



Review Article

ROLE OF MASHATMAGUPTADI MODAKA AS VRISHYA YOGA IN THE MANAGEMENT OF KSHINASHUKRA (OLIGOSPERMIA)

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ABSTRACT

Infertility is major cause of concern in people of reproductive age. Prevalence of Infertility is increasing at alarming rate. WHO estimates one in six people have experienced infertility. In general, around 15-20% couple of reproductive age suffer from infertility worldwide. In India, Prevalence is around 23%. It varies from state to state. Many factors contribute to it like poor lifestyle choices, environmental pollution, exposure to various radiations and more stressful life. Psychological factor also plays very important role. Ayurveda promotes health by preventive as well as curative aspect along with improving healing capacity. *Vajikarana*, one among the *Ashtangas* of Ayurveda focus on holistic approach in improving overall health and quality of life of individual. *Vajikarana* not only improves reproductive system but also relieves stress and mental problems. **Materials and Methods:** Classical Ayurvedic textbooks, nutritional books, and databases, such as PubMed, Scopus, DHARA and Google Scholar etc. were reviewed. **Result and Discussion:** *Shukra* is essence of *Saptadhatus*. *Vajikarana* replenishes all seven *Dhatus* from *Rasa* to *Shukra*. *Vajikarana* not only improves quality of reproductive system but also alleviates stress and anxiety. **Conclusion:** Infertility is prime concern in people of Reproductive age. Ayurveda has 90% effective rate in cases of Infertility. *Vajikarana* balances *Tridoshas* and improves *Saptadhatus*. It acts on hypothalamus and limbic system. It improves *Agni* and production of *Dhatus*.

INTRODUCTION

Every living being has been blessed by the God to reproduce itself and lengthen their lineage. Pregnancy and child-bearing capability is noblest gift given only to women. Motherhood is greatest milestone in the life of woman. But nowadays due to fast-track life, enormous work, family pressure and disturbed work-life balance, many lifestyle disorders are on rise. Infertility is one of the most burning concerns in the people of reproductive age. Infertility is when person is unable to produce progeny even after having regular, unprotected, planned intercourse. Infertility can be primary meaning couple or person never has pregnancy before and secondary meaning

there was successful pregnancy previously but unable to produce progeny now. Though modern science has discovered many of its etiological factors and provided measures for its management, still the success rate is below par.

On the other hand, Ayurveda has described infertility as *Vandhyatva* and has provided fundamental principles and measures to combat it. There is all praise for person with children and one without children is considered as tree without flowers and fruits.^[1] It is also considered as a means for attainment of *Purusharthas* (goals of a human life), *Dharma* (moral values, righteousness), *Artha* (prosperity, economic values), *Kama* (pleasure, love, psychological values) and *Moksha* (liberation, spiritual values).^[2] Therefore, having a child is an act which enhances *Yasha* (success in life), *Dharma* (righteousness), *Maana* (self-respect), *Srikulavardhana* (prosperity and lineage), ultimately aiming a *Supraja* (healthy progeny) advocating the principles of eugenics.^[3]

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Infertility is of dire concern as it affects approximately 13-16% couples worldwide. It is believed that 60-80 million couple suffer from infertility every year out of which 15-20 million couple belong to Indian origin. According to WHO the prevalence of the same in India is between 3.9% and 16.8% which is increasing in an alarming rate. The incidences increase due to the diversified daily routine and adapting modernization which affect the physiological factors causes irregular menstruation, ovulation disorders, polycystic ovary syndrome, fallopian tube blockage, endometriosis, hormonal disorders and uterine abnormalities, etc. The adverse effect of changing environment and pollution also induces cases of depression, stress and obesity which have adverse effect on fertility.^[4,5,6,7]

There are four important factors known as *Garbha Sambhava Samagri* that is *Rutu*, *Kshetra*, *Ambu* and *Beeja*. Normal function of all these ensures safe and healthy pregnancy. *Kshetra* denotes healthy female genital track which will facilitate entry of sperm, *Ambu* represent nutritional elements and hormones and *Beeja* denotes ovum and sperm.^[8] Ayurveda not only focuses on curing the disease but also on improving health. *Rasayana* and *Vajikarana* is one of the prime branches of *Ashtangas* of Ayurveda which promotes health by retarding ageing process. *Vajikarana* improves function of reproductive organs and nourishes *Saptadhatu*s.

Mashatmaguptadi Modaka is revered *Vrishya* *Yoga* which has been described in both Charaka Samhita and Ashtanga Hridayam. It has been referred as *Param Vrishya* in both the classical texts. This emphasizes the importance of this *Yoga* in the formation and maintenance of healthy *Shukra Dhatu*. Overall quality of semen is important when it comes to having healthy and proper conception. Mere numbers are not important while we are considering fertilizing ability of the semen, the motility, the morphology, agglutination and viscosity also play defining role in the fertilization. Thus, improving overall quality of semen should be prime target. This can be achieved by Ayurvedic *Vrishya* *yogas* like *Mashatmaguptadi Modaka*.

AIM

To explore the role of *Mashatmaguptadi Modaka* as *Vrishya* *Yoga* in the management of Infertility.

OBJECTIVES

To review the effect of *Vrishya* *Yogas* in *Kshinashukra*.

MATERIALS AND METHODS

A systematic comprehensive literature search was conducted following the PRISMA guidelines in multiple electronic databases including AYUSH Research Portal, DHARA, Shodhganga, PubMed, J-Gate, Google Scholar, and AYUSH Research Database (A.R.D.)

up to 25.12.2025. The search strategy was developed using a combination of predefined keywords such as "*Mashatmaguptadi Modaka*," "*Vrishya* *Yoga*," "*Kshinashukra*" and "*Oligospermia*" Boolean operators (AND, OR, NOT) were applied wherever necessary to refine the search. The initial search identified a total of 260 records across all databases.

1. Search Strategy

A comprehensive literature search was conducted in multiple electronic databases including AYUSH Research Portal, DHARA, Shodhganga, PubMed, J-Gate, Google Scholar, and AYUSH Research Database (A.R.D.) up to 25.12.2025. The search strategy was developed using a combination of predefined keywords such as "*Mashatmaguptadi Modaka*," "*Vrishya* *Yoga*," "*Kshinashukra*" and "*Oligospermia*." Boolean operators (AND, OR, NOT) were applied wherever necessary to refine the search. The initial search identified a total of 260 records across all databases.

Inclusion and Exclusion Criteria

The retrieved studies were screened in a stepwise manner. Titles and abstracts were reviewed to exclude duplicates and irrelevant articles.

The inclusion criteria comprised:

- Clinical trials, interventional studies, pilot studies, and reviews/meta-analyses directly addressing *Kshinashukra* and/or infertility.
- Research involving Ayurvedic *Vrishya* formulations, particularly *Mashatmaguptadi Modaka*.
- Articles available in full-text and published in English; and
- Both human and experimental studies exploring Infertility, aphrodisiac mechanisms, or reproductive effects.

Exclusion criteria included studies unrelated to the research question, non- scientific papers (e.g., commentaries, editorials), abstracts without full-text, and duplicate entries across databases.

After applying this criteria, 12 studies were finalized for detailed review comprising 5 review-based articles and 7 relevant clinical studies. These studies together provided the conceptual foundation and clinical evidence necessary to establish the link between *Kshinashukra*, oligospermia, *Vrishya* *yogas* and *Mashatmaguptadi Modaka*.

The process of screening and eligibility assessment was carried out in sequential steps:

- Duplicate removal: Many records overlapped across different databases (e.g., PubMed and Google Scholar). These duplicates were removed to avoid bias from repeated data.
- Title and abstract screening: Articles not relevant to *Kshinashukra*, oligospermia *Vrishya* *Yogas* or *Mashatmaguptadi Modaka* were excluded at this

stage. This step was justified to eliminate literature that addressed unrelated topics.

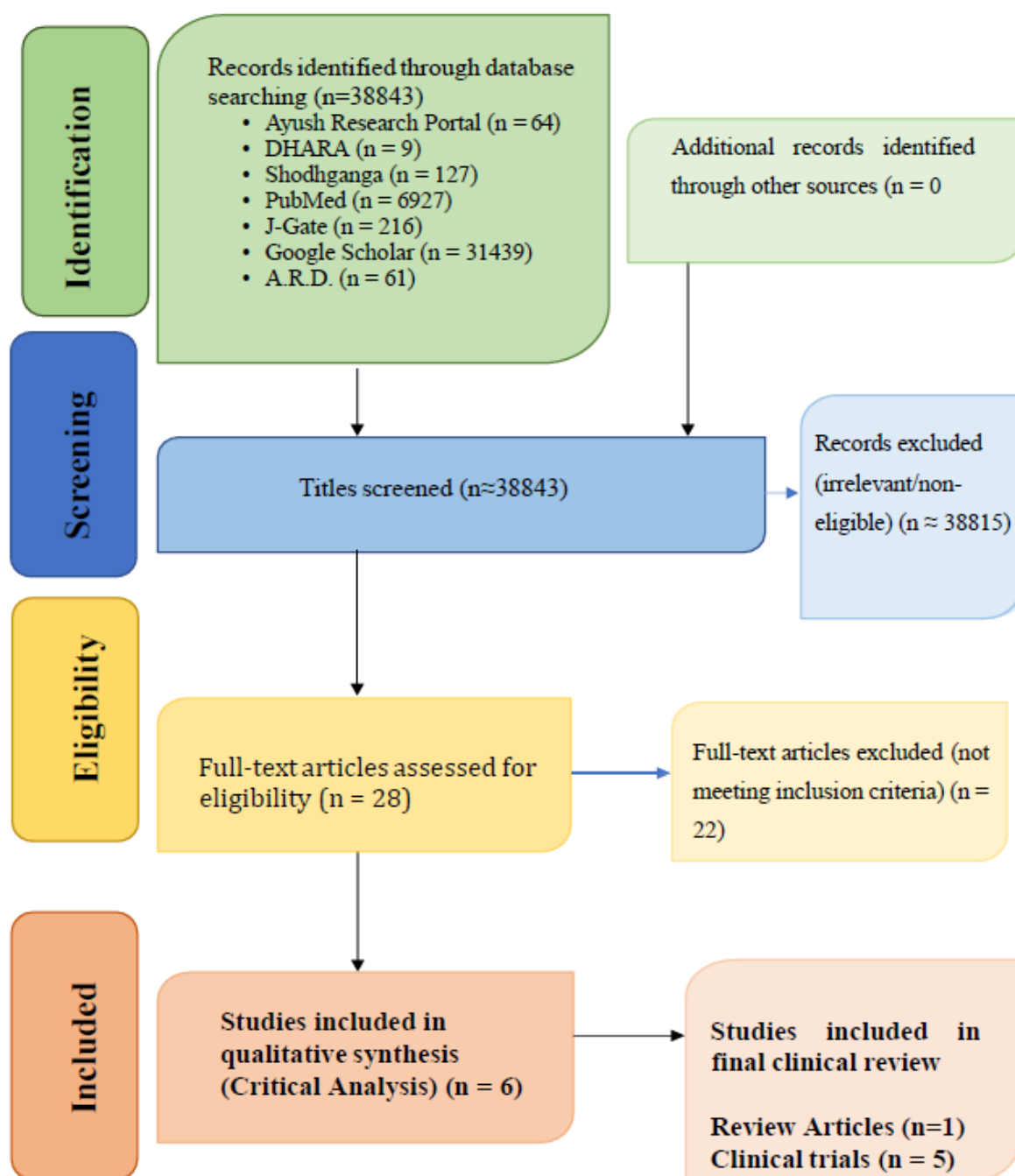
iii. Eligibility assessment (full-text review): Full-text articles were reviewed for methodological soundness. Excluded articles were those with insufficient data, lack of clinical endpoints, poor methodological design, or those not directly related to *Kshinashukra* or *Vrishya Yogas*. This ensured that only scientifically valid and contextually relevant studies were included.

iv. Final inclusion: Based on the above criteria, 6 studies were finalized, 1 review-based articles for

conceptual depth and 5 clinical trials for empirical evidence. This segregation was justified as review papers offered theoretical understanding and mechanistic insights, whereas clinical studies provided measurable outcomes relevant to "*Mashatmaguptadi Modaka*," "*Vrishya Yoga*" and "*Kshinashukra*".

By following this stepwise screening and applying inclusion and exclusion criteria, the final PRISMA chart represents a robust synthesis of both classical Ayurvedic concepts and modern scientific evidence for the current study.

Figure 1: PRISMA Flow (Systematic Review of Literature)



Comprehensive Literature Search Across Different Databases

S.No.	Name of the Database	Keyword use	Date	No. of article retrieved
1.	Ayush Research Portal	<i>Mashatmaguptadi Modaka</i>	25.12.2025	00
		<i>Vrishya Yoga</i>		00
		<i>Kshinashukra</i>		03
		Oligospermia		61
2.	DHARA	<i>Mashatmaguptadi Modaka</i>	25.12.2025	00
		<i>Vrishya Yoga</i>		00
		<i>Kshinashukra</i>		00
		Oligospermia		09
3.	Shodhganga	<i>Mashatmaguptadi Modaka</i>	25.12.2025	00
		<i>Vrishya Yoga</i>		54
		<i>Kshinashukra</i>		02
		Oligospermia		71
4.	Pub Med	<i>Mashatmaguptadi Modaka</i>	25.12.2025	00
		<i>Vrishya Yoga</i>		00
		<i>Kshinashukra</i>		01
		Oligospermia		6926
5.	J Gate	<i>Mashatmaguptadi Modaka</i>	25.12.2025	00
		<i>Vrishya Yoga</i>		08
		<i>Kshinashukra</i>		02
		Oligospermia		206
6.	Google Scholar	<i>Mashatmaguptadi Modaka</i>	25.12.2025	00
		<i>Vrishya Yoga</i>		799
		<i>Kshinashukra</i>		40
7.	Ayush Research Database (A.R.D.)	Oligospermia	25.12.2025	30,600
		<i>Mashatmaguptadi Modaka</i>		00
		<i>Vrishya Yoga</i>		05
		<i>Kshinashukra</i>		02
		Oligospermia		54

Review of literature

Nirukti of Kshinashukra

According to Ayurveda *Shabda Kosha*, the term *Mana* denotes quantity or measurable amount. *Retas*, synonymous with *Shukra*, represents the reproductive tissue responsible for fertility and vitality. The condition in which the *Mana* (quantity) of *Shukra* becomes *Alpa* (diminished) is termed *Kshinashukra*.

Thus, *Kshinashukra* can be interpreted as a pathological state characterized by quantitative depletion of *Shukra Dhatu*. From a contemporary biomedical perspective, this condition closely resembles reduction in sperm concentration, i.e., oligospermia.

Derivation of the Term Oligospermia

The word oligospermia is derived from:

- *Oligo* – less or scanty
- *Sperm* – spermatozoa

- *-ia* – condition or disease

Hence, oligospermia denotes a pathological condition characterized by reduced sperm count in the semen.

Definition of Oligospermia

According to Stedman's Medical Dictionary, oligospermia is defined as a subnormal concentration of spermatozoa in the ejaculate. The World Health Organization (WHO) defines oligospermia as a sperm concentration of less than 16 million spermatozoa per millilitre of semen.

Synonyms

- Oligospermia
- Oligozoospermia

Samanya Nidana (General Etiological Factors) of Kshinashukra

Acharya Sushruta and Vagbhaṭa emphasize the predominant role of *Vata* and *Pitta Doṣa* in the

pathogenesis of *Kshinashukra*. Factors responsible for *Samanya Dhatu Kṣhaya* and *Shukra Dhatu Kṣhaya* are extensively described in classical texts.

➤ **Vata Prakopaka Ahara**

- Intake of *Rukṣa*, *Shita*, *Laghu*, and *Alpa Guṇa Yukta Ahara*
- Excessive consumption of *Kaṭu*, *Tikta*, and *Kashaya Rasa*
- *Abhojana* (skipping meals)

➤ **Vata Prakopaka Vihara**

- *Ativyavaya* (excessive sexual activity)
- *Prajagaraṇa* (night awakening)
- *Laṅghana* (excessive fasting)
- *Ati Plavana* (excessive swimming)
- *Ati Adhva* and *Ati Vyayama* (excessive work and exercise)
- *Vega Vidharana* (suppression of natural urges)
- *Dukha Shayyasana* (improper posture and sleep)
- *Rogakarshana*, *Abhighata*, and *Marma Abhighata*

➤ **Pitta Prakopaka Ahara**

- Excess intake of *Kaṭu*, *Amla*, *Lavaṇa*, *Tikṣṇa*, *Uṣṇa*, and *Laghu Ahara*
- *Tila Taila*, *Kulattha*, *Sarṣapa*, *Atasi*
- *Shaka*, *Matsya*, *Mamsa*, *Dadhi*, *Takra*
- *Souviraka* (alcoholic preparations)
- Excessive consumption of sour fruits

➤ **Pitta Prakopaka Vihara**

- *Upavasa* (fasting)
- *Chinta* (worry), *Krodha* (anger), *Bhaya* (fear), *Shoka* (grief)

❖ **Samprapti of Kshinashukra**

- *Ayasa* (exhaustion)
- *Ati Maithuna* (excessive coitus)

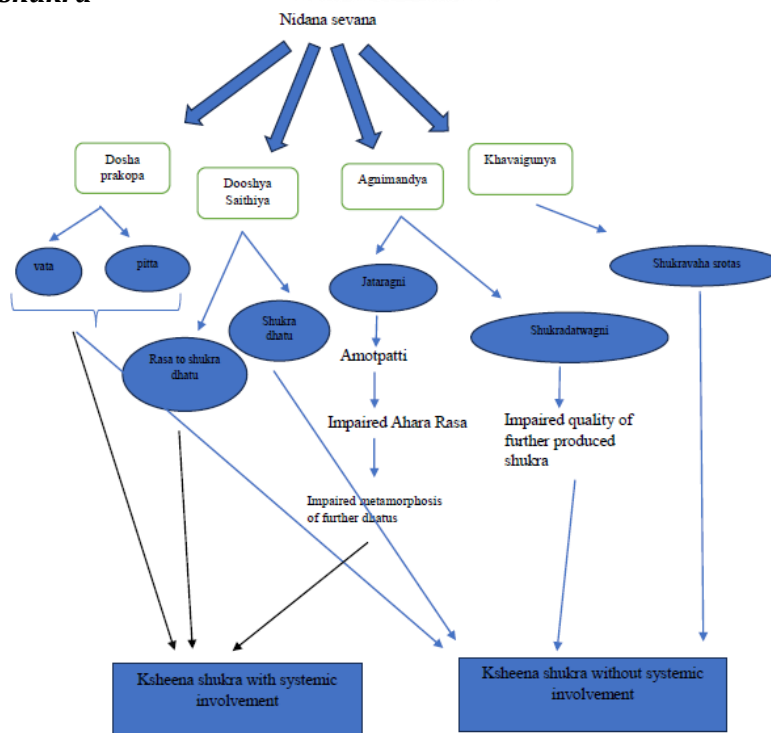
Vishishta Nidana (Specific Etiological Factors) of Kshinashukra

The following factors are specifically mentioned in classical texts as causative for *Kshinashukra*:

- *Ativyavaya* and *Ati Vyayama*
- *Asatmyahara Sevana* (incompatible diet)
- *Akala Maithuna* (untimely intercourse)
- *Ayoni Maithuna* (unnatural intercourse)
- *Amaithuna* (prolonged sexual abstinence)
- Excess intake of *Tikta*, *Kaṣaya*, *Lavaṇa*, and *Amla Rasa*
- *Ruksha Guna* and *Ushna Virya* dominant diet
- *Nariṇam Arasajnanam* (intercourse with an unwilling partner)
- *Ati Chinta* and *Ati Shoka*
- *Atiyoga* of *Shastra*, *Kṣara*, and *Agni Karma*
- *Abhichara Karma*
- *Vyadhi Karshana*
- *Vega Dharana*
- *Kshata* (injury), especially injury to *Vitapa Marma*, resulting in *Alpa Shukrata*

Role of Abrahmacharya

While explaining the concept of *Trayopasthambha*, Acharya Vagbhata states that indulgence in *Abrahmacharya* leads to progressive depletion of *Bala* and *Dhatu*s, culminating in *Shukra Dhatu Kṣhaya*.



Nidanarthakara Vyadhis

Diseases that act as causative factors for *Kshinashukra* are termed *Nidanarthakara Vyadhis*, including:

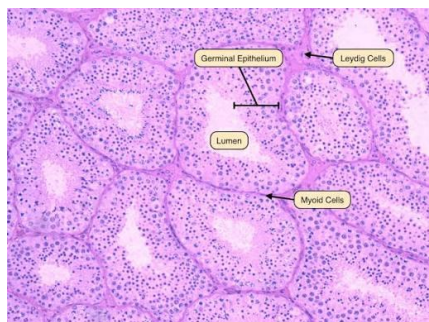
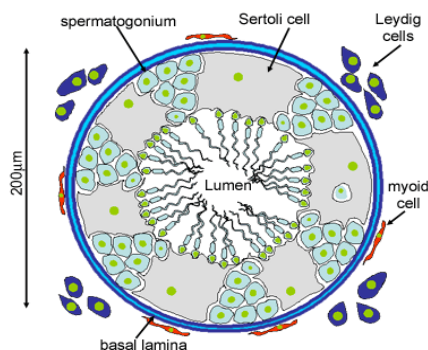
- Upadamsha
- Shukra Dhatugata Jvara
- Pittaja Prameha and Shukrameha
- Lingarsha
- Vyavaya Shosha
- Sahaja Arsha
- Sthaulya
- Majja Dhatu Kshaya
- Rajyakshma

❖ Causes of Oligozoospermia (Modern Perspective)

- Obstruction in normal sperm transport.
- Hormonal disorders and testicular dysfunction.
- Psychological stress, smoking, and alcohol consumption.
- Malnutrition and obesity
- Irregular sexual activity
- Sedentary lifestyle and disturbed circadian rhythm.
- Low-protein and high-fat diet.
- Adverse effects of certain medications.
- Infections and sexually transmitted diseases.

Regulation of Spermatogenesis

Spermatogenesis is a highly coordinated physiological process regulated by Sertoli cells and a complex interplay of endocrine hormones. In addition to hormonal control, the process is influenced by nutritional, paracrine, and local microenvironmental factors within the seminiferous tubules.



Role of Sertoli Cells

Sertoli cells, also known as *sustentacular cells*, play a central role in the regulation and maintenance of spermatogenesis. Their functions can be broadly categorized into the following mechanisms:

1. Nutritional and Structural Support

Sertoli cells provide metabolic and nutritional support to developing germ cells at various stages of spermatogenesis. They facilitate the transport of nutrients and remove metabolic waste products, thereby maintaining an optimal microenvironment for germ cell development.

2. Secretion of Estrogen

Sertoli cells synthesize and secrete estrogen through the aromatization of testosterone. Estrogen is essential for normal spermatogenesis, particularly in regulating fluid reabsorption within the seminiferous tubules and supporting germ cell maturation.

3. Secretion of Hormone-Binding Proteins

Sertoli cells secrete androgen-binding protein (ABP), which binds testosterone and concentrates it within the seminiferous tubules. This mechanism ensures the availability of high intratubular testosterone levels, which are critical for the maturation and differentiation of spermatozoa.

Role of Hormones in Spermatogenesis

The regulation of spermatogenesis depends on the coordinated action of several hormones:

1. Testosterone

Secreted by Leydig cells under the influence of luteinizing hormone, testosterone is indispensable for the initiation and maintenance of spermatogenesis. It promotes meiosis and the maturation of spermatids into spermatozoa.

2. Follicle-Stimulating Hormone (FSH)

FSH acts directly on Sertoli cells, stimulating the synthesis of androgen-binding protein, inhibin B, and other factors necessary for germ cell development.

3. Luteinizing Hormone (LH)

LH stimulates Leydig cells to produce testosterone, thereby indirectly supporting spermatogenesis.

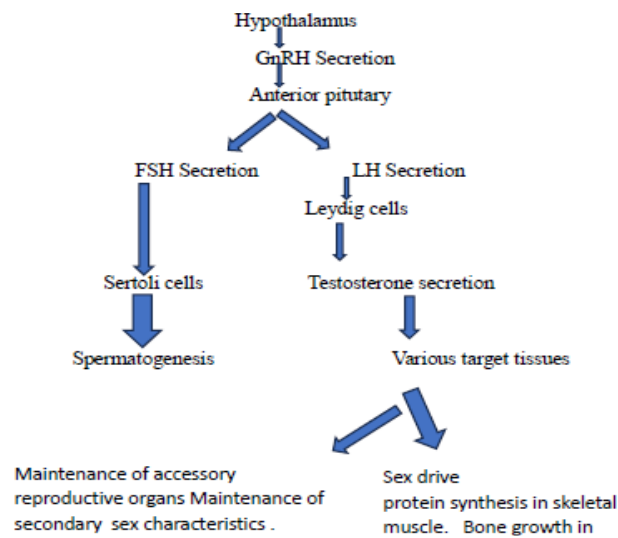
4. Estrogen

Although present in smaller quantities, estrogen plays a vital role in sperm maturation, regulation of fluid dynamics within seminiferous tubules, and feedback control of gonadotropin secretion.

5. Growth Hormone

Growth hormone supports spermatogenesis indirectly by regulating general metabolic processes and promoting cell division and protein synthesis within the testes.

Mechanism of Spermatogenesis



Acharyas have described *Roopa* of *Kshinashukra* in detail. Signs and symptoms of *Kshinashukra* can be divided as:

- 1) *Sarvadaihika Lakshana*
- 2) *Sthanika Lakshana*
- 3) *Manasika Lakshana*
- 4) *Maithnugata Lakshana*
- 5) *Shukragata Lakshana*

<i>Sarvadaihika lakshana</i>	<i>Sthanika lakshana</i>
• <i>Daurbalya</i> (general debility) ^[12] • <i>Bhrama</i> (dizziness) ^[12] • <i>Panduta</i> (pallor) ^[12] • <i>Sadana</i> (body ache) ^[12] • <i>Shrama</i> (Easy fatigability) ^[12]	• <i>Medra, Vrishanavedana</i> ^[13] • <i>Medra, Vrishanadhumayana</i> ^[14] • <i>Mukhashosha</i> (dryness of mouth) ^[12]

<i>Manasika lakshana</i>	<i>Maithunagata lakshana</i>
<i>Stridvesha</i> as <i>Manasika lakshanas</i> of <i>Ksheena Shukra</i> according to Haritacharya. ^[15]	• <i>Klaibya</i> (impotent) ¹³ • <i>Maithune Ashakti</i> (loss of libido) ¹³ • <i>Alpachesta</i> (May be decreased sexual activity)

<i>Shukragata lakshana</i>
• <i>Shukraavisarga</i> (semen may not be ejaculated at all) ¹⁶ • <i>Chiratpraseka</i>. (delayed ejaculation) • <i>Alpa-Raktayuktashukrapravriti</i> (semen may be ejaculated in low quantity mixed with blood).

Lakshanas of *Ksheena shukra* according to Various Acharyas

Acc: to Charaka Samhita	Acc: To Sushruta Samhita	Acc: To Ashtanga Hridaya	Acc: To Ashtanga Samgraha
<i>Pandutwa</i>			<i>Pandutwa</i>
	<i>Medra Vedana</i>	<i>Medra Vedana</i>	<i>Medhra</i>
		<i>Dhumayana</i>	<i>Dhumayana</i>
<i>Shukra avisarga</i>	<i>Chirat Praseka</i>	<i>Chirat praseka</i>	<i>Chirat nishavana</i>

<i>Dourbalya</i>	<i>Maiduna ashakti</i>		<i>Dourbalya</i>
	<i>Vrishana Vedana</i>	<i>Vrishana toda</i>	<i>Mushka toda</i>
	<i>Alpa rakta Shukra darshana</i>	<i>Sarakta shukra darshanam</i>	<i>Rakta nishtivana</i>
<i>Sadana</i>			<i>Sadana</i>
<i>Klaibya Shrama Mukhasosha Bhrama</i>			<i>Klaibya Shrama Asya shosha Angamarda</i>

Kshinashukra lakshanas according to various classical texts

<i>Ksheena shukra lakshanas</i>	C.S	S.S	A.S	A.H
<i>Daurbalya</i>	+	-	+	-
<i>Angamarda</i>	+	-	-	-
<i>Bhrama</i>	+	-	+	-
<i>Pandutwa</i>	+	-	+	-
<i>Sandhishoola</i>	-	-	-	-
<i>Sadanam</i>	+	-	+	-
<i>Shosha</i>	-	-	-	-
<i>Shrama</i>	+	-	+	-
<i>Mukhashosha</i>	+	-	-	-
<i>Timira darshana</i>	-	-	+	-
<i>Medhra vedana</i>	-	+	+	+
<i>Vrishna Vedana</i>	-	+	+	+
<i>Medhra dhumayana</i>	-	-	+	+
<i>Stridwesa</i>	-	-	-	-
<i>Klaibya</i>	+	-	-	-
<i>Alpacheta</i>	-	-	-	-
<i>Maithuna ashakti</i>	-	+	-	+
<i>Shukra avisarga</i>	+	-	-	-
<i>Chirat praseka</i>	-	+	+	+

Types

According to Charaka 4 types of *Klaibya*

- *Bijopaghataja*
- *Dvajopaghata*
- *Jaraja*
- *Shukrakshayaja*.

General symptoms of *Klaibya* - Inability to do coitus due to loss of erection, even if he has desire and the partner is lovable and obedient, and if attempted to do it, he may be afflicted with *Svasa*, Sweating, *Mogha Sankalpa Cheshta* and flaccid penis and *Nirbija*.

Shadvidhaklaibyam by Shushruta

- *Manasaja* (when mind afflicted with *Bhaya*, *Vishrambha*, *Stri dosha darshana*, *Stridvesha*)
- *Aharaja*- (Intake of *Katu*, *Amla*, *Ushna*, *Lavana* in excess)
- *Shukra kshayaja*- (Indulges in excessive coitus

without *Vajeekarana*)

- *Dvaja bhangaja* - (Severe *Medra roga*, injury to Penis, and *Shukra vaha nadi*) *Sahaja*- (Inborn causes)
- *Khara shukraja* - (Excessively obese, instable mind, suppression of *Mala*, *Mutra*, *Brahmacharya*)

Non – Invasive male infertility management

Empirical treatments Life style

Lifestyle influences such as sedentary behaviour, obesity, smoking, alcohol consumption, and substance abuse have been linked to impaired fertility in men. these factors can detrimentally affect sperm quality and motility, suggesting that adopting healthier habits can help improve fertility outcomes.^[17,18]

Weight loss: Non-controlled studies have suggested that weight loss can result in improved sperm parameters.^[19,20,21]

Alcohol consumption

Data derived from a recent meta-analysis including 15 cross sectional studies and 16,395 men suggested that moderate alcohol dose not adversely affect semen parameters, whereas high alcohol intake can have a detrimental effect on male infertility^[22] heavy chronic alcohol consumption (defined as > 2 drinks/ day) can reduce testosterone levels.^[23]

Antioxidant treatment

Oxidative stress is considered to be the most important contributing factors in the pathogenesis of idiopathic infertility. Antioxidant therapy had a positive impact on live birth and pregnancy rates in sub-fertile couples undergoing ART cycles.^[24]

Selective oestrogen receptor modulators

Selective oestrogen receptor modulators (SERMs) block oestrogen receptors at the level of the hypothalamus, which results in stimulation of GnRH secretion, leading to an increase in pituitary gonadotropin release and stimulation of spermatogenesis.^[25]

Anabolic steroid abuse

Oligospermia or azoospermia as a result of anabolic abuse should be treated initially by withdrawal of the anabolic steroid. There is no common indication for treating this disorder, the management is based on case reports and clinical experience. Usually, adequate sperm numbers and quality will improve over a six to twelve months period from cessation. If after this interval the condition persists, then hcG without or in combination with FSH as an alternative to clomiphene can be used to stimulate Spermatogenesis.^[26]

ART

ART, which includes techniques such as Intracytoplasmic sperm injection (ICSI), In vitro fertilization (IVF) and Gamete intrafallopian transfer (GIFT), is increasingly utilized to tackle infertility.^[27]

Ayurveda also described Shamana and Shodhana chikitsa for the management of male infertility

Ayurveda emphasized *Vajikarana tantra* for the management of oligospermia using *Rasayanas* and *Vajikara dravyas* (Virilificatory or aphrodisiacs drugs) along with *panchakarma*.

Shodana chikitsa

The main line of treatment in *Kshinashukra* has been given as -*Ksheena Shukrakari Kriya*. Before the administration of the drugs, which are having *Vrishya karma*, it is a general factor to prepare the body in order to get maximum benefit. These purificatory procedures are sufficient enough to create *Srotoshuddhi* and a body devoid of malas. Ayurveda includes *Vamana karma* and *Virechana karma* in these preparatory procedures.^[28] In *Shukra dosha* i.e. in *Ksheena Shukra* the choice of treatment is *Basti*^[29]

(*Anuvāsana & Niruha*) which is made out of *Shukravardhaka dravyas* i.e. *Ghrīta Taila Chikitsa* etc is given in the classics like *Charaka Samhita*, *Sushruta Samhita* etc. explain various recipes of *Vrishya Basti* which can be effectively used in the condition.

Prashasta: Shukradosheshu Bastikarma Visheshata: | (Cha.Chi.30/152) Snigdham Vaantam Viriktam cha Nirudamanuvasitam |

Yojyet Shukradoshartam Samyaguttara bastinam || (Su.Sha.2/12)

Samshamana chikitsa

Dalhana comments on *Sushruta Sutram* 1/7. As *Upachaya* is the primary line of treatment in *Kshinashukra*. *Vridhhi*, *Unnati* etc. are the meanings of the word *Upachaya*. So, while treating *Kshinashukra* the physician should select the combination of drugs which boost the *Shukra Dhatu*. Properties of *Vrishya dravyas* (*Shukrakara*) are *Madhura rasa*, *Snigdha*, *Guru guna* with function of *Jeevaniya* and *Brimhana* and which create *Harshana* of *Mana*.^[30]

Yat Kinchit Madhuram Snigdham Jeevanam Brimhanam Guru |

Harshanam Manashchaiva Sarvam Tad

Vrushyamucchyate || (Cha.Chi.2/4/36)

Tat Trividham- Janakam, Pravartakam, Janakapravartakam Cheti || (Dalhana)

Samanya Chikitsa mentioned in our classics

1. According to *Charaka Samhita* *Charaka* has explained the *Chikitsa* as *Samaana Gunayukta Dravyopayoga* causes the *Vridhi* of the *Dhaatu* or the *Dosha* which are having the similar *Gunas*. In *Ksheena Shukra Snigdha*, *Madhura* and *Sheeta Gunayukta Ahaara* and *Oushadha* is advised in the 30th Chapter of *Chikitsa Sthaana*.
2. According to *Sushruta Samhita* in *Shaareera Sthaana*, it is explained that, *Svayonivardhana Dravyopayoga* as the treatment of *Ksheena Shukra*. The principle is quite similar to the treatment principle of *Charaka*. Means the drugs of the Similar *Yoni* or *Gunas* should be used increase the *Shukra Dhaatu*.
3. According to *Ashtaanga Hridaya Shukrakari Kriya* should be done. i.e., The *Vajikarana* Should be done. *Vajikarana Yogas* which are having the quality of increasing the *Shukra* should be used.

According to Ayurvedic classics

- According to *Acharya Sushruta*, *Samanya Chikitsa* for *Shukra Dosha* includes *Snehana*, *Vamana* and *Nirooha Basti*, *Swedana*, *Virechana*, *Anuvāsana Basti* followed by *Uttara Basti*. This also holds good for *Ksheena-Shukra*.^[31]
- According to *Sushruta*, *Nidana-Parivarjana* (restraint from etiological factors) is the first line of

treatment of any disease.^[32] This will check the progression of the disease, as it acts on the base of the chain of pathogenesis. So, the first line of treatment of *Ksheena Shukra* will be to stop indulgence of etiological factors whatever is found in the patient.

- Management of *Shukra Dosha* should include diet of *Madhura* and *Tikta Rasa*, proper *Vyayama* and *Vyavaya* along with timely elimination of *Dosha* in proper quantity.^[33]
- Vagbhatta has advised to treat *Shukradushti* based on the involvement of *Doshas*^[34] if *Vata Dosha* is dominant in *Ksheena Shukra* then *Basti* should be the treatment of choice, and if dominated by *Pitta*, *Virechana* should be performed. This promotes quality of semen and helps a person in procreation of offsprings.
- *Dravya* which has properties like *Madhura*, *Sheeta*,

Yogas

Churna yogas: <i>Shatavaryadi churna</i> <i>Vidaryadi churna</i> <i>Kamadeva churna</i> <i>Gokshuradi churna</i> <i>Maha ashwagandadi churna</i>	Ghrita yogas <i>Kamadeva ghrita</i> <i>Brihat Ashwagandadi ghrita</i> <i>Shatavari ghrita</i> <i>Amrutaprasha ghrita</i> <i>Phala ghrita</i> <i>Mahakalyanaka ghrita</i>
Vati yogas <i>Vanari gutika</i> <i>Jatiphaladi ghana vati</i>	Rasa yogas: <i>Poornachandra rasa</i> <i>Pushpadhanva rasa</i> <i>Poornachandra rasa</i>
Lehya yogas: <i>Ashwagandha lehya</i> <i>Pippali Rasayana</i> <i>Kushmanda Rasayana</i>	Taila yogas <i>Shri Gopala Taila</i> <i>Ashwagandha taila</i> <i>Bala ashwagandha lakshadi taila</i> <i>Mahamasha taila</i>

Pathya and Apathya in Ksheena shukra

Pathya	Apathya
Ahara <i>Kshira</i> , <i>Dadhi</i> , <i>Ghrita</i> , <i>Taila</i> , <i>Vasa</i> , <i>Majja</i> , <i>Mamsa rasa</i> , <i>Ikshu</i> , <i>Sharkara</i> , <i>Madhu</i> , <i>Raktashali</i> , <i>Godhuma</i> , <i>Kharjura</i> . Vihara <i>Abhyanga</i> , <i>Snana</i> , <i>Padatraana</i> , <i>Dharana</i> . Aushada <i>Ashwaganda</i> , <i>Shataavari</i> , <i>Vidari</i> , <i>Musali</i> , <i>Lasuna</i> , <i>Bala</i> , <i>Gokshura</i> , <i>Atmagupta</i> , <i>Jivanti</i> .	Ahara <i>Atikatu</i> , <i>Atitikta</i> , <i>Ati lavana ahara sevana</i> , <i>Shaka</i> , <i>Mastu</i> , <i>Takra</i> . Vihara <i>Atimaithuna</i> , <i>Akalamaithuna</i> , <i>Chinta</i> , <i>Atisahasa</i> , <i>Shukra vegadharana</i> . Aushada <i>Dhaanyaka</i> , <i>Kulattha</i> , <i>Atasi</i> , <i>Maricha</i> , <i>Yavaani</i> , <i>Chanaka</i> ,

RESULT AND DISCUSSION

Infertility treatment mostly focuses on treating couples on the basis of frequency of intercourse during the fertile window, management of any dysfunction, treating any pelvic or tubal diseases. Treatment is done according to causative factor. Intrauterine insemination with either clomiphene citrate or gonadotropin therapy, IVF are some of the treatments done in infertility. But *Rasayana* and *Vajikarana* improves health by strengthening body's own healing

Snigdha, *Picchila* such as *Ksheera*, *Ghrita*, *Shatavari*, *Musali* etc., are good *Shukrala Dravyas*.

- In *Charaka Samhita*, he has mentioned a *Guna* consisting of ten drugs namely *Jeevaka*, *Rishabaka*, *Kakoli*, *Ksheera Kakoli*, *Mudgaparni*, *Mashaparni*, *Meda*, *Vruddha Ruha*, *Jatila* and *Kulinga*. Here *Jatila* refers to *Jatamamsi* and *Vruddha Ruha* to *Shatavari*.^[35] This *Guna* is called *Shukra Janana Guna*.
- In *Ksheena Baleeya Vajeekarana Adhyaya*, Acharya *Sushruta* recommends *Shukrala* and *Vajeekara Dravya* like *Bastanda Yoga*, *Masha Yoga*, *Swayamaguptadi Yoga*^[36] etc.
- The principal treatment to be followed in *Ksheena Dhatu* is to consume *Dravya* which have similar qualities to that *Dhatu* e.g. *Marṣa* in *Marṣa Kshaya* and *Shukra* in *Shukrakshaya*.^[37]

system and balancing *Dhatus*. *Rasayana* improves body's nutrition. It gives *Pushti* to all seven *Dhatus* to all ages from pediatrics to geriatrics.^[9] It rejuvenates body by holistic health promoting approach. *Vajikarana* being specialized therapy for reproductive health and enhancing sexual function have high rate of curing infertility. It has been proved to be 90% effective. *Vajikarana* also acts on higher centre of the brain i.e. the hypothalamus and limbic system. It deals

with strengthening and improving sexual competency and conception of healthy offsprings along with curing disturbed spermatogenesis, defects in semen or any reproduction related problems. It improves the physical, psychological and social health which imparts great impression in reproductive health.

Mashatmaguptadi Modaka is one such formulation explained in the Charaka Samhita and Ashtanga Hridayam to have best *Vrishya* effect (*Param vrishya*). It contains *Masha*, *Atmagupta*, *Shashtika Shali*, *Godhuma*, *Ikshuraka*, *Vidarikanda*, *Goghrita*, *Godugdha* and *Sharkara*. *Kapikacchu* (*Mucuna pruriens*), also known as *Atmagupta*/*Svayamgupta*/*Markati*, is described in Ayurveda as a prominent *Vajikarana dravya* with primary actions of *Vrishya* (aphrodisiac /spermatogenic), *Balya* (strength-promoting), and *Brimhana* (tissue-nourishing). In Caraka Samhita, *Kapikacchu* appears under *Balya/Madhura skanda* contexts and is incorporated in formulations explicitly intended for *Vrishya* action, such as *Vrishya pupalika* and related *Vajikarana* preparations. In Sushruta Samhita, *Kapikacchu yogas* are mentioned for *Vrishyata* and also in contexts related to *Vandhyatwa* (infertility) and urinary/reproductive obstruction (*Mutraghata*). In Vagbhata's texts, *Kapikacchu* is repeatedly used in milk/ghee-based preparations (*Ksheera*, *Ghrta*, *Poopalika*) indicated for strengthening and aphrodisiac outcomes-consistent with its *Brimhana* and *Rasayana* profile. *Kapikacchu* seeds are an excellent natural source of L-DOPA (L-3,4-dihydroxyphenylalanine), a precursor of dopamine. The article highlights that this biochemical attribute is not only relevant to neurological indications (e.g., Parkinsonism), but is also relevant to spermatogenesis. Dopaminergic modulation has known roles in the hypothalamic-pituitary-gonadal axis. Improved dopaminergic tone may support libido, sexual motivation, and neuro-hormonal regulation, thereby indirectly benefiting semen parameters and male sexual function.

The study by Gupta et al. evaluated the aphrodisiac activity and spermatogenic potential of *Vigna mungo* Linn. (Fabaceae) seeds, a plant traditionally described as a *Vajikarana* (aphrodisiac) drug in ayurvedic classical texts like Charaka Samhita, etc. A significant improvement in male sexual performance was observed by decreased mount latency and intromission latency (indicating improved libido/sexual motivation and faster sexual initiation), Increased mount frequency and intromission frequency (reflecting enhanced sexual vigour and copulatory performance) and Improvement in ejaculation-related indices, including increased ejaculation frequency and reduced post-ejaculatory interval measures. A major reproductive finding of the study is the spermatogenic enhancement produced by *Vigna mungo* treatment. It showed: Increased

epididymal sperm count relative to control, reported improvement in sperm quality indicators such as motility and increased weight of male reproductive organs, including testis, epididymis, prostate, and seminal vesicle (suggesting androgenic support or reproductive tissue trophic effect).

Studies on *Ikshuraka* (*Asteracantha longifolia*) showed marked reduction in Mount Latency (ML) indicating enhanced sexual motivation/libido, increase in mount frequency (MF) (reported as approximately five-fold at higher dose) suggesting stronger sexual vigour/performance, improved attractability towards females and Reduction in post-ejaculatory latency suggesting quicker recovery of sexual responsiveness. *Ikshuraka* (*Asteracantha longifolia*) improved sperm parameters like motility, seminal vesicle fructose levels. Histopathological findings showed increased diameter of seminiferous tubules, increased density of sperm bundles within tubules and more pronounced spermatogenic progression.

Studies on *Godhuma* (*Triticum aestivum*) showed significant increase in FSH and LH. It acts as reproductive axis modulator, likely acting through phytochemical/nutrient-mediated influence on the hypothalamic-pituitary-gonadal (HPG) axis.

Rice (*Oryza sativa* L.) being mostly eaten *Dhanya* among all the *Dhanyas*, it has most prominent effect on human beings. It has rice bioactives (especially γ -oryzanol and vitamin E-rich fractions) as potent antioxidants capable of protecting reproductive tissues from oxidative damage. Since oxidative stress is a major pathological driver of male infertility (sperm DNA damage, lipid peroxidation, reduced motility), this antioxidant profile provides a mechanistic basis for supportive fertility use. Rice germ is particularly rich in α -tocopherol (vitamin E), and that vitamin E functions as a lipid-phase antioxidant protecting cell membranes from oxidative stress. In the context of male reproductive physiology, this has relevance because spermatozoa membranes are highly susceptible to oxidative injury due to high polyunsaturated fatty acid content. Rice (*Oryza sativa* L.) works by reducing oxidative damage to testes, restoring endogenous antioxidant enzyme systems, protecting reproductive tissue integrity under toxic insult and supporting semen quality indirectly through membrane protection mechanisms.

Studies on *Vidarikanda* (*Pueraria tuberosa*) showed significant reduction in mount latency and post-ejaculatory latency, indicating increased sexual motivation and reduced recovery time. marked rise in mount frequency (notably ~three-fold at 150 mg/kg), reflecting improved sexual vigour. Overall, the behavioural profile indicates a true prosexual/aphrodisiac effect rather than nonspecific stimulation. Also, Significant increase in epididymal sperm count

and Increased fructose content in seminal vesicles (energy substrate critical for sperm motility and fertilizing competence) was seen. Histological examination showed increased diameter of seminiferous tubules, improved spermatogenic progression in treated animals and Epididymis sections showed larger tubules and packed spermatozoa in lumen, especially at high dose. These

confirm biological stimulation of sperm production and maturation. *Vidarikanda* (*Pueraria tuberosa*) has been proved to increase FSH, LH and Testosterone. The studies propose that *P. tuberosa* improves androgenesis by activating the HPG axis, likely via GnRH-mediated upstream regulation, resulting in increased gonadotropins and testosterone that enhance sexual behaviour and spermatogenesis.

Drug Name	Rasa	Guna	Virya	Vipaka	Dosha Karma
<i>Kapikacchu</i> (<i>Mucuna pruriens</i>)	<i>Madhura</i> (predominant), <i>Tikta</i>	<i>Guru</i> ; sometimes <i>Snigdha</i> highlighted	<i>Sheeta</i> (as per several <i>Nighantus</i> ; some variations noted)	<i>Madhura</i>	<i>Vatahara</i> (strongly), <i>Pittahara</i> (reported), <i>Kaphahara</i> (associated with <i>Tikta</i> rasa)
<i>Masha</i> (<i>Vigna mungo</i> Linn.; Black gram/Urad)	<i>Madhura</i> (some sources mention <i>Amla</i> <i>anurasa</i>)	<i>Guru, Snigdha</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Vatahara</i> (<i>Vata-shamana</i>); may increase <i>Kapha</i> & <i>Pitta</i> (<i>Kapha-Pitta vardhaka</i> tendency)
<i>Kokilaksha</i> / <i>Talimakhana</i> (<i>Asteracantha</i> <i>longifolia</i> Nees; syn. <i>Hygrophila</i> <i>auriculata</i>)	<i>Madhura, Tikta</i> (<i>Amla</i> also reported in some <i>Nighantus</i>)	<i>Guru, Snigdha,</i> <i>Picchila</i>	<i>Sheeta</i>	<i>Madhura</i>	Predominantly <i>Vatahara</i> ; also reported <i>Pitta-shamana</i> tendency; can be <i>Kapha-var dhaka</i> due to <i>Madhura/Guru/Snigdha</i>
<i>Godhuma</i> (<i>Triticum</i> <i>aestivum</i> L.)	<i>Madhura</i>	<i>Guru, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vata-Pitta shamaka</i> , tendency for <i>Kapha</i> <i>vardhana</i> (in excess / due to heaviness and unctuousness)
<i>Shali</i> / <i>Tandula</i> (Rice) (<i>Oryza sativa</i> L.)	<i>Madhura</i> (some sources mention <i>Kashaya</i> <i>anurasa</i>)	<i>Guru, Snigdha</i> (some sources mention <i>Laghu</i> depending on variety)	<i>Sheeta</i>	<i>Madhura</i>	<i>Vata-Pitta shamana</i> ; <i>Kapha vardhana</i> tendency (esp. due to <i>Guru-Snigdha-Madhura</i>)
<i>Vidarikand</i> (<i>Pueraria tuberosa</i>)	<i>Madhura</i>	<i>Guru, Snigdha</i>	<i>Sheeta</i>	<i>Madhura</i>	<i>Vata-Pitta shamaka</i>

CONCLUSION

Ayurveda has most unique method and principles of addressing holistic health through *Rasayana* and *Vajikarana* aiding preventive aspect in all ages ranging from neonates to geriatrics. Ayurveda focuses on balancing *Tridoshas*, *Agni* and *Saptadhatu*s. It bridges gap between *Sharira*, *Atma* and *Mana*. Understanding the cause of infertility will help in diagnosis and accurate treatment. Adapting proper lifestyle and using of *Vajikara* and *Vrishya* formulations will be great boon for people suffering from infertility and societal stigma that comes with it. Ayurveda recognizes *Ahara* as a fundamental pillar of health, comparable to the modern concept of nutraceuticals that combine nutritional and therapeutic benefits. Across the reviewed evidence, the included *Vajikarana* drugs collectively demonstrate significant male reproductive enhancing potential through both

classical Ayurvedic rationale and modern experimental validation. Ayurvedically, herbs such as *Kapikacchu* (*Atmagupta*), *Maṣa*, *Kokilaksha*, *Vidarikanda*, *Godhuma* and *Shali* are characterized predominantly by *Madhura* rasa, *Madhura vipaka*, *Guru-Snigdha guṇa*, and chiefly *Vata-shamana* actions, which directly correlate with *Brimhaṇa*, *Balya*, *Rasayana* and *Shukra-var dhana* effects. Modern preclinical findings further confirm these classical claims by demonstrating measurable improvements in sexual behaviour parameters (libido and copulatory performance), androgenic activity (FSH-LH-testosterone cascade), spermatogenesis, sperm count/motility, reproductive organ trophicity, and testicular histological recovery, along with antioxidant-mediated testicular protection under oxidative/toxic stress models. Taken together, these data provide strong scientific and Ayurvedic

justification for incorporating these drugs in herbal formulations aimed at male sexual dysfunction, reproductive debility, and impaired semen quality, supporting their role as evidence-based male reproductive tonics and fertility-promoting agents.

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