Case Study

www.ijrap.net

(ISSN Online: 2229–3566, ISSN Print: 2277–4343)

EFFECT OF BASTI AND UTTARBASTI ON ENDOMETRIAL THICKNESS AND OVULATORY FUNCTION IN SECONDARY INFERTILITY: A CASE STUDY

Ashwinee Ghanekar [1]*, Gous Mujawar [2]

[1] Head Infertility Department, Vishwanand Kendra, Pune, Maharashtra, India

[2] Head Research Department Vishwanand Kendra, Pune, Maharashtra, India

Received on: 21/12/25 Accepted on: 24/1/26

***Corresponding author**

E-mail: rd@vishwanand.org

DOI: 10.7897/2277-4343.1711

ABSTRACT

Introduction: Thin endometrium and ovulatory dysfunction are significant contributors to infertility and are often associated with poor outcomes even with assisted reproductive techniques. In Ayurveda, these conditions correlate with Artava Kshaya (diminished menstrual tissue) and Dhatu Kshaya (tissue depletion) resulting from derangement of Apana Vata. Case presentation: A 34-year-old female with secondary infertility of two years duration presented with a history of four failed intrauterine insemination cycles. The patient complained of scanty and painful menstruation, psychological stress, reduced energy levels, and digestive disturbances. Investigations revealed low Anti-Mullerian Hormone levels, thin endometrium, and inconsistent ovulation. From an Ayurvedic perspective, these findings indicated Vata–Pitta vitiation (imbalance of Vata and Pitta dosha), Mandagni (low digestive fire) with Ama (metabolic toxins), and impaired Dhatu Poshana (tissue nourishment) affecting the reproductive system. Intervention: The patient was treated with a structured Ayurvedic regimen comprising Yoga Basti (therapeutic enema protocol), Uttarbasti (intrauterine instillation of medicated oil/ghrita). Despite persistently low ovarian reserve, progressive improvement in endometrial thickness and spontaneous ovulation was observed, highlighting functional restoration without alteration of ovarian reserve parameters. Outcome: Serial ultrasonography demonstrated improvement in endometrial thickness from 6.8 mm to 9.0 mm and restoration of bilateral ovulation. The patient conceived successfully following a subsequent intrauterine insemination cycle. Conclusion: This case suggests that Basti (medicated enema therapy) and Uttarbasti (intrauterine therapy) can enhance uterine receptivity and ovulatory function by correcting Apana Vata and improving tissue nourishment. Functional improvement in fertility outcomes may be achieved even in the presence of low ovarian reserve.

Keywords: Secondary Infertility, Thin Endometrium, Ovulatory Dysfunction, Artava Kshaya, Yoga Basti, Uttarbasti

INTRODUCTION

Infertility is a growing global health concern affecting approximately 10–15% of couples of reproductive ages, with female-related factors accounting for nearly 40–50% of cases.[1] Secondary infertility, defined as the inability to conceive following a previous conception, poses unique clinical and psychological challenges. Among the various etiological factors, thin endometrium and ovulatory dysfunction are considered critical determinants of poor fertility outcomes, particularly in women undergoing assisted reproductive techniques.[2]

Adequate endometrial thickness is essential for implantation and successful pregnancy. Clinical evidence suggests that an endometrial thickness of less than 7 mm during the peri-ovulatory phase is associated with reduced implantation rates, increased cycle cancellation, and poor pregnancy outcomes in both natural and assisted conception cycles.[2] Ovulatory dysfunction further compounds infertility by disrupting follicular development, hormonal balance, and endometrial receptivity. Despite advancements in ovulation induction protocols and assisted reproductive technologies, a subset of patients continues to demonstrate suboptimal endometrial development and inconsistent ovulation.[3]

In Ayurveda, infertility is described under the broad concept of Vandhyatva (infertility). Impaired formation of Artava (menstrual blood and ovulatory factor) is attributed to derangement of Apana Vata, diminished Agni (digestive and metabolic fire), and inadequate nourishment of reproductive tissues. Artava Kshaya (reduced menstrual flow) is characterized by scanty menstruation, dysmenorrhea, delayed cycles, and compromised fertility potential. Vata–Pitta vitiation (dosha imbalance) and Dhatu Kshaya (tissue depletion**)** are commonly implicated in the pathogenesis of reproductive dysfunction. [4,5]

Basti (therapeutic enema) is regarded as the prime therapeutic modality for disorders of Vata, particularly those involving Apana Vata, which governs ovulation, menstruation, and conception. Uttarbasti (specialized gynecological basti) is a specialized gynecological procedure described for direct administration of medicated substances into the uterine cavity, facilitating localized action on the reproductive organs. These therapies aim to restore physiological balance, improve tissue nourishment, and enhance uterine receptivity.[4-6]

The present case study evaluates the effect of Basti and Uttarbasti on endometrial thickness and ovulatory function in a patient with secondary infertility, highlighting their potential role as effective integrative interventions in functional infertility management.

Patient Information

A 34-year-old female patient presented at Vishwanand Kendra, Walvekar nagar, Pune 411009 with a history of secondary infertility of two years' duration. She had previously undergone four cycles of intrauterine insemination (IUI), all of which were

unsuccessful. The patient reported painful menstruation associated with reduced menstrual flow, suggestive of compromised Artava formation (menstrual tissue development) formation. She also experienced significant psychological stress, reduced energy levels, and persistent digestive disturbances, including bloating and episodes of acidity, indicating impaired Agni (digestive fire) and possible ama (toxic metabolic byproducts) accumulation.

On clinical and investigative evaluation, the patient was found to have low Anti Mullerian Hormone (AMH) levels, along with thin endometrium and suboptimal follicular maturation, which were identified as major contributory factors to her infertility. These findings indicated both functional and structural impairment of the reproductive system, correlating with Artava Kṣaya and Vāta– Pitta vitiation from an Ayurvedic perspective.

Ethical Consideration and Informed Consent

The present case study involved a human participant. Written informed consent was obtained from the patient prior to initiation of treatment and for publication of clinical details and investigation findings, ensuring confidentiality and anonymity. The study was conducted in accordance with the ethical principles outlined in the International Conference on Harmonization–Good Clinical Practices Guidelines (ICH-GCP) and the Indian Council of Medical Research National Ethical Guidelines for Biomedical and Health Research Involving Human Participants. The therapeutic interventions were carried out as part of routine clinical practice without any experimental procedures.[7-12]

Ayurvedic Assessment: Vata–Pitta vitiation, Artava Kshaya, Mandagni with Ama, and impaired Dhatu Poshana were identified.

Therapeutic Intervention: A Vata-pacifying Yoga Basti protocol was administered, followed by Uttarbasti and supportive oral medications aimed at uterine nourishment and ovulatory regulation.

Table 1: Monthly treatment program

Month	Intervention	Therapeutic Objective and Action	Action and Role in Infertility
1st Month (oral medicine + Panchakarma)	Tablet Masanumas Phala Sarpi ghrita Ashokarishta Yoga Basti[4,5] (Narayana Taila + Dashamoola) Uttarbasti (Narayana Taila, Phalaghrita)[8] Yoni Pichu[8] (Phalaghrita)	Vata–Pitta samana; Artava-poshana; uterine snehana and srotas correction	Initiates endometrial nourishment, regulates menstruation, prepares uterus for further therapy
2nd Month (Oral medicine)	Tablet Masanumas Phala sarpi ghrita Uterine tonic Syrup	Vata Shamana, uterine cleansing and nourishment	Enhances ovulation, endometrial thickness and uterine receptivity
3rd Month (oral medicine + Panchakarma)	Tablet Masanumas Phala Sarpi ghrita Uterine tonic Syrup Yoga Basti (Narayana Taila + Dashamoola) Uttarbasti (Narayana Taila, Phalaghrita) Yoni Pichu (Phalaghrita)	Reinforces snehana; enhances Artavavaha srotas and ovulatory function	Improves ovulation and endometrial thickness, cycle regularity
4th Month (oral medicine + Panchakarma)	Shatavari Ghana Tablet Masanumas Mahakalyanaka Ghritam Capsule Yoga Basti (Narayana Taila + Dashamoola) Uttarbasti (Narayana Taila, Phalaghrita) Yoni Pichu (Phalaghrita)	Vata Shamana, Rasayana and Garbhasthāpana support; Satva and dhātu strengthening, neuro-endocrine support	Facilitates implantation and conception

RESULT

Following completion of the Basti and Uttarbasti intervention protocol, marked improvement was observed in both subjective symptoms and objective reproductive parameters. The patient reported significant relief from menstrual pain, with improvement in menstrual flow. Psychological well-being improved, reflected by reduced stress levels and enhanced energy, along with normalization of digestive symptoms, including reduction in bloating and abdominal discomfort.

Objective assessment revealed progressive improvement in endometrial thickness, increasing from 6.8 mm to 9.0 mm, along with restoration of bilateral ovulation on serial ultrasonography.

These functional improvements suggest enhancement of uterine receptivity and ovulatory efficiency rather than alteration in ovarian reserve. The combined clinical and ultrasonographic improvements culminated in successful conception following a subsequent IUI cycle.

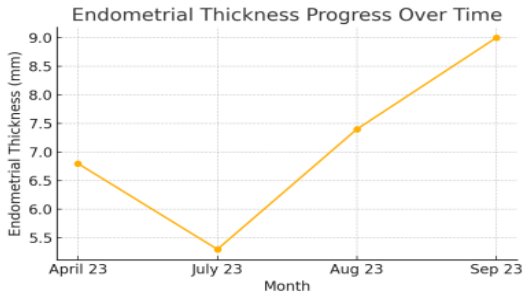

Figure 1: Progressive improvement in endometrial thickness during treatment.

Table 2

Month	Cycle Day	Endometrial Thickness (mm)	Ovulation		Pod Fluid	Basti Given
			Right	left		
April 23	15	6.8	12 * 9mm -	23 *11mm ovulated	Yes	Yes
July 23	15	5.3	anovulatory	anovulatory	NO	No
Aug 23	15	7.4	18*16 mm ovulated	10 * 12mm -	Yes	Yes
Sep 23	15	9.0	ovulated	ovulated	Yes	Yes

DISCUSSION

In Ayurveda, derangement of Apana Vata with Dhatu kṣaya is a key factor in impaired Ārtava, leading to poor endometrial development and irregular ovulation. Basti is the prime therapy for Apana Vata disorders and plays a central role in restoring systemic balance, digestion, and tissue nourishment, thereby supporting reproductive function. [4,5]

Uttarbasti directly acts on the Garbhasaya, improving local snehana, circulation, and uterine receptivity.[8] In the present case, Uttarbasti with Nārāyaṇa Taila and Phala Ghrita contributed to strengthening and nourishing uterine tissues. Narayaṇa Taila, with its Vata-samaka and balya properties, supports pelvic function, while Phala Ghrita promotes Artava-vardhana and Garbhasaya puṣṭi. The improvement in endometrial thickness from 6.8 mm to 9.0 mm and restoration of bilateral ovulation highlight the therapeutic importance of Basti and Uttarbasti in functional infertility management.

Notably, the patient conceived after four months of the above line of Ayurvedic treatment, following an IUI cycle, highlighting the clinical relevance of Basti and Uttarbasti as effective therapeutic modalities in functional infertility associated with thin endometrium and ovulatory dysfunction.

From an Ayurvedic standpoint, this outcome can be attributed to effective Vāta śamana, particularly normalization of Apāna Vāta, which governs ovulation, menstruation, and reproductive function. [4-6]

Before initiation of Ayurvedic intervention, the patient required pharmacological ovulation induction with clomiphene citrate (CC) to achieve follicular development and ovulation. Following completion of Basti and Uttarbasti therapy, ovulation occurred spontaneously without the need for clomiphene citrate, as confirmed by serial ultrasonography demonstrating bilateral follicular rupture.

CONCLUSION

Basti and Uttarbasti were associated with significant improvement in endometrial thickness and restoration of ovulation, ultimately enabling successful conception after four months of treatment in a patient with secondary infertility and low AMH. This case highlights the potential role of classical Ayurvedic therapies as effective integrative interventions in selected infertility cases.

REFERENCES

1 Ombelet W. Global access to infertility care in developing countries: A case of human rights, equity and social justice. Facts Views Vis Obgyn. 2011;3(4):257–266.
2 Mahajan N, Sharma S. The endometrium in assisted reproductive technology: How thin is thin? J Hum Reprod Sci. 2016;9(1):3–8.
3 Kasius A, Smit JG, Torrance HL, Eijkemans MJ, Mol BW, Opmeer BC, *et al.* Endometrial thickness and pregnancy rates after IVF: A systematic review and meta-analysis. Hum Reprod Update. 2014;20(4):530–541.
4 Agnivesha. Charaka Samhita, revised by Charaka and Dridhabala. Sutrasthana, Chapter 28, Verse 18–19. Yadavji Trikamji, editor. Varanasi: Chaukhamba Surbharati Prakashan; 2014. p. 180–182.
5 Sushruta. Sushruta Samhita. Sharirasthana, Chapter 2, Verse 25–27. Yadavji Trikamji, editor. Varanasi: Chaukhamba Surbharati Prakashan; 2014. p. 345–347.
6 Vagbhata. Ashtanga Hridaya. Sutrasthana, Chapter 19, Verse 1–5. Murthy KRS, translator. Varanasi: Chaukhamba Krishnadas Academy; 2016. p. 214–217.
7 Indian Council of Medical Research. National Ethical Guidelines for Biomedical and Health Research Involving Human Participants. New Delhi: ICMR; 2017. Available from: ICMR website. Accessed on 10 Jan 2026.
8 Shastri A. Ayurvediya Prasuti Tantra evam Striroga. Part 1. Varanasi: Chaukhamba Sanskrit Sansthan; 2015. p. 215–220.
9 Sharma PV. Dravyaguna Vijnana. Vol. 2. Varanasi: Chaukhamba Bharati Academy; 2013. p. 635–640.
10 Smith J, Buyalos R. The impact of endometrial thickness on pregnancy outcomes in assisted reproduction cycles. Fertil Steril. 2000;73(4):785–789.
11 Practice Committee of the American Society for Reproductive Medicine. Diagnostic evaluation of infertile female: A committee opinion. Fertil Steril. 2015;103(6):e44–e50.
12 International Council for Harmonization. ICH Harmonized Guideline: Integrated Addendum to ICH E6 (R2) Guideline for Good Clinical Practice. Available from: ICH website. Accessed on 10 Jan 2026.

Cite this article as:

Ashwinee Ghanekar and Gous Mujawar. Effect of Basti and Uttarbasti on endometrial thickness and ovulatory function in secondary infertility: A Case Study. Int. J. Res. Ayurveda Pharm. 2026;17(1):1-3 DOI: http://dx.doi.org/10.7897/2277-4343.1711

Source of support: Nil, Conflict of interest: None Declared