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EFFICACY OF *KAPIKACCHU CHURNA* IN *KSHINASHUKRA* W.S.R. TO OLIGOZOOSPERMIA

Research Article

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Abstract

Kshinashukra is *kshaya* of *Shukra Dhatu* in the body due to change in diet, life style, stress and disorders like hormonal imbalance, orchitis, mumps and vericocele etc. Out of total infertility worldwide 40-50% male factor is responsible due to different pathology related to *Shukra* especially *Kshinashukra* (Oligozoospermia). It is understood that *Vata* and *Pitta Dosha* are responsible for this condition. So, *Vrishya padartha* like *Kapikacchu* enriched with *madhura rasa* and *Guru, snigdha guna* for this purpose was selected for study. A result indicates better and safer improvement in sperm count and hence relieved oligozoospermia by enhancing the spermatogenesis.

Keywords: - *Ksheena Shukra*, Oligozoospermia, *Kapikacchu*.

Introduction

The *chaturvidha ahara (asita, pita, leedha, khadita)* which a person consumes is responsible for formation of *sapta dhatu*. *Shukra* is also formed from this *aahara,* finally as a *dhatu*, according to physiology described by the *Acharyas* by the way of *kshiradadhi nyaya, kedarikulya nyaya, khalekapot nyaya. Charak* consider *Vrishanu (~testicles)* and *Shepha* (~penis) as the *mula of shukravaha srotas. Shushruta* considers *Vrishna and Stana* (~breasts) as the *mula* of *shukravaha srotas*. The *prasadansha* of *Shukra* is responsible for the conception denotes spermatozoa which carry all genetic characteristics of the individual. When insufficiency of semen is occurring then it called as *Kshinshukra* (~oligozoospermia) according to classical text. Various causes are responsible for this condition according to Ayurveda, like *atisevana* of *katu, amla*, and *lavana Rasa* and *kshara* lead to oligozoospermia. Among the *viharaj nidana*, the main one is *atisevana* of stree (excessive intercourse), *shoka* or *dhukham* (sorrow) is a depressive behavior of the patient and *chinta* (worry), *deergha brahmacharya* (long abstinence) are also among the causes. *Acharya charaka* says that virility of man depends on much or proper sleep. Lack of proper sleep will leads to *klaibya.* When insufficiency of semen occurs then it called as *klaibya* according to classical text as per modern. As per modern it is defined as less number of sperms in the ejaculate of the male or less than 20 million sperm/ml recently, however the WHO reassessed sperm criteria and establish a lower reference point less than 15 million/ml. *Vandhyatwa* in male according to Ayurveda can be occurring due to *klaibya* includes impotents as well as infertility. Male infertility refers to inability of male to achieve a pregnancy in a fertile female. It

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is due to deficiencies in the semen and semen quality (specific oligozoospermia). So an attempt was made here to focus on clinical study of *Kapikachhu* in the oligozoospermia.

AIMS AND OBJECTIVE OF STUDY

To study the efficacy of *kapikachhu churna* in Oligozoospermia.

MATERIAL AND METHOD

Following material and method adopted for this clinical trial.

Selection of cases: - Patients selected from OPD and IPD at NIA hospital and Bombaywala hospital, Jaipur, Rajasthan.

Inclusion criteria:-The following inclusion criteria for the selected patients were:-
-Adult male patient in the age of 20-60 years.
-Patient having signs and symptoms of *Klaibya.*
- Patient having low sperm count (<20million/ml.)

Exclusion criteria:-
- Patient below 20yrs and above 60yrs.
- Male with primary and secondary azoospermia.
- Patient with chronic disease, severe hypertension, IHD, COPD, etc.
- Male having any sexually transmitted disease.
- Patient having psychological problem.

On the basis of criteria 30 individuals suffering from oligozoospermia in the age group of 20-60 yrs married patients selected for clinical trial of *Kapikachhu churna* for 45 days.

Selection of drug:-

The drug *kapikachhu churna* selected for the study in view to increase sperm count to normalize physiological phenomenon of *Shukrautpatti* (spermatogenesis) in the Oligozoospermia. The dose of study drug administered 5gms for twice a day with milk and 1teaspoonfull sugar, according to the condition of their *Koshtha* for 45 days.

ASSESSMENT CRITERIA:-

Objective Parameters-
Semen analysis:-

- Vol. in ml.
- Viscosity
- PH
- Total sperm count
- Motility of sperm

Subjective Parameter:-

- Sexual desire
- Erection
- Penile Rigidity
- Ejaculation control and satisfaction
- Night emission

Total 30 patients were registered for this study.

SCORING PATTERN

Table No.1

Sr. No.	Symptoms	Clinical grading	Numerical grading
1.	Sexual desire	No desire at all	0
		Lack of desire	1
		Desire but no activity	2
		Desire only on demand of the partner	3
		Normal desire	4
		Excess desire	5
2.	Erection	No erection by any method	0

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		Erection with artificial methods	1
		Erection but unable to penetrate	2
		Initial difficulty but able to penetrate	3
		Erection with occasional failure	4
		Erection whenever desired	5
3.	Penile Rigidity	Unable to maintain erection or unable to continue sexual act	0
		Some loss in erection but able to continue	1
		Able to maintain erection and continue sexual act	2
4.	Ejaculation	No ejaculation at all	0
		Delayed ejaculation without orgasm	1
		Ejaculation before penetration	2
		Ejaculation with penetration but early	3
		Discharge ejaculation with own satisfaction	4
		Ejaculation with own and partner's satisfaction	5
5.	Night emission	No emission	3
		1-2 emission/week	2
		3-4 emission/week	1
		> 5 emission/week	0

ASSESSMENT OF THERAPY (RESULTS)

Table No.2: Effect of *Kapikacchu Churna* on Seminal Parameters by pair t-test.

Parameters	N	Mean		D	% of Relief	SD	SE	t	P
		BT	AT						
pH	30	6.890	7.363	0.473	6.8	0.592	0.108	4.38***	<0.001
Volume	30	2.267	2.690	0.423	18.6	0.611	0.112	3.80***	<0.001
Sperm Count	30	18.28	51.53	33.25	181	8.71	1.59	20.90***	<0.001
RLP	30	44.27	55.67	11.40	25.75	9.16	1.67	6.81 ***	<0.001
SLP	30	24.07	25.50	1.43	5.94	6.64	1.21	1.18	>0.05
NP	30	12.50	9.17	3.33	26	8.64	1.58	2.11*	<0.05
IM	30	19.17	10.17	09	46	11.48	2.10	4.30***	<0.001

(RLP-Rapid Linear Progress, SLP-Straight Linear Progress, NP-non Progressive, IM-Immotile)

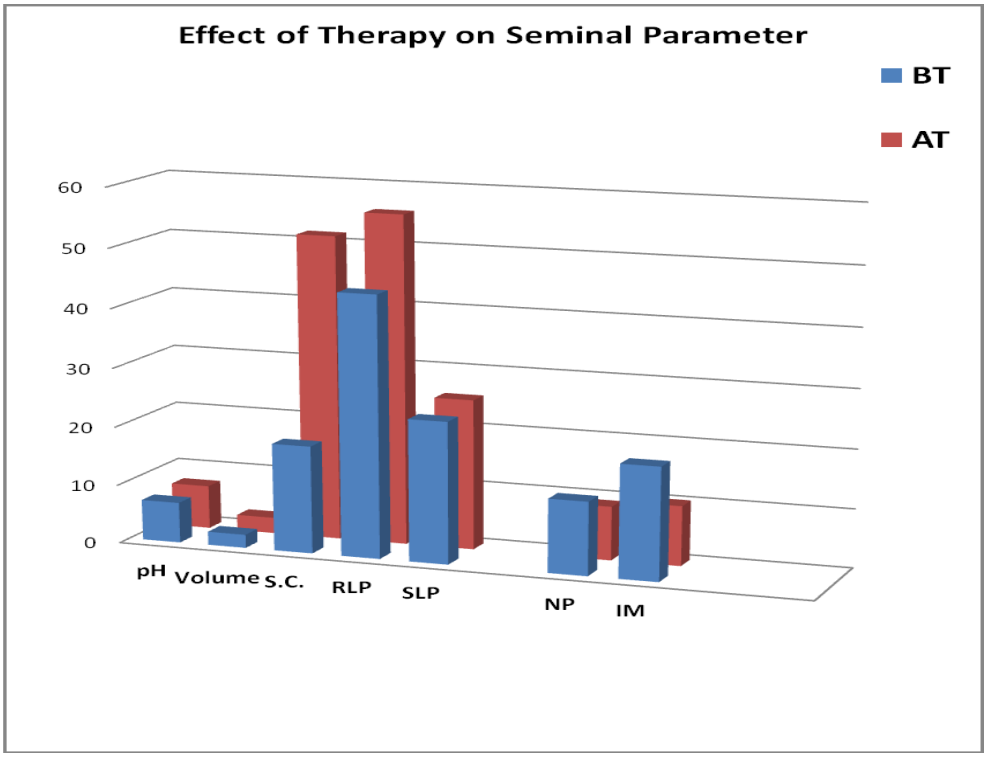

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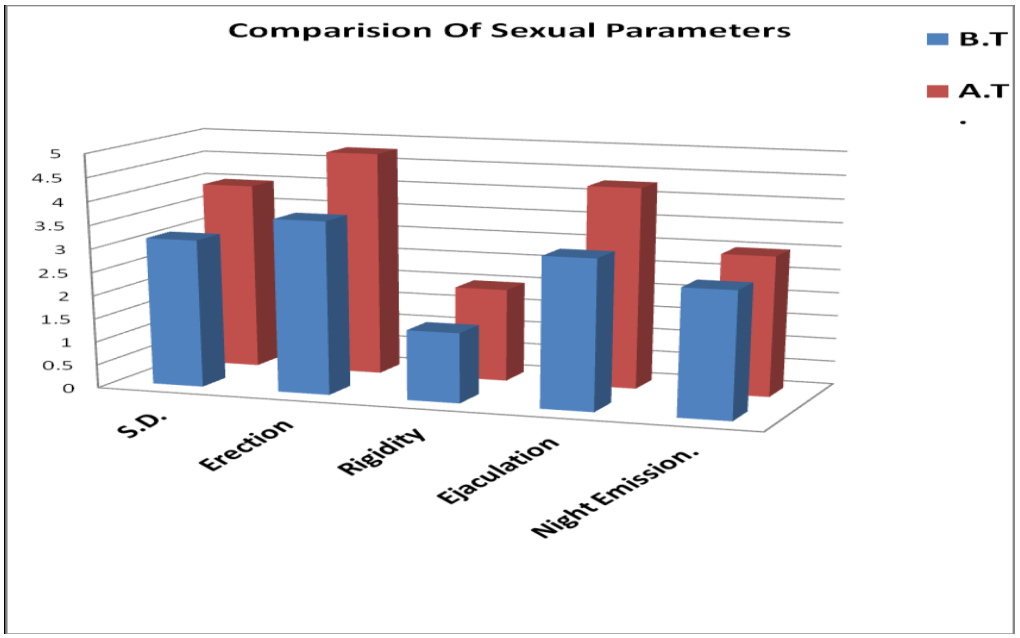
Table No.3: Comparison of before and after treatment of sexual parameter score in study group

Parameters	Before treatment		After treatment		Wilcoxon Z Value	P Value
	Mean	SD	Mean	SD		
Sexual Desire	3.17	0.65	4	0.26	4.46***	<0.001
Erection	3.7	0.88	4.8	0.48	4.56***	<0.001
Rigidity	1.5	0.51	2	0	3.87***	<0.001
Ejaculation	3.2	0.66	4.3	0.47	4.56***	<0.001
Night Emission.	2.7	0.47	3	0	3*	<0.05

Note: - **pair t-test** was done at end of treatment when *p<0.05, mild significant **p<0.01 moderate significant, ***p<0.001as highly significant and p>0.05 not significant.



Discussion

Infertility affects the psychological harmony, sexual life and social relation of the couple. The incidence of male infertility is about 50% of infertile couples. It may vary from place to place, nation to nation but magnitude of the problems remains the same. Even with the advent of modern techniques, the success rate in conception is very low; the cost of treatment is also not affordable by all. The agony, sorrow of infertile patients remains almost same even today. Considering the wide spread nature in the society and its depth of causing innumerable problems, thus the subject of *Shukravaha srotas* is selected. Infertility has direct relationship with impairment of *Shukravaha srotas* leads to *shukradusti* (~oligozoospermia).

Shukravaha srotas is important one among the *srotas*, any physiological disturbance in the *srotas* may cause pathology in *srotas* and induces oligozoospermia like pathology.

Oligozoospermia can be co-relate with the *Kshinshukra* and induces male infertility.

Kshina Shukra is a *vyadhi* in which *Shukra Dhatu* is quantitatively and qualitatively vitiates but in oligozoospermia there is quantitative reduction of sperms.

Here *Kapikachhu Churna* was used in this trial to increase spermatogenesis and relieved oligozoospermia. (The table No.3 shows that effect of ***Kapikacchu Churna*** on sperm count increased from mean 18.28 to 51.53 mil / ml. after treatment. Percentage of improvement was 181%. The increase in sperm count was statistically highly significant at't' value being 20.90 with $p<0.001$. This is probable reason for conclusion).

Probable mode of action:-

Kapikacchu and *kshira (cowmilk) is Shukra Janaka Pravartaka.* It improves the quantity and quality of *Shukra*. It increases the sperm population and results in improvement of sperm count.

Acting on Psychic Level:

Kappikacchu which contain L-Dopa and anti depressant activity may increases the sexual arousals**.**
(Dipanwita Pati, Dilip Kumar Pandey*, Radhakrishnan Mahesh, Vadiraj Kurdekar Hemant R. Jhadav, Pharmacologyonline, Anti-Depressant-Like Activity of Mucuna Pruriens; A Traditional Indian Herb in Rodent Models of Depression,1: 537-551 (2010) Pati et al.537**)**

Acting at the somatic level: *Kapikacchu churna* works on body by the basic principle of "*Samanyam Vriddhi Karanam*". (Ch. Su. 1/44)

It has *Gunas* similar to *Shukra dhatu* viz *madhura, guru, snigdha*, are known as *Shukravardhaka*. *Kapikacchu* have *madhura rasa, guru* and *snigdha Guna* etc. It is *guna samanya* with *Shukra*. The *madhura rasa* and *snigdha guna* of *Kapikacchu churna* allieviates/pacifies the aggravated *Laghu & Chala* properties of excited *Vata* and thus responsible for production of *Shukra Dhatu.* Ref.- (Prof. K.R. Srikantha Murthy, Bhavprakash of Bhavmisra, Krishnadas academy, Varanasi 1st edition 1998, page no. 247-248). *Kapikacchu* nourishes the *Dhatus* in the sequential pattern right form *Rasa* to *Shukra dhatu*. Hence it also responsible for *Brimhana* (weight gain). Ref- Cha.Su.4/7. Ultimately it increases sperm count and also improve other seminal and sexual parameters (According to my Clinical Study)

Conclusion

In this study *Kapikacchu Churna* effectively raised the sperm count. The results on sperm count found highly significant.

It also showed good improvement in other seminal parameter like Volume of semen, Ph of semen, motility of sperms etc.

It showed mild significant result in Non progressive sperm (NP) and Not significant in Slow linear progress of sperm (SLP).

It also significantly increased the sexual desire, penile rigidity, erection and duration of ejaculation with orgasm.

This drug therapy also affect night emission by mild improvement in some patients but it is less significant in comparison of other parameter.

Kapikacchu churna also increased body weight and showed the effect of *Brimhana* by nourishing the *dhatus* in the sequential pattern right form *Rasa* to *Shukra dhatu*.

Kapikacchu churna was well tolerated by all the patients and no unwanted effect seen in any patient.

Thus it can be concluded that orally *Kapikacchu churna* in the dose of 5gms with the *Anupana* milk added with sugar can be used as safe and main

'Therapeutic Agent' in the management of Oligozoospermia.

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