

**COMPARATIVE STUDY TO EVALUATE THE EFFICACY OF
BALADI YAPANA BASTI AND ASHWGANDHA GHRITA
SNEHAPANA IN KSHEEN SHUKRA (OLIGOSPERMIA)-A
RANDOMIZED CONTROL TRIAL: A STUDY PROTOCOL**

***¹Gaurav Kumar Meena, ²Pankaj Kumar Katara, ³Arun Gupta**

¹Post Graduate Scholar, PG Department of Panchakarma, Chaudhary Brahm Prakash
Ayurved Charak Sansthan, Delhi, India.

²Associate Professor, PG Department of Panchakarma, Chaudhary Brahm Prakash Ayurved
Charak Sansthan, Delhi, India.

³Professor and Head, PG Department of Panchakarma, Chaudhary Brahm Prakash Ayurved
Charak Sansthan, Delhi, India.

Article Received on 26 April 2026,
Article Revised on 16 May 2026,
Article Published on 01 June 2026,

<https://doi.org/10.5281/zenodo.20438338>

***Corresponding Author**

Gaurav Kumar Meena

Post Graduate Scholar, PG Department
of Panchakarma, Chaudhary Brahm
Prakash Ayurved Charak Sansthan,
Delhi, India.



How to cite this Article: *¹Gaurav Kumar Meena, ²Pankaj Kumar Katara, ³Arun Gupta. (2026). Comparative Study To Evaluate The Efficacy Of Baladi Yapana Basti And Ashwgandha Ghrita Snehapana In Ksheen Shukra (Oligospermia)-A Randomized Control Trial: A Study Protocol World Journal of Pharmaceutical Research, 15(11), 97-105.

This work is licensed under Creative Commons Attribution 4.0 International license.

ABSTRACT

Introduction: In Ayurveda, Shukra Dhatu is considered essential for reproduction and vitality. Ksheena Shukra (Oligospermia) is characterized by decreased quantity and quality of semen, leading to infertility. Among Panchakarma therapies, Basti is regarded as “Ardha Chikitsa” due to its systemic action, especially in Vata disorders and Dhatu Kshaya conditions. Baladi Yapana Basti is indicated for Brimhana and Vrishya effects, while Ashwagandha Ghrita is widely known for its Shukra Vardhaka and Balya properties. **Aim:** To compare the efficacy of Baladi Yapana Basti and Ashwagandha Ghrita Snehapana in the management of Ksheena Shukra (Oligospermia). **Materials and Methods:** A randomized comparative clinical trial will be conducted at Ch. Brahm Prakash Ayurvedic Charak Sansthan from 2024 to 2026. A total of 52 patients will be randomly divided into two groups. Group A will receive Baladi Yapana Basti and Group B will receive

Ashwagandha Ghrita Snehapana. Assessment will be done on semen parameters and clinical symptoms at baseline, after treatment, and follow-up. **Results:** The collected data will be statistically analyzed to evaluate and compare the efficacy of both interventions based on objective and subjective parameters. **Discussion and Conclusion:** The study will help to establish evidence-based comparative efficacy of Basti (Shodhana therapy) and Snehapana (Shamana therapy) in the management of Oligospermia.

KEYWORDS: Ksheena Shukra, Oligospermia, Baladi Yapana Basti, Ashwagandha Ghrita, Panchakarma.

INTRODUCTION

Ksheena Shukra is described in Ayurveda as a condition of diminished Shukra Dhatu, leading to reduced fertility. It occurs due to Vata aggravation, Dhatukshaya, improper diet, and lifestyle factors.

Oligospermia in modern medicine refers to sperm count less than 15 million/ml and is one of the leading causes of male infertility.

Acharya Charaka has emphasized the importance of Basti in Vata disorders and Dhatu depletion. Baladi Yapana Basti provides nourishment and rejuvenation, whereas Ashwagandha Ghrita acts as a potent Vrishya and Rasayana.

Need of Study

Although both therapies are widely used clinically, there is a lack of comparative clinical evidence. This study is designed to evaluate and compare their effectiveness scientifically.

REVIEW OF LITERATURE

A comprehensive literary review will be carried out from:

Brihatrayi and Laghutrayi

Nighantus

Modern textbooks

Databases: PubMed, Scopus, Google Scholar

Drug Review

Baladi Yapana Basti – Classical reference (Charaka Samhita Siddhi Sthana)

Ashwagandha Ghrita – Bhaishajya Ratnavali

AIM AND OBJECTIVES

Aim

To compare the efficacy of Baladi Yapana Basti and Ashwagandha Ghrita Snehapana in Ksheena Shukra.

Objectives

- To evaluate improvement in sperm count
- To assess sperm motility and morphology
- To assess improvement in clinical symptoms
- To compare overall efficacy between both groups

RESEARCH QUESTION

Which therapy is more effective in improving semen parameters in Ksheena Shukra?

HYPOTHESIS

- H0: Both therapies have equal efficacy
- H1: Baladi Yapana Basti/Ashwagandha Ghrita is more effective

STUDY DESIGN

- Type: Interventional
- Purpose: Treatment
- Masking: Open label
- Randomization: Computer generated
- Timing: Prospective
- Endpoint: Efficacy
- Groups: 2
- Sample size: 52 (26 each)
- Phase: Clinical study
- Duration: 6–12 months

METHODOLOGY

Study Setting

Ch. Brahm Prakash Ayurvedic Charak Sansthan

Inclusion Criteria

Male patients aged 21–45 years

Diagnosed Oligospermia (<15 million/ml)

Willing to participate

Exclusion Criteria

Azoospermia

Genetic disorders

Severe systemic illness

Obstructive pathology

Withdrawal Criteria

Patient withdrawal

Adverse effects

PLAN OF STUDY

Table 1:

Group	A	B
Drug	Baladi Yapana Basti	Ashwagandha Ghrita
Dose	550 ml	20 ml
Duration	16 Days	16
Route	Anal route	oral

(1)ASSESSMENT CRITERIA

(i) Objective Parameters:

Table 2: Sperm count (million/ml)

Score	Criteria
0	>15 million/ml (normal)
1	10-14 million/ml (mild oligospermia)
2	5-9 million/ml (moderate)
3	<5 million/ml (severe)

Table 3: Sperm motility %.

Score	Criteria
0	>40% motile
1	30-39%
2	20-29%
3	<20%

Table 4: Sperm morphology (normal forms %).

Score	Criteria
0	>4% normal
1	3-4%

2	2-3%
3	< 2 %

(ii) SUBJECTIVE PARAMETERS (SECONDARY OUTCOME)

Table 5: Shukra Alpata (semen quantity).

Score	Criteria
0	normal
1	Slightly reduced
2	Moderately reduced
3	Severly reduced

Table 6: Daurbalya (Generalized weakness)

Score	Criteria
0	No weakness
1	Mild
2	Moderate
3	Severe

Table 7: Shrama (Fatigue).

Score	Criteria
0	No fatigue
1	Mild
2	Moderate
3	Severe

ASSESSMENT SCHEDULE

Before Treatment (BT)

After Treatment (AT)

1st assessment :0 day

2nd assesment:16th day

3rd assesment:48th day

Follow up after 48 days.

STATISTICAL ANALYSIS

Paired t-test

Unpaired t-test

Significance: $p < 0.05$

ETHICAL CONSIDERATION

IEC approval

Informed consent

CTRI registration

RESULTS

Results will be analyzed statistically and presented in tables and graphs.

Table 1: Baseline characteristics of patients.

Parameter	GroupA (Mean +_SD)	GROUP B (Mean + SD)	P- VALUE
Age(years)			
Duration of disease(months)			
Semen volume(ml)			
Sperm count(million/ml)			
Motility(%)			

Table 2: Effect of therapy on objective parameters.

PARAMETER	GROUP A(BT)	GROUP A(AT)	% CHANGE	GROUP B (BT)	GROUP B (AT)	% CHANGE
SEMEN VOLUME						
SPERM COUNT						
MOTILITY						

Table 3: Effect of therapy on subjective parameters.

SYMPTOMS	GROUP A(BT)	GROUP A(AT)	GROUP B (BT)	GROUP B (AT)
KLAIBYAM				
SHUKRA ALPATA				
MAITHUNA ASHAKTI				
DAURBALYA				

Table 4: Symptom wise improvement(%)

SYMPTOM	GROUP A % RELIEF	GROUP B % RELIEF
KLAIBYAM		
SHUKRA ALPATA		
MAITHUNA ASHAKTI		
DAURBALYA		

Table 5: Within group comparison (paired t test).

PARAMETER	GROUP	MEAN BT	MEAN AT	T VALUE	P VALUE
SPERM COUNT					
MOTILITY					

Table 6: Between group comparison (unpaired t test).

PARAMETER	MEAN DIFFERENCE	T VALUE	P VALUE
SPERM COUNT			
MOTILITY			
SEMEN VOLUME			

STATISTICAL PRESENTATION

The data obtained will be statistically analyzed using:

- Paired t test
- Unpaired t test

Interpretation

- $P < 0.05$ – Significant
- $P < 0.01$ – Highly Significant
- $P > 0.05$ – Not Significant

DISCUSSION AND CONCLUSION

Conclusion will be drawn after statistical analysis.

REFERENCES

1. Acharya JT. Charaka Samhita of Agnivesha, revised by Charaka and Dridhabala, with Ayurveda Dipika commentary by Chakrapani Datta. Varanasi: Chaukhambha Orientalia; 2022. Chikitsa Sthana, 30/17–19.
2. Acharya JT. Charaka Samhita. Varanasi: Chaukhambha Orientalia; 2022. Siddhi Sthana, 1/38–40.
3. Sushruta. Sushruta Samhita with Nibandhasangraha commentary of Dalhana. Varanasi: Chaukhambha Surbharati Prakashan; 2021. Sharira Sthana, 2/33.
4. Vagbhata. Ashtanga Hridaya with Sarvangasundara commentary. Varanasi: Chaukhambha Orientalia; 2020. Sutra Sthana, 12/1–5.
5. Govinda Das Sen. Bhaishajya Ratnavali. Varanasi: Chaukhambha Prakashan; 2019. Vajikarana Adhikara.
6. Sharma PV. Dravyaguna Vijnana, Vol II. Varanasi: Chaukhambha Bharati Academy, 2020; 763–765. (Ashwagandha)
7. MODERN / RESEARCH REFERENCES
8. World Health Organization. WHO Laboratory Manual for the Examination and Processing of Human Semen. 6th ed. Geneva: WHO, 2021.

9. Agarwal A, Baskaran S, Parekh N, Cho CL, Henkel R, Vij S, et al. Male infertility. *Lancet.*, 2021; 397(10271): 319–333.
10. Shukla KK, Mahdi AA, Rajender S. Apoptosis, spermatogenesis and male infertility. *Front Biosci.*, 2012; 4: 746–754.
11. Ambiyee VR, Langade D, Dongre S, Aptikar P, Kulkarni M, Dongre A. Clinical evaluation of the spermatogenic activity of Ashwagandha (*Withania somnifera*) in oligospermic males: A pilot study. *Evid Based Complement Alternat Med.* 2013; 2013: 571420.
12. Ahmad MK, Mahdi AA, Shukla KK, Islam N, Jaiswar SP, Ahmad S. *Withania somnifera* improves semen quality in stress-related male infertility. *Fertil Steril.*, 2010; 94(3): 989–996.
13. Gupta A, Mahdi AA, Ahmad MK, Shukla KK, Bansal N, Sankhwar SN. Efficacy of *Withania somnifera* on semen profile. *Fertil Steril.*, 2011; 95(2): 764–767.
14. Sharma R, Harlev A, Agarwal A, Esteves SC. Cigarette smoking and semen quality. *World J Mens Health*, 2016; 34(2): 91–101.
15. Kumar N, Singh AK. Trends of male factor infertility. *Asian J Androl.*, 2015; 17(4): 550–556.
16. Chauhan NS, Sharma V, Dixit VK, Thakur M. A review on plants used for improvement of sexual performance. *Biomed Res Int.*, 2014; 2014: 868062.