



Research Article

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EFFICACY OF SEEDS OF UTANGAN (*BLEPHARIS EDULIS*), LAJJAWANTI (*MIMOSA PUDICA*), VASTUK (*CHENOPODIUM ALBUM*) IN SHUKRA DUSHTI WITH SPECIAL REFERENCE TO MALE INFERTILITY

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ABSTRACT

The population of the world is increasing day by day but today 1 out of 10 couples is suffering from infertility. There are many reasons for infertility but oligospermia is a major factor of infertility. In Ayurveda, eight kinds of shukra dushti explained, in which *ksheen shukra* can be considered as oligospermia. Many treatment modules have been depicted in ayurvedic text. In the present study three drugs *Lajjawanti*, *Vastuk* and *uttangan* used for treatment. In this study, 30 patients were selected according to the sign and symptoms described in our texts and semen analysis was done as laboratory investigation. Significant results are found on symptoms like Swinngattra (body sweating), Sharm (fatigue) Pandutav (anaemia) etc. This drug also showed a dramatic effect on, sperm motility, Viability, Erection and Ejaculation.

Keywords: Shukra dushti, ksheen shukra, oligospermia

INTRODUCTION

According to Ayurveda, the body is said to be composed of seven dhatus, Ras, Rakt, Mamsa, Meda, Asthi, Majja and Shukra. Shukra dhatu is the last dhatu to be made after all dhatus in the body. Hence, we can say shukra dhatu is the essence of all the dhatus. It is well spread all through the body. Prajotpadana (Fertility) is the main karma of Shukra dhatu and one of the main artha's to be fulfilled by the individual in his lifespan. Acharya Charaka told that "A man without offspring is like a single tree with single branch"¹.

Vitiated Tridosha (three humours); impaired Agni; Impaired production of Dhatu (Rasa to Shukra) depletion of Soumya Bhava; all these factors impair the Shukra Dhatu. Ayurveda Encompasses this Tridoshaja dushti and explains 8 types of shukra dushti i.e., vaataj pittaj, kaphaj, Raktaj, Granthi, Kunapagandhi, ksheen, mutra purish gandhi². While fertility is an essential ingredient for the survival and continuity of species, not all couples can further their families. So, the problem of infertility finds its place in the recorded history of ancient civilizations. Infertility can complicate even the most intimate relationships. It brings many strains on time, finances, ability to make decisions and even the job.

This study was carried out to correlate the parameters of semen analysis from an Ayurvedic perspective and simultaneously validate the Shukra Pareeksha (semen examination) told in classical Ayurvedic literature.

MATERIALS AND METHODS

Objectives of the study

1. To study the concept of etiopathogenesis of shukra dushti concerning male infertility.
3. To study on the clinical efficacy of seeds of Utangan (*Blepharis edulis*), Lajjawanti (*Mimosa pudica*), Vastuk (*Chenopodium album*) in male infertility.

Study Design: It was an open labelled clinical study with pre-test and post-test design.

Method of collection of data

30 patients diagnosed as ksheen Shukra/ Oligospermia were selected from IPD/OPD of the National Institute of Ayurveda, Jaipur. A special proforma was prepared with details of history taking, symptoms as mentioned in our classics and allied sciences. Patients were analysed and selected accordingly. Informed consent was taken before participation in the study. The study was carried out as per the international conference of Harmonization-Good Clinical Practices Guidelines (ICH-GCP) or as per the Declaration of Helsinki guidelines.

Inclusion Criteria

- 1) male patients between the age group of 22 years to 45 years
- 2) Patients with a sperm count less than 20 million/ml

Exclusion Criteria

- 1) Male patients below 20 years and above 50 years
- 2) Patients with Absolute Azoospermia.
- 3) Patients with major systemic disorders like Tuberculosis, AIDS and STD

Grading

Erection No erection by any method - 0 Erection by artificial methods- 1 Erection but unable to penetrate- 2 Initially difficult but able to penetrate-3 Erection with occasional failure- 4 Erection whenever desire - 5	Ejaculation No ejaculation at all - 0 Delayed ejaculation without orgasm- 1 Ejaculation before penetration - 2 Ejaculation with penetration - 3 Ejaculation with own satisfaction - 4 Ejaculation with own and partners satisfaction - 5
Sexual desire No desire at all - 0 Lack of the desire - 1 Desire but no activity - 2 Desire only on demand of partner - 3 Normal desire - 4 Excess desire - 5	Orgasm No enjoyment - 0 Lack of enjoyment - 1 Enjoyment in 25% of sexual intima- 2 Enjoyment in 50% of sexual intima- 3

Semen analysis

Some parameters measured in a semen analysis are well established and their reference values have remained stable over time such as:

- volume
- pH
- minimal concentration of spermatozoa and minimum absolute number of spermatozoa per ejaculate
- minimal motility
- maximal leucocyte concentration tolerance

Reference values of semen variables

- Volume - 2.0 ml or more
- pH - 7.2 or more
- Sperm concentration - 20 million spermatozoa/ml or more
- Total sperm count - 40 million spermatozoa or more
- Motility - 50% or more motile.
- Vitality - 75% or more life
- White blood cells Fewer than 10 million/ml

Administration of drug

Utangan seed (*Blepharis edulis*), Lajjwanti seed (*Mimosa pudica*), Vastuk seed (*Chenopodium album*)

Selected patients were made to use the combined powders of Utangan seed, Lajwanti seed and Vastuk seed.

Drug Manufacture - The entire process of drug manufacturing was completed under the supervision of Researchers. First,

Lajwanti Beej, Utangan Beej and Vaastuka Beej were purified by removing the impurities from them. The above-mentioned medicinal seeds were self-dried. After that their powder was made in the pasteurizer. Drugs were used for 45 days for selected patients for research. Each patient was given 3 grams of aushadha yoga in the morning and the evening with milk. During the time of taking the drug, the patient was told to take a digestible food diet.

Follow up: Follow up will be done every after 15 days.

Statistical analysis

Data were analysed by using statistical software Primer of Biostatistics. Measurements were expressed as means and standard deviations for continuous variables and percentages for categorical variables and were analysed. Paired T-Test and Z test were used as a test of significance in the inferential statistics. P-value less than 0.05 was considered statistically Significant

OBSERVATIONS AND RESULTS

Table 1: Relief in main symptoms

Symptoms	BT %	AT %	Relief %
Erection	37.5	85.7	93.33
Ejaculation	30	80	93.56
Sexual desire	32	89	94.9

BT: Before Treatment, AT: After Treatment

Table 2: Relief in associated symptoms

Symptoms	BT		AT		Relief %
	Patients	%	Patients	%	
Daurbalya	17	56.66	7	23.33	58.83
Mukhshosha	17	56.66	2	6.66	88.23
Pandutav	18	60	8	26.66	55.55
Swinngatrata	27	90	6	20	77.77
Shram	26	86.66	10	33.33	61.53
Shishinvedna	6	20	4	13.33	33.33
Vrishanvedna	11	36.66	5	16.66	54.54

BT: Before Treatment, AT: After Treatment

Table 3: Relief in laboratory investigations

Investigation	BT		AT		Relief %
	Patients	%	Patients	%	
Sperm Viability	30	58.1	30	75	39.08
Sperm Motility	30	37.5	30	52.5	56.99
Sperm Counting	30	38.56	30	48.4	52.40

BT: Before Treatment, AT: After Treatment

DISCUSSIONS

In Ayurveda, male infertility is called as Shandhatva or napunsakta. It is the inability to sire a progeny by a man. Acharya Charaka mentioned four causes that lead to Shandhatva. These include Bija upghaat, dhvaj upghaat, Vriddhavastha (old age), Shukra kshay³. When Shukra dhatu is vitiated by vata and pitta dosh, it affects the quality and quantity of shukra dhatu and ultimately leads to ksheen shukra. Ksheen shukra can be

considered as oligospermia. A very big population is suffering from infertility due to oligospermia. The present study gave significant results on Ksheen shukra (oligospermia). Churna of these medicines given a dramatic effect on shukradushti. Lajjawanti (*Mimosa pudica*) is also proved for increasing the testosterone level in the body⁴. Aphrodisiac activity in males is proved for utangan (*Blepharis edulis*)⁵. It is proved in many studies that Vastuk (*Chenopodium album*) has a good effect on erectile dysfunction in males⁶⁻⁸

	Mean	S.D.	S.E.	t	P
Erection	93.56	13.70	2.99	20.976	<0.001
Ejaculation	93.33	19.19	4.40	15.90	<0.001
Serial desire	94.92	17.36	3.70	21.15	<0.001
Sperm count	52.40	7.00	1.30	1.30	>0.10
Sperm motility	56.99	9.11	1.69	10.95	<0.001

CONCLUSION

Infertility is said failure conception after one year of isolated sex. Male infertility accounts for 50 % of human infertility and is considered less complicated than female. In the present study drug lajjawanti (*Mimosa pudica*) contains ymimosine alkaloid and mucilage, so it has the good property of shukrajanan (spermatogenesis). Drug Uttangan (*Blepharis edulis*) contains olintayn and blepherin glucosides, so it has shukrajanak (spermatogenic) and kamottejak (aphrodisiac) effects. treatment based on Ayurvedic principles was found to be effective in male oligospermia in improving sperm count, sperm motility, sperm viability along with some associated symptoms like Shram, swinnagratra and pandutav.

Recommendation

We recommend larger and more rigorous studies such as randomised control trials to get more conclusive results.

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