

CLINICAL EVALUATION OF MUSLYADI CHURNA IN THE MANAGEMENT OF KSHEENSHUKRAWSRTO OLIGOSPERMIA

Trivedi Atal Bihari¹, Mahajan Nitin², Dutta Atul³, Chaudhary Robin⁴

¹Associate Prof., ²Asstt.Prof.

P.G. Deptt. Of Kayachikitsa J.I.A.R Jammu, India

³Assistant Prof., Deptt. Of Rog Nidana, Dayananad Ayurvedic College, Jalandhar, Punjab, India

⁴Assistant Prof., Deptt. Of Kaumarbhritya, Dayanand Ayurvedic College, Jalandhar, Punjab, India

Email: abdratal8@gmail.com

ABSTRACT

Ayurveda is the “science of life” that describes importance of nature in one’s life. In *Ayurveda*, *Ra-sayan & Vajikaran* plays a very important role specially “*Vajikarana*” due to the fact that infertility not only makes its impact on the patient but also causes social embarrassment to the couple. The idea of man as perpetuator of the race has been projected and repeatedly stressed in *Ayurvedic* literature. A man incapable of procreation is described as shadow less, single branched and foul smelling tree devoid of fruits that has no purpose or plays no useful role in the world. Infertility in males is mainly due to defective spermatogenesis and also due to inadequate quality of semen in both morphology and motility. If there is *Dusti* in *Shukra*, it will definitely affect the fertility factor; *Vajikarana* is a particular branch of *Ayurveda*, which deals with such factors. According to Modern aspect, as far as male infertility is concerned, 30-40% infertility is associated with male factor in which conditions like Oligospermia. In *Ayurveda*, this entity is enriched under the cover of *KshinaShukra* in which selected *Vrishya* drugs are used. In the present study entitled as “Clinical Evaluation of *Muslyadi-Churna* in the Management of *KsheenShukra*³ With Special Reference To Oligospermia” I have selected *MuslyadiChurna*, a *kalpityog*. It contains drugs like *Atmagupta*, *ShwetMusli*, *GiloySatwa*, *Talmakhana*, *Ashwagandha*, *Yasthimadhu* and *Mishri*.⁶

Keywords: *ksheenshukra*, oligospermia, *muslyadichurna*, *ayurveda*

INTRODUCTION

Nature always doing better for all living being, but life of modern man is far removed from

the rules of nature. There has been a drastic change in his day to day activities including

Life style, Food habits, Sexual hazards etc. Due to all these factors, infertility is increasing day by day. WHO (1976) has estimated incidence of global infertility as 16.7% in which the contribution of male factor alone is reported to be 26.2% to 46.6% (Inslar and Lunenfeld 1993). Since the beginning of recorded history, the human race has placed a great emphasis on fertility. Infertility seldom causes any physical debility, but its severity affects the couple's psychological harmony, sexual life and social status. The couple desiring a child but unable to conceive feels demeaned and deprived. In most cultures, children are regarded as an extension of self, as bearers and perpetuators of the family name and tradition. Male infertility can be defined as an inability to induce conception due to defect in spermatogenic functions. The male partner having pathological semen reports include Low sperm count, Decrease in Motility of Sperms and Abnormal forms of sperms, abnormal sperm functional tests.

Further, the quality and quantity of ejaculate are decreasing day by day which may be due to altered life styles, rapid industrialization etc leading to male infertility. The modern science has now started realizing its importance and a new branch known as Andrology has been developed recently. However, till date, no satisfactory management has been developed. On the other hand, *Ayurveda* has realized this problem thousands of years back and maintains a separate branch known as *Vajikarana* which deals with promotion of sexual health, prevention and cure of disorders of semen resulting due to *ShukraDusti*.

In *Ayurvedic* Classics, eight types of *Shukradoshas* are enumerated. This classification is based upon two methods. First one is based upon physical characters i.e. *Tanu, Alpa, Ruksha, Phenila*¹ etc and second is based upon involvement of *doshas* in *shukra* e.g. *Vataja, Pittaja, Sleshmajashukradusti* etc. *Kshinashukra* is a disease of *shukra* in which both quality and quantity of *shukra* is altered and may lead to *shukradushti*. *Kshinashukra* is described under eight types of *shukradustis*. In this condition, *Vatadosha* along with *Pitta* undergo vitiation and the normal qualities and quantity of the *shukradhatu* is deranged.²

As a result of the vitiation of *Vata* and *Pittadoshas*, the channels which carry *shukra* i.e. *Shukravahasrotas* undergoes *dusti* and incapacitates the normal individual from conceiving his life partner ending in infertility.⁴ The condition associated with *Kshinashukra* in *Ayurveda* can be well matched with Oligospermia according to modern science. In this condition, the sperm count comes below 20 million/ml. *Ayurveda*; the holistic medicine describes potent drugs and efficient therapeutic procedures to face the problem of infertility. *Vajikarana*, the eighth branch of *Ayurveda* mainly deals with the drugs and therapeutics which are Aphrodisiac in nature. It provides progeny to infertile couple, potency to the impotent and at the same time Excellency of progeny with suitable therapeutic measures.

AIMS AND OBJECTIVES:-

The present research work has been undertaken with following two main aims and objectives are:-

1. Conceptual and Clinical Study on *KshinaShukra* with special reference to Oligospermia.
2. Clinical evaluation of *MUSLYADICHURAN* in the patients of *KshinaShukra* w.s.r. to Oligospermia on scientific parameters.

MATERIALS AND METHODS:-

Two types of materials are utilized for the study:-

1. LITERARY:-

Classical books and other literature available are the sources to compile it.

2. CLINICAL:-

It is collected by analyzing the data from the clinical study. In it, 40 patients were selected by keeping the Signs and Symptoms of *KshinaShukra* mentioned in *Ayurvedic* texts as well as criteria in modern medicine for Oligospermia irrespective of religion, occupation and socio-economic status for present study. Patients were selected from OPD / IPD of Jammu Institute of *Ayurveda* And Research, JAMMU and from PHC *KotBhalwal*. They were divided into two groups. Each group contains 20 patients. Proforma was prepared including all the necessary Clinical and Laboratory investigations. The semen samples were collected and analyzed before and after the treatment.

CRITERIA FOR PATIENT SELECTION:-

Infertile male patients having *lakshanas* of *KshinaShukra* were selected and sent for semen analysis. If the Laboratory report confirms Oligospermia, then those patients were included in the present study.

INCLUSION CRITERIA:-

- 1) Male subjects of age between 20yrs to 45yrs.
- 2) Confirmed cases of Oligospermia with Sperm Count below 40 million/ ml in average of three successive weekly semen analyses.

EXCLUSION CRITERIA:-

The following subjects were excluded from the study:-

- 1) Subjects categorized under Azoospermia.
- 2) Subjects with past history of Mumps, Orchitis, Trauma.
- 3) Subjects with history of Diabetes mellitus, Thyroid disorders, Tuberculosis, Vascular disorders, Testicular mal descent, previous reproductive organ surgery, S.T.D., HIV/AIDS, Hydrocele, hypertension.
- 4) Subjects with uncontrolled metabolic and other systemic disorders.
- 5) Patients with psychotropic disorders.

INVESTIGATION:-

• BLOOD:-

Complete Haemogram and blood sugar.

• URINE:-

Routine & Microscopic

• SEMEN:-

Semen Analysis (as per the Guidelines of WHO (1993) i.e. Liquefaction Time, Volume, Viscosity, pH, Sperm Count, Sperm Motility are done.

DRUG – DOSAGE – DURATION: -

The patients of *KshinaShukra* were randomly divided into two Groups.

GROUP A: MUSLYAADI CHURAN: -

In this group, 20 patients of oligospermia were administered “MUSLYAADI CHURNA” (Authenticated by Drayaguna department) which was prepared in college pharmacy.

GROUP B:-PLACEBO

In this group, 20 patients of oligospermia were administered placebo capsules containing starch powder which was procured from market.

DOSAGE:-

- *Muslyadichurna* was administered in a dose of 5gm with milk and sugar (*Shakar*) as *anupana* twice a day after food.
- Placebo capsules filled with starch powder was given in a dose of two capsules twice daily with milk and sugar as *anupana* after food.

DURATION:-

Total duration of treatment in both groups was two months.

DIET REGIMEN:-

The patients of both the groups were strictly advised to avoid the *aharas* and *viharas*, which make the vitiation of *vata* & *pittadoshas* and follow *brahamcharya* during the course of treatment. Counseling was given to all patients including advice on importance, normal cycle of sexual response etc.

FOLLOW UP:-

After completion of treatment, patients were observed for further 1-3 months after every 15 days interval.

AVASTHIK SHODHANA:-

Prior to these therapies, *KosthaShuddhi* was done with *Haritkyadi yoga* which was administered in a dose of 5 gm for three days only at bed time.

CRITERIA FOR ASSESSMENT:-

For assessing the patients of oligospermia before and after the treatment, following parameters were used:-

A. CLINICAL ASSESSMENT.

B. LABORATORY INVESTIGATIONS.

A. CLINICAL ASSESSMENT:-

- a. Improvement in signs and symptoms of *KshinaShukra* i.e. *Durbalya*, *MukhaSosha*, *Panduta*, *Sadanam*, *Shrama*, *Klaibya* and *Shukravisarg/AlpaShukraVisarg*.
- b. Improvement in sexual health parameters i.e. Sexual Desire, Erection, Rigidity, Ejaculation and orgasm were recorded.

a) IMPROVEMENT IN SIGNS AND SYMPTOMS OF KSHINA SHUKRA

- *Daurbalya*
- *Mukhasosha*
- *Panduta*
- *Sadanam*
- *Shrama*
- *Klaibya*
- *Shukravisarga/AlpaShukravisarga*

OBSERVATIONS:

1. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR AGE

Notifies that the sample was split into four classes of five years age group interval. The minimum age of the patient in this study was

22 years and maximum age was 40 years. The maximum no of patient were recorded in the age group of 26-30 (42.5%) years followed by 31-35 group (40%), >35 Years (12.5%) resp. and minimum were in 21-25 years (5%).

2. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR RELIGION

Religion wise distribution of the patients. It reveals that out of 40 Patients, 87.5 % (35) were Hindus and 12.5% (5) were Muslims.

3. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR OCCUPATION

Notifies that 35% of the total patients were physically exerted, 30% were leading a sedentary life style, 25% were in Govt. service and 10% were exposed to heat.

4. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR SHARIRIKA PRAKRIT

Prakriti wise distribution. According to it, 67.5 % of patient was having Vata – PittaPrakriti, 20 % were with Vata – Kapha and 12.5% were belonging to Pitta – KaphaPrakriti.

5. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR VYAYAM SHAKTI

The distribution of patient is according to their vyayamashakti. 60% were with madhyamavyayamashakti, 22.5% were having avara and 17.5% were possessing pravaravyayamashakti.

6. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR AGNI

42.5% were having Mandagni, Vishamagni in 37.5% and 10% were with samagni and tikshnagni each.

7. DISTRIBUTION OF PATIENTS ACCORDING TO THEIR UNDERGARMENTS

67.5% were using synthetic type of undergarments and 32.5% were wearing cotton type. Wearing pattern showed that 72.5% of patients used to wear undergarments tightly while 27.5% were wearing them loose. 57.5% of patients were wearing undergarments for more than 15 hrs/ day, 22.5% wear them for 10 – 15 hrs and 20% wear them for less than 10 hrs group.

CLINICAL RESULTS

GROUP A: MUSLYADI CHURNA GROUP

Table 1: effect of muslyadi churna on volume

Mean	D	%	S.D	S.E	t	P	df	
BT	AT							
1.795	2.825	1.03	57.38	0.494	0.111	9.319	<0.001	19

Table 2: effect of muslyadi churna on total sperm count

Mean	d	%	S.D	S.E	t	p	df	
BT	AT							
19.55	71.90	52.35	267.77	11.62	2.598	20.151	<0.001	19

Table 3: effect of muslyadi churna on liquification

Mean		d	%	S.D	S.E	t	P	df
BT	AT							
31.40	32.90	1.50	4.78	6.57	1.47	1.02	0.32	19

Table 4: effect of muslyadi churna on ph of semen

Mean		D	%	S.D	S.E	T	P	df
BT	AT							
7.21	7.395	0.185	2.57	0.305	0.07	2.71	0.014	19

Table 5: effect of muslyadi churna on motility of sperms

Mean		D	%	S.D	S.E	t	P	df
BT	AT							
32.75	60.65	27.9	85.19	10.68	2.39	11.68	<0.001	19

Table 6: effect of muslyadi churna on sign and symptoms of kshina shukra

Parameter	MEAN		% of Improvement
	BT	AT	
<i>Daurbalya</i>	24	5	79.17
<i>Mukhasosha</i>	11	2	81.82
<i>Panduta</i>	17	5	70.59
<i>Sadanam</i>	14	3	78.57
<i>Shrama</i>	11	2	81.82
<i>Klaibyam</i>	24	4	95
<i>AlpaShukravisarg</i>	15	2	86.67

GROUP B: PLACEBO GROUP

Table 7: effect of placebo on volume

Mean		d	%	S.D	S.E	t	P	df
BT	AT							
1.88	2.08	0.21	10.93	0.312	0.69	2.94	0.08	19

Table 8: effect of placebo on total sperm count

Mean		D	%	S.D	S.E	t	P	df
BT	AT							
21.15	22.00	0.85	4.02	4.29	0.96	0.885	0.387	19

Table 9: effect of placebo on liquification

Mean		D	%	S.D	S.E	t	P	Df
BT	AT							
32.2	33	0.80	2.48	4.67	0.82	0.97	0.34	19

Table 10: effect of placebo on ph of semen

Mean		d	%	S.D	S.E	t	P	df
BT	AT							
7.29	7.27	-0.02	-0.27	0.28	0.063	-0.39	0.67	19

Table 11: effect of placebo on motility of sperms

Mean		D	%	S.D	S.E	t	P	df
BT	AT							
30.85	31.15	0.30	0.9	4.77	1.07	0.281	0.782	19

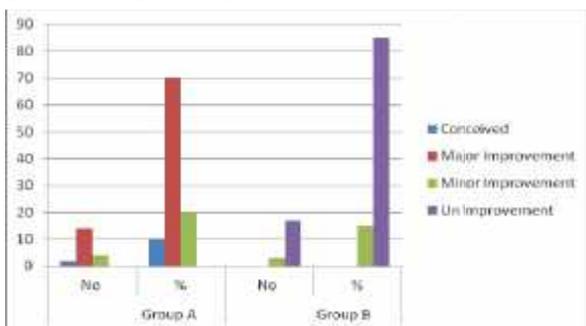
Table 12: effect of placebo on sign and symptoms of kshina shukra

parameter	mean bt	mean at	% of improvement
daurbalya	29	29	0
mukhasosha	16	19	-18.75
panduta	18	22	-22.22
sadanam	13	14	-7.69
shrama	15	15	0
klaibyam	19	12	36.84
alpashukravisarg	18	18	0

Table 13: overall effect of therapies

Parameter	Group A		Group B	
	No	%	No	%
Conceived	2	10	0	0
Major Improvement	14	70	0	0
Minor Improvement	4	20	3	15
Un Improved	0	0	17	85

GRAPHIC PRESENTATION



At the end of the treatment after 60 days the overall improvement in both the groups is as follows:-

- **In group A:** - 2 patients (10%) were able to conceive their wives, 14 patients (70%) shows major improvement while 4 patients (20%) show minor improvement.
- **In groups B:** - Only 3 patients (15%) show minor improvement while 17 patients (85%) remain unimproved.

DISCUSSION

KshinaShukra is a disease associated with male reproductive system. Here, *ShukraDhatu* is vitiated and impairment in both qualitative and quantitative parameters of *ShukraDhatu* is

seen. According to *Ayurveda*, *Vata* and *Pitta* are the major *doshas* which are responsible for this condition.⁸ When these vitiated *doshas* gets localized in the *shukravahasrotas* where *khavaigunya* is already present, it results in *KsheenShukra* which is one among *Ashta-Retodosha* described in *Ayurvedic* classics resulting in infertility.⁵

Since, the *doshas* involved in *KshinaShukra* are *Vata* and *Pitta*, the certain characteristics features of both these *doshas* can be seen in the *dushtishukradhatu*. The features like *Fenila*, *Tanu*, *Ruksha*, *AlpaShukraPravriti* etc. can be attributed due to the *Vatadosha*. (*Cha. Chi* 30/140) while *Pitta*, *Nila*, *Putigandhatva* are due to *Pittadosha* (*Cha Chi* 30/141).

Oligospermia can be compared with *KsheenShukra*, according to modern science. But, if we consider the characteristic features of *kshinashukra*, we cannot co-relate *KshinaShukra* and oligospermia directly. The reason behind this is that in oligospermia, the criteria for diagnosis is based strictly on the quantity and number of sperms present. But according to *Ayurveda*, the excellent tissue element status is disturbed and thus the final *dhatu* formed i.e. *Shukrais* weak. Fertilizing capacity of *ShukraDhatu* depends upon its excellent status rather than the number of sperm count. However, as the sperm count decreases, there is a corresponding decrease in the likely hood of conception.⁷

So, to find out an effective remedy which increases sperm count as well as fertility in *KshinaShukrarogi*, the present study entitled as "Clinical Evaluation of *MuslyadiChurna* in the Management of *KshinaShukra* w.s.r to Oligospermia" was carried out in two groups

containing 20 patients each. The observations made and results obtained were continuously monitored assessed and analyze.

CONCLUSION

Finally, conclusion can be drawn on the basis of deductive reasoning of information obtained by clinical observations:-

Predominance of *Vata* and *Pittadosha* in predisposing the disease *KshinaShukra* is collaborated clinically by its mode of presentation i.e. majority of the patients were from *madhyamvaya* (82.5%) which is the period of *pittapradhanta*, maximum were possessing *Vata-PittaPrakriti* (67.5%). Only *MuslyadiChurna* was found to be effective in the management of *KshinaShukra* out of the two groups.

All parameters except liquification time and rigidity show improvement with *MuslyadiChurna*. As far as placebo therapy was concerned, the overall effect was unsatisfactory except *Klaibyam*. Since, the present *yogas* contain potent drugs, and they can be tried in the other diseases associated with *Shukravahasrotodusti*. Further researches may provide more fruitful results.

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Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Trivedi Atal Bihari Et Al: Clinical Evaluation Of Muslyadi Churna In The Management Of Ksheenshukrawsrto Oligospermia. *International Ayurvedic Medical Journal* {online} 2017 {cited June, 2017}
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