

**CONCEPTUAL STUDY OF KSHEENA SHUKRA W.S.R TO OLIGOZOOSPERMIA****Dr. Nikhil B. N.<sup>1\*</sup> and Dr. Waheeda Banu<sup>2</sup>**

<sup>1</sup>PG Scholar, Department of PG Studies in Kayachikitsa, Karnataka Ayurveda Medical College and Hospital, Mangalore, D.K. District, Karnataka, India.

<sup>2</sup>HOD and Professor, Department of PG Studies in Kayachikitsa, Karnataka Ayurveda Medical College and Hospital, Mangalore, D.K District, Karnataka, India.

Article Received on  
23 October 2024,

Revised on 12 Nov. 2024,  
Accepted on 02 Dec. 2024

DOI: 10.20959/wjpr202424-34879



**\*Corresponding Author**

**Dr. Nikhil B. N.**

PG Scholar, Department of  
PG Studies in Kayachikitsa,  
Karnataka Ayurveda  
Medical College and  
Hospital, Mangalore, D.K.  
District, Karnataka, India.

**ABSTRACT**

The overall frequency of primary infertility in India varies from 3.9% to 16.8%, according to a World Health Organization (WHO) research. According to a recent research on the condition of infertility, 90% of male infertility issues are caused by oligospermia and other abnormalities in semen analysis, with 50% of cases being related to reproductive anomalies or illnesses in men. Oligospermia is regarded as KsheenaShukra in Ayurveda. The primary therapeutic options in conventional medicine include surgery, hormone therapies, medications, and assisted reproductive technology (ART); nevertheless, these are linked to numerous unintended and severe side effects. The Ayurvedic term for oligospermia is KsheenaShukra, which denotes low sperm counts or sperm counts of less than 15 million sperm/ml of sperm. The cause, signs, and treatment of ksheenashukra in the context of Ayurveda have all been covered in this article. The primary goals are to rule out the causes, investigate Ayurvedic

perspectives, and provide KsheenaShukra with reasonably priced Ayurvedic treatment. There are several treatments available in the world of allopathic medicine, but none of them have produced the desired outcomes because the majority of them are hormonal in nature and do not address the underlying causes of the condition. In addition to contemporary textbooks, periodicals, and other websites, classic Ayurvedic works such as Charaka Samhita, Shusrut Samhita, AshtangaHridayam, and others have been used to explore literary aspects. Ayurvedic herbs with qualities like shita, Balya, Brishya, Madhura, sheet Virya, Vrihana, and pacify

Vata, as well as therapies that pacify vata like basti, have been found to be effective in treating Ksheenashukra. These herbs are readily available and reasonably priced for all societal segments.

**KEYWORDS:** *KasheenaSukra, Oligospermia, Rasayana, Vajikarana, SukraDosha.*

## INTRODUCTION

According to Ayurveda, Shukra is considered as the 7th Dhatu amongst the 7 Dhatus which constitutes the body<sup>[1]</sup> and is considered as the Sara (essence) of all the Dhatus. It gets its nourishment from the former Dhatu(Majja, the 6th Dhatu).<sup>[2]</sup> Its function is GarbhaPrasada<sup>[3]</sup> (to produce progeny), Dhairya (courage), Chyavana (ejaculation), Priti (affection), DehaBala (strength of body), Harsha (pleasure) and Beejartha (purpose of seed).<sup>[4]</sup> The Gunas of ShukraDhatu are Bahala (thick), Madhura (sweet), Snigdha (unctuous), Avisra (without any putrid smell), Guru (heavy), Picchila (slimy), Shukla (white), Bahu (large in quantity), Phalavatasanshaya (invariably helps in procreation of offsprings)<sup>[5]</sup> & Snigdha (unctuous), Ghana (dense), Picchila (slimy), Madhura (sweet), Avidahi (non irritating) and Sphatikabha (white like a crystal).<sup>[6]</sup> There are several meaning of the term Shukra, but in this context a white and silvery substance ejaculate during sexual act is considered as Shukra.

## Synonyms

MajjaSamudbhava (Derived from bone marrow), Beejam (Sperm), Retas (Semen), 4. Ananda Samudbhava (Born out of pleasure), Pumsatva (Manliness), Paurushama (Virility), Veerya (Potency), Kittavarjitam (Without any waste), Majjarasa (An essence of Bone marrow).

## AIM AND OBJECTIVES

To assess the extent of Ayurvedic treatment for male infertility in relation to KsheenaShukra. To outline its treatment principles and formulations and to review oligozoospermia from the perspectives of current science and Ayurveda.

## MATERIALS AND METHODS

Both contemporary literature and classic Ayurvedic writings are examined.

Literature Samhita like: Charaka Samhita, Shusruta Samhita, Astang Hridaya.

Internet Source: Journals, Magazine, Articles, Google.

### Production of Sukra Dhatu

The process of ShukraDhatuUtpatti is explained in almost all almost Samhitas with a little discrepancy between them regarding the time period. The process of ShukraDhatuUtpatti<sup>[7]</sup> is, first Jatharagni and then Bhutagni acts upon the Ahara, then RasDhatwagni acts upon the AharaRas to produce the Rasdhatu, and subsequently all Dhatwagnis do act one by one to produce that specific Dhatu.

### Concept

Oligozoospermia is closely related to the term KsheenaShukra, a VataPittajaVyadhi and one of the eight varieties of Shukradushti described in the classics.<sup>[8]</sup> Being more common in Madhyam Vaya, a condition from the province of Apana Vata that prevents a man from becoming pregnant and causes infertility. The treatment of KsheenaShukra has been emphasized in Ayurvedic writings as Upachaya of Shukra Dhatu.<sup>[9]</sup> ShukraVardhaka medicines, such as Shukrala and Vrishya, can be used for this.

### Retas / Sukra

The Sanskrit root "RiKsraneRiyateKsarateIti," which meaning to flow, is where the word "Retasa" originates. "The substance that flows out of the body during sexual intercourse" is what "Re GatiRecanyohRiyateGacchatiSariratVahatiMaithunkaleIti" signifies. The phrases "Retas," "Sukra," and "Virya" are frequently used interchangeably. Shukra, on the other hand, refers to the whole secretion of the testicles and accessory glands, including semen and androgens. These names were created for a specific purpose. It is the body's seventh Dhatu and symbolizes the essence of all Dhatus, whereas "Virya" stands for potency and "Retas" for ejaculate (semen). Acharya Sushruta asserts that a flower bud only releases fragrance when it opens, but this does not mean that the bud is fragrance less. In a similar vein, Shukra does not manifest throughout childhood but does as one ages; this does not mean that Shukra is not there during childhood. Both males and females possess shukra, which in males is shown by the development of facial and genital hairs.

### Suddha Sukra

According to Acharya Charaka<sup>[10]</sup>, the best pure Retasas found in nature are Snighda (unctuous), Ghana (viscous), Pichila (slimy), Madhura (sweet), Avidahi (nonblazing), Sweta, and SphatikaSannibham. Likewise, Sphatikabham, Dravam, Snighdham, Madhura, Madhugandhi, TailaNibham, and KsoudraNibham are the attributes of pure Retasa, according to Acharya Sushruta.<sup>[11]</sup>

**Sukra Dusti**

Phenilam (frothy), Tanu (slender), Ruksha (arid), Vivarnam (discolored), Puti (putrid), Picchilam (slimy), Anya DhatuSamsrata (afflicted with other Dhatu), and Avasadi are the eight Doshas of Shukra, according to Acharya Charaka.

Ejaculation that is frothy, thin, dry, scarce, and unpleasant is caused by vata (dominance). Consequently, damaged sperm cannot fertilize (Garbha). Pittaa causes ejaculation that feels burning and purple or yellow stained sperm with an unpleasant odor. Sperm with kapha are extremely sticky and block the ejaculatory duct, or sperm channel.<sup>[12]</sup>

**KshinaShukra causative factor**

Disorders of the Shukra (semen) are caused by eating inappropriate food, exercising excessively, ejaculating too soon, eating dry, bitter, astringent, salty, sour, hot food, injury, morbidity that vitiates Dhatu, anxiety, distress, mistrust, apprehension, anger, exorcism, and Dosha individually or collectively reaching to Retovahasrotas.<sup>[13]</sup> Any kind of stress, whether mental or physical, may cause oligospermia. According to a basic Ayurvedic principle, if the initial Rasadhatu is not produced correctly or in the right quantity, the subsequent Dhatus will also be synthesized incorrectly. Senility, excessive coitus, lack of awareness of female desire, suppression of sperm discharge, inappropriate surgical procedures, or if Kshara and Agni karma cauterization procedures are offered.

**Oligospermia causes in Modern science**

- XX male syndrome and Klinefelter's syndrome are genetic disorders that result in defective spermatogenesis.
- Alcohol and tobacco addiction.
- Hormonal imbalance with low testosterone and high prolactin levels.
- Environmental and occupational hazards like lead, microwaves, chemical nematocides, and ultrasonography can cause oligospermia.

Retrograde ejaculation is the process of ejaculating backward into the bladder.

- Infections including syphilis, non-specific urethritis, mumps, or orchitis that affect sperm health or production.<sup>[14]</sup>

**Ayurvedic Management**

Thus, three topics can be used to address the entire management of KsheenaShukra: Nidana Parivarajana, Sanshamana Chikitsa, and Samshodhana Chikitsa.

- Niruha Basti and Anuvasana Basti are recommended if Shukra is impacted by Vata.
- Rasayanas like Abhayamalakeeyam are utilized when Pitta affects Shukra.
- Amrita, triphala, Loha, pippali, and BhllatakRasayana will be used to treat Shukra if it is impacted by Kapha Dosha.
- Ashawgandha (*Withaniasomnifera*), which acts similarly to testosterone to enhance spermatogenesis.<sup>[15]</sup>
- Shukarala in nature, Yashtimadhu (*Glycyrrhizaglabra*) enhances the quality of semen.
- Gokshura (*Tribulusterrestris*), which increases gonadotropin-releasing hormone and luteinizing hormone, promotes the generation of testosterone.
- Shukrajanan, Shukrashodhaka, Shukrapravartaka, and Sukrasthambhaka are also referenced in Ayurvedic classics.<sup>[16]</sup>

### **Samshodhana Chikitsa in Ksheena Shukra<sup>[17,18,19]</sup>**

“Ksheene Shukrakari Kriya” is the main line of treatment in KsheenaShukra. Before the administration of the drugs, which are having Vrishya Karma, it is a important to prepare the body in order to get maximum benefit. These procedures are sufficient enough to create Srotoshuddhi and a body devoid of Malas. Ayurveda includes Vamana Karma and Virechana Karma in these procedures. In Shukra Doshai.e in KsheenaShukra, the choice of treatment is Basti (Anuvasana & Niruha) which is made from ShukravardhakaDravyas i.e. GhritaTaila etc. Various recipes of VrishyaBasti are described in classics which can be effectively used in the condition. Vajikarana is strongly recommended in management of KsheenaShukra. While explaining the effect of Vajikarana, Charaka has said that the therapy which enhances fertility potential of semen and it lends a hand in getting a healthy offspring for maintenance of continuity of ancestry, it is therapy by which even in old age also one does not get semen debility, which enables one to remain firm like a big tree having innumerable branches and to earn respect from people by virtue of having procreated several children; which is favourable to his enjoying life and eternity in this world and which brings longevity, beauty, strength and nourishment is known as Vajikarana.

### **Management of Oligospermia Modern Science<sup>[20]</sup>**

- Anti-sperm antibodies, cyclic steroids that inhibit the immune system, artificial insemination (A.I.), and in vitro fertilization. (IVF)
- Injection of sperm into the cytoplasm

- Varicocele: Varicocele.
- Transurethral resection of the ejaculatory duct (TURED): When the ejaculatory duct is blocked.

## DISCUSSION

The man alone without children looks like a single tree having one branch, shade less, fruitless, and with a foul smell, says Charaka Acharya. One of the Saptadhatu that is described in Ayurvedic literature is Shukradhatu, which is also known for possessing Shadrasa and being predominant in Saumyaguna. Garbhoutpadana is Shukra's primary function. The activity of Shukradhatvagni creates Shukra from the sneha of majja. Eight varieties of Shukradushti were described in accordance with Ayurveda. Ksheena Shukra results from changes in the quantity and quality of Shukra caused by vitiation of the vata and pitta doshas. The depletion of Shukradhatu results from Vata's possession of the property of Shoshana, which causes obstruction in the uttarottaradhatuparinama. Shukrakshaya is caused by Pitta vitiation, which results in Amotpatti and incorrect dhatu production. Ksheenashukradushti is associated with oligospermia. Rasayana and Vajikaranachikitsa were performed to increase the sperm count and motility following appropriate Shodhana (Virechana karma). The basic level of Agni, or digestion and metabolism, is where Rasayana and Vajikarana medications work. It resulted in Srotashodhana, which energized the organic metabolism and improved Shukradhatu's structural and functional pattern. In Ksheena Shukra, the Agneya Guna of Pitta Dosha and the ChalaGuna of VataDosha are causing decreased motility. In this manner, Vajikarana treatment is recommended with Brimhana and Balya effect to cure Ksheena Shukra Vikara; in any case, Vajikarana drugs should be used following Sroto-shuddhi and body purification.

## CONCLUSION

Shodhana Karma is responsible for the development of new Shukra Dhatu, Dhatvagni Deepana, and Srotoshuddhi. Due to Dhatus's enhanced status and the fact that the components' actions showed improved erectile and ejaculatory function, sexual desire, coitus duration, and sexual satisfaction. According to this case study, oligospermia-related infertility can be successfully treated by adhering to fundamental Ayurvedic Siddhanta principles. The literature suggests that Kshina Retasa is positively impacted by medications that have Snighdhaguna, Balya, Vrishya, and Vatasthapana properties. Likewise, the properties of

Madhura rasa, Sheetavirya, Vrishya, Brimhana, and Vatapittahara in a number of drugs aid in KshinaRetasa.

## REFERENCES

1. Acharya Vagbhata. Sutra Sthana 1/13. In: Tripathi, B(ed.) Ashtanga Hridya. Delhi: Chaukhamba Sanskrit Pratisthan, 2009; p.11.
2. Acharya Agnivesha. Chikitsasthana 15/16 -17. In: Shashtri, K, Chaturvedi, G(eds.) Charak Samhita Part-2. Varanasi: Chaukhambha Vishvabharati, 2011; p.456.
3. Acharya Agnivesha. Chikitsasthana 15/16-17. In: Shashtri, K, Chaturvedi, G(eds.) Charak Samhita Part-2. Varanasi: Chaukhambha Vishvabharati, 2011; p.456.
4. Acharya Sushruta. Sutra Sthana, 15/5(1). In: Srikanthamurthy, K. R. (ed.) Shushruta Samhita vol1. Varanasi: Chaukhambha Orientalia, 2012; p.98-99.
5. Acharya Agnivesha. Chikitsasthana 2/4/50. In: Sharma, R.K, Dash, B(eds.) Charak Samhita, Vol3. Varanasi: Chowkhamna Sanaskrit Series Office, 2012; p.105.
6. Acharya Agnivesha. Chikitsasthana 30/145-146. In: Sharma, R.K, Dash, B(eds.) Charak Samhita, Vol5. Varanasi: Chowkhamna Sanaskrit Series Office; 2012; p. 166.
7. Acharya Agnivesha. Chikitsasthana 30/145-146. In: Sharma, R.K, Dash, B(eds.) Charak Samhita, Vol5. Varanasi: Chowkhamna Sanaskrit Series Office, 2012; p. 166.
8. Sushruta, Sushruta Samhita, Dalhanacharya Nibandha Samgraha commentary, Vaidya Yadavji Trikamaji Acharya, Chaukhambha Surbharati Prakashan, Varanasi. Reprinted 2008. Sutra sthana Adhyaya 1/8.page no.15.
9. Agnivesha, "Charaka Samhita", revised by Charaka and Dridhabala with „Ayurveda Deepika' commentary, by Chakrapanidatta, edited by Vd. Jadavaji Trikamaji Acharya, Chaukhambha Surabharati Publications, Varanasi -221 001, (India), reprint 2008, Sutra Sthana, Adhyaya-16/20.page no.304.
10. Shashirekha HK, Bargale SS Charaka Samhita Sanskrit Text with English Translation. Chikitsa Sthana, 30/45.
11. Shashirekha HK, Bargale S SCharaka Samhita Sanskrit Text with English Translation. Vol. 4, Chikitsa Sthana, 30/39.
12. Shashirekha HK, Bargale SS Charaka Samhita Sanskrit Text with English Translation. Chikitsa Sthana, 30/135-138.
13. Shashirekha HK, Bargale SSCharaka Samhita SanskritText with English Translation, Vol. 4, ChikitsaSthana, 8/24-27.
14. The Turek Clinic (2016) Oligospermia – Low Sperm Count.



15. Pandya K, Solanki B, Maniar K, Gurav N, Bhatt S, et al. (2011) Natural herbal supplements-A study on their nutritional value and their phytochemical constituents. International Journal of Pharmaceutical Sciences and Research, 2(6): 1480-1494.
16. Tripathi B (2010) Sarangadhara Samhita of Pandita Saranadharacharya annotated with 'Dipika' Hindi Commentary. Vol. 4/15-17, Chaukhamba Prakashana, S Purvakhanda, pp: 49.
17. Agnivesha, Charaka Samhita', revised by Charaka and Dridhabala with Ayurveda Deepika commentary, by Chakrapanidatta, edited by Vd. Jadavaji Trikamaji Acharya, Chaukhambha Surabharati Publications, Varanasi -221 001, (India), reprint 2008 Chikitsa Sthana, 1: 1: 9-13: page no.391.
18. Sushruta, Sushruta Samhita, Dalhanacharya Nibandha Samgraha commentary, Vaidya Yadavji Trikamaji Acharya, Chaukhambha Surbharati Prakashan, Varanasi. Reprinted 2008 Chikitsa Sthana, 26: 6,: page no.497.
19. Ibidem ref. 79, Chakradatta of Sri Chakrapanidatta 27: 24: page no.184.
20. Mayo Clinic (2022) Low Sperm Count.