



# Effect of *Svadamshtradi Choorna* in the management of Oligospermia – A Case Study

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### ABSTRACT:

Oligospermia or Oligozoospermia is a male fertility issue characterized by low sperm count. The World Health Organization (WHO) defines sperm count below 15million sperm per milliliter of semen as Oligospermia. In Ayurveda classics, mainly two pathological conditions for Shukra are explained such as Shukra Kshava and Shukra Dushti. Oligospermia is a condition that can be correlated with one of the Ashtavidha Shukra Dusti namely Kshina Shukra where there is quantitative and qualitative vitiation of Shukra Dhatu can be seen. Kshina Shukra is a Vatapaittika Vyadhi, along with quantitative decrease of Shukra Dhatu, hence Shukra Vriddhikara Chikitsa can be mainly adopted. In this case report, management of a 30 years old male who is a known case of oligospermia with sperm count 11.8 million/ml with Dourbalya, Srama, Mukha Sosha, Sadana, Maidhuna Ashakti and Angamarda was treated with Ayurveda. He was done an Anulomana with Avipathy Choorna and followed by the administration of Svadamshtradi Choorna 6gms twice daily morning before food and evening after food with milk as Anupana for 72 days. Subjective and objective parameters were assessed and found an increase of sperm count to 24.8 million/ ml is noted after treatment. Hence, the medicine Svadamshtradi Choorna is found effective for oligospermia by having the action at the level of Dosha, Agni, Srotas and Dhatu. Kshina Shukra is a Vatapittaja Vyadhi, to correct the vitiated Dosha and Dhatu the drug of choice must be Madhura, Tarpana, Balya and Shukrala which is possessed by Svadamshtradi Choorna.

KEY WORDS: Kshina Shukra, Oligospermia, Svadamshtradi Choorna.

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### INTRODUCTION:

Infertility is defined as the inability to conceive after 1 year of unprotected intercourse of reasonable frequency. It affects the psychological harmony, sexual life and social function due to the social stigma which prevails in the society. [1] This severity of abandonment is mentioned in classics by the terms *Aprathista*, *Nagna*, *Shunya*, *Ekendriya* and *Nishkriya* [2]. Here comes the importance of *Vajikarana Tantra* and the *Dravyas* for procreating the progeny.

Oligospermia or Oligozoospermia is one of the common causes of male infertility characterized by a low sperm count. The WHO classifies sperm count at or above 15million sperm per milliliter of semen as average and anything below that is considered low and is diagnosed as Oligospermia [3]. Kshina Shukra is one type of Ashtavidha Shukra Dushti [4] which is a Vatapaittika Vyadhi [5], in which Shukra *Dhatu* is quantitatively and qualitatively affected. Based on the available references, Kshina Shukra can be correlated to oligospermia in which the sperm count is less than 15 million / ml which affects the quality of Shukra and cause infertility.

Yet, the field of reproductive medicine and endocrinology is rapidly growing, with success stories that have resolved infertility and fertility problems – from the hormonal replacement therapy to more advanced innovations. Due to the misconceptions, social stigma, cost and side effects ranges from simple acne to major systemic ailments most of them are reluctant to take these therapies. In Ayurveda there is a special branch of science called *Vajikarana Tantra* which deals with methods of increasing semen which is either less, vitiated, decreased or dried up of bestowing pleasure and growth of the body. [6]

In this case report, management of a 30

years old male who is a known case of oligospermia with sperm count 11.8 million/ml with *Dourbalya, Srama, Mukha Sosha, Sadana, Maidhuna Ashakti* and *Angamarda* was treated with Ayurveda. He was done an *Anulomana* with *Avipathy Choorna* and followed by the administration of *Svadamshtradi Choorna* [7] 6gms twice daily morning before food and evening after food with milk as *Anupana* for 72 days. Subjective and objective parameters were assessed and found to be improved.

### **CASE HISTORY:**

A 30 years old male with moderate BMI (24.1Kg/m²), who is a known case of oligospermia with sperm count 11.8 million/ml is presented with *Dourbalya, Srama, Mukha Sosha, Sadana, Maithuna Ashakti* and *Angamarda* since 8 months is unable to procure child evenafter 1.5 years of unprotected sexual intercoarse. He does not have a history of thyroid dysfunction, liver disease, DM, DLP, HTN.

In personal history, he was an individual with mixed diet and regular exercise with *Tikshna Agni* and *Mridu Koshta*. He had a frequency of *Mala Pravritti* 3 times/day with loose stool consistency and *Mutra Pravritti* 5-6times/day. He was a person with no addiction, had an irregular sleep, preference of using *Sheeta Jala* for *Snana* and usage of moderately tight under garments.

In sexual history, he had a history of normal development of secondary sexual character with a frequency of coitus 4-5 times/ week and with occasional masturbation with a complaint of premature ejaculation.

In psycosocial history, due to his strenuous nature of work he had a history of lots of stress, strain, anger and fear. There is no relevant family or drug history.





### **METHODOLOGY:**

The assessment was done based on the objective and subjective parameters. The objective parameters are the seminal whereas the parameters subjective Sexual Health parameters are the parameters, Sarvadaihika Lakshana like Dourbalya, Muka Sosha, Pandutva, Sadana, Srama, Angamarda, Timira Darshana and Pratvatma Lakshana like Medra Dhumayana, Medra Vedana, Vrishna Vedana, Chirat Praseka, Maidhuna Ashakti, Klaibya, Shukraavisarga and Sarakta Shukra Darshana.

The sexual health parameters are sexual desire, erection, rigidity and orgasm and the scoring system developed by Mehra and singh (1995) which was taken in previous studies (Pawan Sharma: A Comparative

Study of Sukrajanana Dashemani Sadhith Madhutailika Basthi and Madhutailika Basti in the Management of Kshina Sukra W.S.R. to Oligospermia. Govt. Akhandanand Ayurveda College & Hospital. 2008.) was adopted for the purpose (Table 1)

### THERAPEUTIC INTERVENTION:

An *Anulomana* with *Avipathi Choorna* was done on the first day and followed by the administration of *Svadamshtradi Choorna* from 3<sup>rd</sup> day in a dosage of 6 gms twice daily morning before food and evening after food with milk as *Anupana* for 72 days.

**Dose of administration:** In classical references, the dose for *Choorna* is mentioned as Karsha [8] (12gms). Hence the dose of drug is fixed in divided doses of 6gms twice daily.

**Table 1: Scoring of Sexual Health Parameters:** 

SEXUAL HEALTH PARAMETERS	SCORE
SEXUAL DESIRE	
No desire at all	0
Lack of desire	1
Desire present, but no activity	2
Desire only on demand of partner	3
Normal desire	4
Excess desire	5
ERECTION	
No erection by any method	0
Erection with artificial method	1
Erection but unable to penetrate	2
Initial difficulty but able to penetrate	3
Erection with occasional failure	4
Erection whenever needed	5
RIGIDITY	
Unable to maintain erection or unable to continue sexual act	0
Some loss in erection, but able to continue act	1
Able to maintain erection and continue act	2
ORGASM	
No enjoyment at all	0
Lack of enjoyment in most occasions	1
Enjoyment in 25% of sexual encounters	2
Enjoyment in 50% of sexual act	3
Enjoyment in 75% of sexual act	4
Enjoyment in ever sex act	5
EJACULATION	



No ejaculation at all	0
Delayed ejaculation without orgasm	1
Ejaculation before penetration	2
Ejaculation with penetration, but early discharge	3
Ejaculation with own satisfaction	4
Ejaculation with own and partner's satisfaction	5

**Table 2: Details of ingredients** 

DRUGS	RASA	GUNA	VIRYA	VIPAKA	DOSHA KARMA	PARTS USED	QTY
Gokshura	Madhura	Guru, Snigdha	Sita	Madhura	Vatanut, vrishya, brimhana	Fruit	1 part
Ikshurak a	Madhura	Snigdha Picchila	Sita	Madhura	Vrsya, Balya, Santarpana	Seed	1 part
Masa	Madhura	Guru, Snigdha	Ushna	Madhura	Tarpana, Balya, Brmhana	Seed	1 part
Athma- gupta	Madhura, Tikta	Guru, Snigdha	Sita	Madhura	Vatahara, Vrsya, Pittahara, Brimhana, Balya	Seed	1 part
Satavari	Madhura, Tikta	Snigdha Guru	Sita	Madhura	Vrsya, Shukraja, Vatahara, Pittahara, Shukrala	Tuber	1 part
Milk	Madhura	Snigdha Guru	Sita	Madhura	Vatapittahar a, Vrsya,Balyam Ojasyam,	Cow's milk	Quantity sufficien t

**Table 3: Assessment of seminal Parameters** 

Seminal Parameters	BT	AT	
Sperm count	11.8 million sperm/ml	24. 8 million/ml	
Sperm motility	-		
Rapid progression	• 18%	• 29%	
<ul> <li>Moderate Progression</li> </ul>	• 10%	• 9%	
<ul> <li>No progression but twitching</li> </ul>	• 11%	• 11%	
• Immotile	• 23%	• 23%	
<ul> <li>% forward motility</li> </ul>	• 38%	• 28%	
Semen Volume	2.0 ml	2.0 ml	
рН	7.4	7.4	
Colour	Grey White	Grey white	
Liquefaction	>60 min	30 min	
Viscousity	Normal	Normal	
Agglutination	Absent	Absent	
Normal sperm morphology	24%	30%	



Table 4: Assessment of Sarvadaihika Lakshana

Symptoms	BT	AT
Dourbalya	Present	Absent
Mukha Sosha	Present	Occasionally
Pandutva	Absent	Absent
Sadana	Present	Absent
Srama	Present	Absent
Angamarda	Present	Absent
Timira Darshana	Absent	Absent

Table 5: Assessment of Pratyatma Lakshana of Kshina Shukra

Symptoms	BT	AT
Medra Dhumayana	Absent	Absent
Medra Vedana	Absent	Absent
Vrishna Vedana	Absent	Absent
Chirat Praseka	Absent	Absent
Maidhuna Asakti	Present	Absent
Klaibya	Absent	Absent
Sukraavisarga	Absent	Absent
Sarakta Sukra Darshana	Absent	Absent

Table 6: Assessment of sexual health parameters

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Parameters	BT	AT
Desire	Grade 4	Grade 4
Erection	Grade 3	Grade 5
Rigidity	Grade 1	Grade 2
Orgasm	Grade 3	Grade 4
Ejaculation	Grade 3	Grade 5

### RESULTS AND DISCUSSION:

Kshina Shukra is a Vatapittaja Vyadhi in which the excellence of Shukra Dhatu is reduced both quantitatively and qualitatively which is very evident in this subject. So keeping this in mind a formulation is selected from Ashtanga Hridaya, Uttarasthana, Vajikarana Adhyaya, to manage the vitiated Vata and Pitta Dosha, Agni and Srotas.

The drug Svadamshtradi Choorna consists of 5 ingredients namely, Svadamshtra (Tribulus Terrestris), Ikshuraka (Asteracantha Longifolia), Masha (Vigna Mungo), Atmagupta (Mucuna Pruriens) and Satavari (Asparagus Racemosa). After proper processing these drugs are dried and finely powdered and then administered Aushada Sevana Kala: In this subject, the

time of administration of medicine is prescribed as morning before food and evening after food, because, the drug taken as *Pragbhakta* have action on *Apana Vayu*. *Apana Vayu* is responsible for *Shukra Nishkramana* and controls the whole process of spermatogenesis. Hence to correct the *Sthanika Dosha*, one dose of medicine is administered morning before food.

The whole process of spermatogenesis is occurring due to the action of hormones from HPA. To have action on whole Hypothalamo Pituitary Axis and for *Brimhana* purpose the second dose of medicine is administered during evening after food.

**Duration:** Medicine is administered for 72 days by considering the period of





spermatogenesis as 72days.

Anupana: Here Ksheera is used as Anupana, which can normalize the vitiated Vata and Pitta by Madhura Rasa, Sita Virya, Madhura Vipaka and Guru, Snigdha Guna of Ksheera.

**Preparation of subject:** Prior to the administration of medicine an Anulomana is done as a part of preparation of subject with Avipathi Choorna9, which is a Pittahara Dravva that have action on the Ushna, Tikshna and Drava Guna of Pitta, improves Agni and it also produce a Koshta Shuddhi which provide an easy absorption of medicine. While analyzing the Rasapanchaka, Svadamshtradi Choorna is found to possess Madhura and KincitTikta Rasa, Sita Virya, Madhura Vipaka and Guru, Picchila, Snigdha Guna which provides Vatapittahara action.

All the drugs in the formulation also possess *Brimhana, Vrishya, Tarpana, Balya* and *Shukrala Guna* which alleviate the distorted condition based on the *Samanya Vishesha Siddhanta* and corrects the vitiated *Vata* and *Pitta* 

## Mode of Action of *Svadamshtradi Choorna* In Oligospermia

The mode of action of *Svadamshtradi Choorna* could be best understood by considering the action at the level of *Dosha*, *Agni, Srotas* and *Dhatu. Kshina Shukra* is a *Vatapittaja Vyadhi*, to correct the vitiated *Dosha* and *Dhatu* the drug of choice must be *Madhura*, *Tarpana*, *Brimhana*, *Balya* and *Vrishva*.

Action on *Dosha:* The subject possess *Tikshna Agni* and *Mridu Koshta* and he had a frequency of *Mala Pravritti* 3 times/day with loose stool consistency which represents the vitiation of *Vata* and *Pitta*, Considering the action of *Svadamshtradi Choorna* at the level of *Dosha*, due to *Madhura*, *Kinchit Tikta Rasa* predominance, *Madhura Vipaka*, *Sita Virya* and *Guru* 

Snigdha Guna helps to alleviate the aggravated Vata and Pitta.

Action on Agni: Agni is the main factor that controls the whole bodily functions. The whole Samprapti encroaches the health due to Agni Vaishamya. The subject possess a vitiated Vata and Pitta that may produce Vishtabdha as well as Vidagdha type of Ajirna due to deranged Agni and leads to Samprapti. Hence to correct the deranged Agni, imbalanced state of Vata and Pitta is to be corrected with Vatapittahara Dravya along with Ksheera as Anupana which is possible with Svadamshtradi Choorna

Action on *Dhatu*: The main *Dhatu* involved in *Kshina Shukra* is *Rasa* and *Shukra Dhatu* which is evident by the *Sarvadaihika*, *Pratyatma* and *Rasa Sukravaha Sroto Lakshana* that is seen in subject. Hence as a drug of choice the formulation must be *Tarpana*, *Balya* and *Vrishya*. An unstable *Vata* and *Pitta* in the subject produce an *Agni Vaishamya* which inturn produce deranged *Rasa Dhatu* along with *Malaroopa Kapha Vriddhi*, which vitiates other *Dhatu*. Hence to correct the *Agni*, the drug must have an action on *Vata* and *Pitta* which is attained with *Svadamshtradi Choorna*.

Hence. the administration of Vatapittahara Dravya along with Ksheera corrects the vitiated Pitta and produce a positive effect on Rakta. Dooshita Rasa Dhatu with Mala Roopa Kapha Vriddhi vitiates the Dhatu like Mamsa, Medas and Majja due to its Samana Guna. Here in all such Dushti, Agni is the root cause for all sort of vitiation. Hence to bring all Dosha and Dhatu back to normalcy, this vitiated *Agni* is to be corrected. When the *Dosha* gets corrected all corresponding Agni, Dhatu, Mala are produced efficiently and such a correction also brings a change in Srotas also.

Hence a conclusion can be made that the *Svadamshtradi Choorna* is a *Vatapittahara* 

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*Dravya* that have action on *Agni* vitiation by *Vata* and *Pitta* followed by correction of all impending sequences.

### **CONCLUSION:**

Svadamshtradi Choorna has a significant role in managing oligospermia and to improve the seminal parameters as well as Sexual health Parameters and other Lakshana of Kshina Shukra.

### LIMITATION OF STUDY:

The medicine should had been administered for a longer duration and higher dosage to get better improvement on seminal parameters especially on sperm count.

### **PATIENT'S CONSENT:**

Patient's consent was taken for the treatment and publication of data without disclosing the identity of the subject.

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