ghritha/taila* yogas which have the property of *tridoshaghata*, *vatanulomana*, *vrushya* and also, they will strengthen the reproductive system. *Uttar Basti* removes the *srotosanga* which regulates the menstrual cycle, thus resulting in ovulation. *Virechana/ vamana karma* is used to execute *Stroto shodhana* (body detoxification), which settles down vitiated *doshas*. *Nasya karma* promotes ovulation by stimulating the HPO axis. *Basti* is the primary treatment of *vataj roga*, so *matra basti* can be opted for as will normalise *apana vata*, which causes *vatanulomana* and can aid in the production of follicles. These were some medicated *ghritha/taila* formulations mentioned in our classics for *vandhyatva*, but there are many more. As in contemporary science, there are a number of ovulation induction medications exist, but they offer unsatisfactory results and a number of harmful side effects, such as rapid weight gain, abnormal bleeding, ovarian enlargement, etc. In opposed to this, Ayurveda provides a wide range of formulations in the form of *ghritha*, *taila*, *kashaya*, *choorna*, etc. that can be used in a diverse way, such as oral administration, *nasya*, *uttar basti*, *matra basti*, *snehapana* (*vamana* or *virechana*), etc., and which are delivering impressive results without any downsides.

REFERENCES

1. Infertility National Health Portal of India published on 05/08/2016 [https://www.nhp.gov.in/disease/reproductive system/infertility](https://www.nhp.gov.in/disease/reproductive%20system/infertility)
2. D. C Dutta, Textbook of Gynaecology including contraception, edited by Hiralal Konar, new central book agency, Kolkata, 5th edition 2009, 222.
3. Shaw's Textbook of Gynaecology 17th chapter The Pathology of Conception, 2010, 6th edition, 180.
4. Yadavji Trikamaji (editor). Commentary: Sushruta Samhita with Nibandhasangraha commentary of Dalhanacharya and Nyayachandrika Panjika Commentary of Gayadasacharya on Nidanasthana, Chaukhambha Orientalia Publications, Varanasi, 2009, 669.
5. Pandey Jaymini, Harita Samhita, with Nirmala Hindi Commentary, Chaukhambha Visvabharati Publications, Varanasi, 2010, 463.
6. Sharma S.P., Astanga Sangraha with Shashilekha Sanskrit Commentary by Indu, Chowkhambha Sanskrit Series Office, Varanasi, 2008, 268.
7. Tripathi Brahmananda, Astanga Hrudayam with Nirmala hindi Commentary, Chaukhambha Sanskrit Pratishthan, Delhi, 2012, 339 and 1133.
8. Shukla Vidyadhar, Charak Samhita vol. 2, with Vaidyamanorama Hindi Commentary, Chaukhambha Sanskrit Pratishthan Publication, Delhi, 2009, 733.
9. Shukla Vidyadhar, Charak Samhita vol. 1, with Vaidyamanorama Hindi Commentary, Chaukhambha Sanskrit Pratishthan Publication, Delhi, 2009, 759.
10. Vrddhajivaka, Kashyapa samhita, (Vrddhajivakiya Tantra), edited by Vatsya with Vidyotini Hindi Commentary, Chaukhambha Sanskrit Sanstha Publication, Varanasi, 2012, 192.
11. Tripathi Brahmananda, Madhava Nidanam- vol 2, edited with Vimala Madhudhara Hindi Commentary and notes, Chaukhambha Surbharati Prakashan, Varanasi, 2009, 485
12. Krishnamurthy K. H., Sharma Priyavat, Bhela Samhita with English Translation, Chaukhambha Visvabharati, Varanasi, 2008, 240.
13. Tiwari Premavati, Ayurvediya Streeroga Avum Prasuti Tantra Part 2, Chaukhambha Orientalia Publication Varanasi, 2000, 2nd Edition, 277-279
14. Sharangadhara. Sharangadhara Samhita, Madhyama khanda, 9/101-106, commentary by Dr. Brahmanand Tripathi. Reprint edition. Varanasi: Chaukhambha Surbharti Prakashan; 2006.
15. Donga K R, Donga S B, Dei LP, 2013, Role of Nasya and Matra basti with Narayana taila on anovulatory factor, An international Quarterly journal of research in ayurveda, 34[1], p81-85.
16. Vriddha Jivaka. Kashyapa Samhita, Kalpa Sthana, Shatapushpa Shatavari Kalpadhyaya, 5/8, Pandit Hemaraja Sharma Commentator. 6th edition. Varanasi: Chaukhambha Samskrit Samsthan; 1998.
17. Pandya S H, Gujarathi J R, Vyas J M. effect of shatpushpa in female infertility w.s.r to anovulatory factor:

- a review study. www.jahm.in ISSN-2321-1563 pg 52-60
18. Bhavamisra, Bhavaprakash, vol. 2, Commentary by Dr. Bulusu Sitaram, Chaukhambha Orientalia, Varanasi, edition 2010, Pp 770, pp. 696
19. Yende, M., Pradnya, D., Preeti, D., Sheetal, T., & Kalpana, T. (2022). Effect of Phala ghrita on development of ovarian factor followed by beejotsarga (ovulation) in patients of Infertility due to ovarian factor in comparison with clomiphene citrate. *International journal of health sciences*, 6(S2), 956-967. <http://doi.org/10.53730/ijhs.v6nS2.5060>
20. Sharma Priyavrat, Chakradatta. 1sted. Varanasi. Chaukhamba orientalia.1994.P. 419
21. Agnivesha, Charaka Samhita revised by Charaka and Dridhbala with Ayurveda Dipika commentary of Chakrapanidatta, editor Yadavaji Trikamji acharya, Chikitsa sthana, ed.20213, Chaukhamba Prakashan, chapter 30, verse 115 p.636.
- M Reemalakshmi, K.V Mamatha, Jain A. A clinical study to evaluate the efficacy of guduchayadi tail matrabasti in Vandhyatva w.s.r. to endometrial receptivity. IAMJ. ISSN: 2320-5091. <http://doi.org/10.46607/iamj0909092021>
23. Pt. Kasinatha Shastri and Dr. Gorakhanatha chaturvedi Charaka Samhita with Vidyotini hindi commentary Part 2 Chikitsasthana 9/41, reprint 2009 Varanasi Chaukhambha Bharati Academy p. 318
24. Jain K, Sharma S, C M Jain. Clinical study of kalayanaka ghrut uttar basti in vandhyatwa. IAMJ (dec,2016-jan,2017) 1(2) 195-201.
25. Bhaisajya Ratnavali of Govinda Dasji Bhisagratna commentary by Shri Ambika Datta Shastri, English translation by Dr. Kanjiv Lochan, Vol –II, Vatavyadhiadhikara, Shloka: 307 – 314; Published by Chaukhambha Sanskrit Sansthan, Varanasi. Reprint edition: 2009.
26. Vagbhata. Ashtangahrdayam, vol II. Murthy KRS, editor. 3rd ed. Varanasi: Krishnadas academy; 1998. Chikitsa sthana, 21/70. P.510
27. Sakhare S, Raut R, Dole V, Dongare K. Clinical efficacy of Sahacharadi tail basti in management of PCOS- A single case study. AYUSHDHARA, 2022;9(2): 128-132. [.http://doi.org/10.47070/ayushdhara.v9i2.935](http://doi.org/10.47070/ayushdhara.v9i2.935)

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Cynthia Thakur & Arpana Jain: Role of Medicated Ghrita / Taila in Female Infertility W.S.R Anovulation: A Review. *International Ayurvedic Medical Journal* {online} 2023 {cited April 2023} Available from: http://www.iamj.in/posts/images/upload/850_855.pdf