

A CLINICAL STUDY IN THE MANAGEMENT OF KSHEENA SHUKRA WITH SHAMAN AND BASTI KARMA BY SHUKRALA YOGA

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ABSTRACT

Background:- *Ksheena Shukra* is an important disorder described under *Shukra Dushti* in Ayurveda and is characterized by diminution and impairment of *Shukra Dhātu*. The condition is associated predominantly with vitiation of *Vata* and *Pitta Dosha*, impairment of *Agni*, disturbance of *Dhātu Parinama* and dysfunction of *Shukravaha Srotas*. Clinically, it may present with weakness, reduced seminal quantity, genital discomfort, delayed ejaculation and diminished sperm count. In contemporary medicine, the condition may be clinically correlated with oligospermia.

Objective:- To evaluate and compare the therapeutic efficacy of oral *Shaman Karma* and *Basti Karma* using a *Shukrala Yoga* in patients diagnosed with *Ksheena Shukra* and oligospermia.

Materials and Methods: Sixty clinically diagnosed male patients with *Ksheena Shukra*/oligospermia were selected from the OPD and IPD of SVSP Hospital (IPGAE&R) and J.B. Roy State Ayurvedic Medical College and Hospital, Kolkata. Participants were randomly allocated into two groups of 30 patients each. Group A received oral *Shukrala Aushadhi* at a dose of 500 mg twice daily with lukewarm water for 30 consecutive days. Group B received a *Kala Basti* schedule consisting of 1 *Anuvasana*, 6 *Niruha*, 6 *Anuvasana* and 3 *Anuvasana Basti*. The *Niruha Basti* formulation contained *Kapikacchu* (*Mucuna pruriens*), *Masha* (*Vigna mungo*), *Godhuma* (*Triticum aestivum*) and *Yava* (*Hordeum vulgare*). Dietary and lifestyle modifications were advised.

Results :- Both therapeutic approaches produced beneficial clinical responses. Group A showed improvement in general symptoms and seminal parameters. Group B demonstrated comparatively greater improvement in total sperm count, sperm motility, semen volume and localized symptoms such as *Medhra-Vrishana Vedana*. The supplied manuscript does not provide individual baseline and post-treatment values, measures of dispersion or exact *P* values; therefore, these numerical data have not been fabricated.

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Conclusion :-Both *Shaman Karma* and *Basti Karma* demonstrated beneficial effects in the management of *Ksheena Shukra*. The comparatively greater response reported with *Basti Karma* may be interpreted through the Ayurvedic principles of *Vata Shamana*, *Apana Vayu* regulation, *Srotoshodhana* and *Brimhana*. Larger, well-designed clinical trials with complete statistical reporting are required to further establish these findings.

Keywords: Ksheena Shukra; Shukra Dhatu; Oligospermia; Shaman Karma; Basti Karma; Shukrala Yoga; Vajikarana; Male infertility; Ayurveda.

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INTRODUCTION

Ayurveda describes health as a state of equilibrium among *Dosha*, *Dhatu* and *Mala*. The seven *Dhatus* represent successive levels of tissue organization and nourishment, with *Shukra Dhatu* regarded as the seventh and final *Dhatu*. It is described as the refined essence arising from the preceding tissue elements and is associated with reproductive capacity, vitality and continuation of progeny (1-3).

Shukra Dhatu possesses characteristic properties including *Shukla*, *Madhura*, *Snigdha*, *Picchila*, *Guru* and *Bahala*. Its predominantly *Jala Mahabhuta*-related nature is associated with nourishing, sustaining and unctuous characteristics (1-3). Normal formation and function of *Shukra* depend on proper digestion, adequate nutrition and sequential transformation of the preceding *Dhatus*.

The *Shukravaha Srotas* is described as originating in the *Vrishana* and *Shepha*. These channels are concerned with the formation, transport and functional expression of reproductive tissue (4,5). Disturbance of the *Shukravaha Srotas* may consequently manifest as quantitative or qualitative abnormalities of *Shukra*.

Ksheena Shukra is characterized by diminution of *Shukra Dhatu*. The clinical manifestations described in the Ayurvedic literature include *Daurbalya*, *Mukhashosha*, *Medhra-Vrishana Vedana*, *Chirat Praseka* and *Alpa Shukra* (3,6-10). The condition may therefore involve both systemic manifestations and localized reproductive abnormalities.

The etiological factors described in relation to *Shukra* disorders include excessive sexual activity, inappropriate sexual practices, suppression of natural urges, improper diet, malnutrition, psychological stress and physical trauma (3,6,7,14). Excessive use of *Ruksha*, *Tikta*, *Kashaya* and *Ushna* dietary substances may contribute to *Vata-Pitta* aggravation.

The pathogenesis may involve impairment of *Jatharagni*, formation of *Ama*, disturbance of *Dhatu Parinama* and obstruction of the relevant *Srotas*. Consequently, nourishment of *Shukra Dhatu* becomes inadequate and the clinical manifestations of *Ksheena Shukra* develop.

In modern medicine, reduced sperm concentration is an important abnormality associated with male reproductive dysfunction. The present study correlates *Ksheena Shukra* with oligospermia. Contemporary causes of impaired sperm production include varicocele, cryptorchidism, genital tract infection, endocrine abnormalities, nutritional deficiency, environmental exposures and physiological stress (24-34).

Ayurveda approaches disorders of reproductive tissue through a combination of *Nidana Parivarjana*, dietary regulation, *Shamana*, *Shodhana*, *Rasayana* and *Vajikarana*. Among the *Shodhana* therapies, *Basti* is particularly important in disorders involving *Vata* (8,10,13).

The present clinical study was therefore undertaken to evaluate and compare the effects of oral *Shaman Karma* and *Basti Karma* using a *Shukrala Yoga* in patients with *Ksheena Shukra*.

MATERIALS AND METHODS

Study Design and Setting

A clinical study was conducted in patients presenting with clinical features of *Ksheena Shukra*/oligospermia. Sixty male patients were selected from the OPD and IPD of SVSP Hospital (IPGAE&R) and J.B. Roy State Ayurvedic Medical College and Hospital, Kolkata. The patients were

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randomly allocated into two groups containing 30 patients each.

The overall study period was 18 months. The oral treatment in Group A was administered for 30 consecutive days, while Group B underwent the prescribed *Kala Basti* schedule.

PATIENT ALLOCATION

Group A – Shaman Karma

Thirty patients received oral *Shukrala Aushadhi* at a dose of 500 mg twice daily with lukewarm water as *Anupana* for 30 consecutive days.

Group B – Basti Karma

Thirty patients received *Kala Basti*. The schedule consisted of:

- 1 *Anuvasana Basti*
- 6 *Niruha Basti*
- 6 *Anuvasana Basti*
- 3 *Anuvasana Basti*

The *Niruha Basti* decoction was prepared using *Kapikacchu* (*Mucuna pruriens*), *Masha* (*Vigna mungo*), *Godhuma* (*Triticum aestivum*) and *Yava* (*Hordeum vulgare*) (15-20).

Table 1. Treatment protocol

Parameter	Group A: Shaman Karma	Group B: Basti Karma
Sample size	30	30
Intervention	Oral Shukrala Aushadhi	Kala Basti
Dose/schedule	500 mg twice daily	1 Anuvasana–6 Niruha–6 Anuvasana–3 Anuvasana
Vehicle	Lukewarm water	Shukrala Kwatha
Major ingredients	Shukrala Aushadhi	Kapikacchu, Masha, Godhuma, Yava
Treatment period	30 days	Complete Kala Basti schedule

Dietary and Lifestyle Measures

Participants were advised to avoid foods and habits considered aggravating to *Vata* and *Pitta*, particularly excessively pungent, sour, dry and spicy substances. Adherence to the prescribed lifestyle regimen and *Brahmacharya* during active treatment was advised.

Dietary regulation was considered an important supportive component because adequate digestion and nutrition are fundamental to normal *Dhatu* formation.

Outcome Measures

The therapeutic response was assessed using clinical symptoms and seminal parameters. The major outcome domains reported in the study were:

1. Total sperm count.
2. Sperm motility.
3. Semen volume.
4. *Medhra-Vrishana Vedana*.
5. General symptoms such as weakness and fatigue.

The supplied manuscript reports comparative improvement but does not provide complete numerical outcome tables. Therefore, no numerical values, effect sizes or statistical values have been added.

Ethical and Statistical Information

The supplied source does not provide an ethics committee approval number, informed-consent statement, detailed inclusion/exclusion criteria, sample-size calculation, statistical software, statistical tests or exact *P* values. These details should be inserted from the original study records before journal submission. Current ICMJE guidance recommends that original research manuscripts provide sufficient methodological detail for reproducibility and include appropriate ethics/review-board information.

AYURVEDIC CONCEPTUAL REVIEW

Shukra Dhatu

Shukra Dhatu occupies the final position among the seven *Dhatus*. It is described as the most refined product of the sequential tissue-nourishment process. The classical characteristics of normal *Shukra* include whiteness, sweetness, unctuousness, viscosity, heaviness and adequate thickness (1-5).

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The physiological importance of *Shukra* extends beyond the production of semen. It is associated with reproductive capacity and vitality. Consequently, impairment of *Shukra* may present with both reproductive and systemic manifestations.

Shukravaha Srotas

The *Shukravaha Srotas* provides the conceptual anatomical and functional pathway through which *Shukra* is formed and expressed. The *Vrishana* and *Shepha* are identified as important sites associated with these channels (4,5).

Any disturbance affecting the integrity or function of the *Shukravaha Srotas* may therefore interfere with normal reproductive function.

Nidana

The causative factors of *Ksheena Shukra* include excessive sexual activity, inappropriate sexual practices, suppression of the urge for ejaculation, unsuitable dietary intake, malnutrition, psychological stress and trauma (3,6,7).

These factors may disturb *Vata* and *Pitta*, impair digestion and adversely influence tissue nourishment.

Samprapti

The proposed pathogenesis can be represented as:

Nidana → Vata-Pitta Prakopa → Agni Mandya → Ama formation → Srotorodha → impaired Dhatu Parinama → Shukravaha Srotas dysfunction → Ksheena Shukra.

The pathogenesis indicates that management should involve more than simple supplementation. Correction of *Agni*, regulation of *Dosha*, removal of obstruction and nourishment of *Shukra Dhatu* are all relevant.

MODERN MEDICAL CORRELATION

Oligospermia refers to reduced sperm concentration and represents one of the abnormalities encountered during evaluation of male reproductive function. The present manuscript uses sperm concentration below 15 million/ml as its operational correlation with *Ksheena Shukra*.

Male reproductive dysfunction can have multiple causes. Testicular disorders, varicocele, endocrine disturbances, infections, nutritional deficiencies, environmental exposures and chronic physiological stress may all influence spermatogenesis and semen quality (24).

Spermatogenesis is a complex biological process requiring appropriate testicular function, endocrine regulation and an adequate local environment. Abnormalities in any of these components can influence sperm concentration, motility or morphology.

The Ayurvedic concept of *Ksheena Shukra* is broader than a single semen-analysis parameter. Therefore, the correlation with oligospermia should be regarded as a clinical interpretation rather than an assertion that the two concepts are identical.

PHARMACOLOGICAL AND THERAPEUTIC BASIS

Kapikacchu

Kapikacchu (*Mucuna pruriens*) is traditionally associated with *Vajikarana* and reproductive health. Its inclusion in the Basti formulation is consistent with the therapeutic objective of supporting *Shukra Dhatu* (18,19).

Because the study evaluated the combined formulation, the specific contribution of *Kapikacchu* cannot be determined independently.

Masha

Masha (*Vigna mungo*) is traditionally considered a nourishing substance. Its inclusion supports the *Brimhana* orientation of the formulation and is relevant in a condition involving diminution of *Shukra Dhatu*.

Godhuma

Godhuma (*Triticum aestivum*) contributes to the nourishing character of the formulation. Its use in the preparation is consistent with the objective of supporting tissue nourishment.

Yava

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Yava (*Hordeum vulgare*) forms another component of the decoction. Together with the other ingredients, it contributes to the overall formulation rather than functioning as an isolated therapeutic agent.

The formulation can therefore be understood as a combination designed to support *Shukra*, provide nourishment and address *Vata*-related functional disturbance.

RESULTS

Both treatment groups demonstrated beneficial clinical responses.

Group A receiving oral *Shaman Karma* showed improvement in general symptoms, including fatigue, along with gradual improvement in seminal parameters such as semen volume and sperm count.

Group B receiving *Basti Karma* demonstrated improvement in seminal parameters and localized symptoms. The source manuscript reports comparatively greater improvement in total sperm count, sperm motility, semen volume and *Medhra-Vrishana Vedana* compared with oral *Shaman* therapy alone.

Table 2. Summary of reported therapeutic response

Outcome	Group A: Shaman	Group B: Basti
General weakness/fatigue	Improved	Improved
Semen volume	Improved	Greater improvement reported
Sperm count	Improved	Greater improvement reported
Sperm motility	Improvement reported	Greater improvement reported
Medhra-Vrishana Vedana	Improved	Greater improvement reported

Note: The original supplied material does not contain numerical pre-treatment and post-treatment values or exact statistical values. Therefore, the table reports only the direction of effect documented in the source.

DISCUSSION

The present clinical study evaluated two Ayurvedic therapeutic approaches for *Ksheena Shukra*: oral *Shaman Karma* and *Basti Karma*. Both interventions produced beneficial responses, while comparatively greater improvement was reported in the Basti group for sperm count, sperm motility, semen volume and localized symptoms.

The response observed following oral *Shaman Karma* indicates that systemic therapeutic support may be useful in patients with *Ksheena Shukra*. The oral *Shukrala Aushadhi* was administered continuously for 30 days and was associated with improvement in general symptoms as well as seminal parameters. This suggests that a simple oral therapeutic approach may contribute to improvement in both systemic and reproductive manifestations.

The improvement in general weakness is clinically relevant because *Daurbalya* forms an important component of the clinical presentation described in the study. A therapeutic intervention that addresses both systemic well-being and reproductive parameters may therefore have broader clinical relevance than an intervention directed toward a single laboratory parameter.

The comparatively greater improvement in the Basti group may be interpreted through the Ayurvedic understanding of *Vata* and *Apana Vayu*. Reproductive functions are closely related to the pelvic region, and regulation of *Apana Vayu* is therefore considered important in disorders involving reproductive function.

The Basti schedule used in the study incorporated both *Niruha* and *Anuvasana* components. This provides a combined approach involving regulation of *Vata*, correction of functional obstruction and nourishment. Such a combination may be particularly relevant in a condition where both *Srotorodha* and *Shukra Kshaya* are considered part of the pathogenesis.

The improvement in sperm count reported in the Basti group represents an important outcome because sperm concentration is an objective reproductive parameter. The observed improvement suggests a beneficial effect of the overall intervention on the reproductive outcome assessed in the study. Similarly, improvement in sperm motility is clinically meaningful because motility is an important characteristic of sperm functional capacity. The greater improvement reported in the Basti group may therefore indicate a broader

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response than improvement in sperm concentration alone. Improvement in semen volume was also reported. From the Ayurvedic perspective, adequate quantity and proper quality of *Shukra* are important characteristics of healthy reproductive tissue. Improvement in semen volume may therefore be viewed as one component of restoration of *Shukra* function.

Reduction in *Medhra-Vrishana Vedana* was another important clinical finding. The improvement in localized discomfort may be interpreted as a reduction in the functional manifestations associated with *Vata* disturbance. Because genital discomfort can have multiple causes, however, the precise mechanism cannot be established from the available study data.

The Basti formulation contained *Kapikacchu*, *Masha*, *Godhuma* and *Yava*. The combined formulation provides both reproductive-supportive and nourishing components. The therapeutic response should therefore be considered as the result of the entire formulation and Basti procedure rather than being attributed to any single ingredient.

The findings also emphasize the importance of dietary and lifestyle modification. Both groups were instructed to avoid dietary and behavioral factors considered aggravating to *Vata* and *Pitta*. Such measures may have contributed to the overall therapeutic response and represent an important component of Ayurvedic management.

The two treatment approaches differ in their route and therapeutic complexity. Oral *Shaman* therapy is comparatively simple to administer, whereas Basti requires a structured therapeutic procedure and appropriate clinical expertise. Therefore, although greater improvement was reported in the Basti group, the choice of treatment should be considered in relation to the individual clinical condition and suitability of the procedure.

The results do not indicate that oral therapy is ineffective. Both groups demonstrated improvement. Rather, the findings suggest that the addition of a Basti-based intervention may provide additional therapeutic effects in selected patients.

The study also highlights the importance of addressing the broader pathogenesis rather than focusing solely on sperm count. In the Ayurvedic framework, *Ksheena Shukra* involves disturbance of digestion, tissue transformation, channel function and doshic balance. Therefore, a comprehensive intervention addressing

multiple components of the pathogenesis may be therapeutically appropriate.

The observed findings should nevertheless be interpreted cautiously. The supplied manuscript does not provide detailed numerical outcome data, including baseline values, post-treatment values, standard deviations, confidence intervals or exact *P* values. Therefore, the magnitude and precision of the reported treatment differences cannot be independently assessed.

The contribution of individual ingredients also cannot be established because the intervention consisted of a combined formulation. Similarly, the independent effects of Basti, dietary modification and lifestyle regulation cannot be separated from the available study design. Male reproductive dysfunction is multifactorial, and different underlying causes may respond differently to treatment. Consequently, appropriate clinical evaluation remains important when managing patients with reduced sperm concentration.

Overall, the present findings indicate that both *Shaman Karma* and *Basti Karma* may have beneficial effects in *Ksheena Shukra*. The comparatively greater improvement reported with Basti provides a basis for further clinical investigation, particularly through adequately powered randomized controlled studies with standardized treatment protocols and complete statistical reporting.

PROBABLE MODE OF ACTION

The Ayurvedic therapeutic interpretation of the intervention can be summarized as follows:

Shukrala Yoga



Brimhana and Shukra Dhatu nourishment



**Support of Shukra formation and function
Basti Karma**



Vata Shamana



Apana Vayu regulation



**Improved pelvic and reproductive functional
coordination**

Niruha component



Srotoshodhana



Reduction of functional obstruction

Anuvasana component

↓

Snigdha and Vata-pacifying action

↓

Support of tissue nourishment

↓

Improvement in Shukravaha Srotas function

↓

Improvement in clinical and seminal parameters

This represents an Ayurvedic conceptual model and should not be interpreted as a proven modern pharmacological mechanism.

CLINICAL IMPLICATIONS

The present study provides a clinical framework for evaluating *Ksheena Shukra* using both subjective symptoms and objective seminal parameters.

The findings suggest that oral *Shaman Karma* may be useful as a systemic therapeutic approach, while *Basti Karma* may provide additional benefits in appropriately selected patients, particularly where *Vata* disturbance and pelvic functional abnormalities are prominent.

The study also emphasizes that management should not be restricted to pharmacological intervention. Dietary regulation, avoidance of causative factors and appropriate lifestyle modification should form an integral part of management.

At the same time, patients presenting with reduced sperm concentration require appropriate clinical assessment for recognized medical causes of male reproductive dysfunction. Ayurvedic treatment should therefore be integrated with appropriate diagnostic evaluation where clinically indicated.

LIMITATIONS

The study has several limitations.

First, the total sample size was 60 patients, with 30 participants in each group. Larger studies would provide greater statistical precision.

Second, detailed numerical results are not available in the supplied manuscript. The absence of baseline and post-treatment values, measures of variability, confidence intervals and exact *P* values prevents

independent evaluation of the magnitude of the treatment effect.

Third, the treatment groups differed in route, procedure and therapeutic schedule. Therefore, the comparative result cannot establish whether the difference was caused by the Basti route, the formulation, the therapeutic schedule or their combined effect.

Fourth, semen parameters may demonstrate biological variability. Repeated standardized assessments would strengthen future investigations.

Fifth, the individual contribution of *Kapikacchu*, *Masha*, *Godhuma* and *Yava* cannot be determined from the present study.

Finally, the supplied manuscript does not provide detailed information regarding ethics approval, informed consent, inclusion and exclusion criteria, randomization procedure, sample-size calculation or statistical methodology. These details should be incorporated from the original study documentation before submission.

FUTURE RESEARCH

Future clinical research should involve larger sample sizes and clearly defined eligibility criteria.

Baseline demographic and clinical characteristics should be presented separately for each treatment group. The method of randomization should be explicitly described, and appropriate allocation procedures should be documented.

Semen analysis should be conducted using standardized laboratory methodology. Outcomes should include sperm concentration, total sperm number, progressive motility, morphology and semen volume where appropriate.

Repeated semen analyses would improve reliability because semen parameters can vary between samples.

Long-term follow-up should be included to determine whether improvements persist after treatment completion.

Future trials could compare:

1. Oral *Shaman Karma* alone.

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2. *Basti Karma* alone.
3. Combined *Shaman* and *Basti* therapy.
4. Appropriate control or standard-care intervention.

Such studies would help determine the independent and combined effects of the different therapeutic components.

Additional laboratory investigations could also be incorporated to explore endocrine and physiological parameters associated with spermatogenesis. However, such investigations should be prospectively defined rather than introduced retrospectively.

CONCLUSION

Ksheena Shukra is an Ayurvedic disorder characterized by diminution and dysfunction of *Shukra Dhatu*. Its clinical presentation may include generalized weakness, reduced semen quantity, genital discomfort, delayed ejaculation and diminished sperm count. The Ayurvedic pathogenesis involves *Vata-Pitta* disturbance, impairment of *Agni*, disturbance of *Dhatu Parinama* and dysfunction of *Shukravaha Srotas*. The present clinical study included 60 patients divided into two groups of 30. Group A received oral *Shukrala Aushadhi*, while Group B received a *Kala Basti* protocol using a *Shukrala Kwatha* containing *Kapikacchu*, *Masha*, *Godhuma* and *Yava*. Both groups demonstrated beneficial therapeutic responses. Oral *Shaman Karma* was associated with improvement in general symptoms and seminal parameters. *Basti Karma* demonstrated comparatively greater improvement in total sperm count, sperm motility, semen volume and *Medhra-Vrishana Vedana*. The findings may be interpreted through the Ayurvedic principles of *Vata Shamana*, *Apana Vayu* regulation, *Srotoshodhana* and *Brimhana*. However, because complete numerical statistical data are not available in the supplied manuscript, the magnitude of the reported treatment difference cannot be independently quantified. Further adequately powered randomized controlled clinical trials with standardized treatment protocols, objective outcome assessment, complete statistical reporting, appropriate ethical documentation and long-term follow-up are required to substantiate these findings.

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