

ANALYSIS OF SUKRA FUNCTIONS RELATED TO SEXUAL BEHAVIOUR IN MALE INFERTILITY

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ABSTRACT

Introduction: Acharya Susruta has beautifully narrated certain important functions of the *Sukra dhatu* viz. *Cyavana*, *Preeti*, *Harsh*, *Dhairya* and *Dehabala* which have particular importance regarding reproduction or sexual act. It is very clear that the functional characteristics of *Sukra* explained by Susruta can be incorporated in the human sexual response cycle. *Harsha* is the pleasure, joy and the attraction making the arousal towards the opposite sex, *Cyavana* is the optimal timed ejaculation while *Preeti*, the resultant satisfaction of sexual act. *Dhairya* is the maintenance of anxiety as well as orgasm at the optimal level, avoids disruption and it is the conditional factor to *Harsha*, *Cyavana* and *Preeti*. '*Dhairya*' also has relation with sexual act as well as general psychological and behavioural features. These functions seem to be interrelated in same stages of male sexual behaviour. The applied meanings of *Dhairya*, *Cyavana*, *Preeti* and *Harsha* are being analyses here in detail. **Methods:** The present work want to observed all these functions in applied aspect with emphasizing International Index of Erectile function(IIEF) questionnaire as subjective parameters. **Result & Discussion:** As the present work include male infertile patients hence abnormalities in *Garbhautpatti* function of *sukra dhatu* is seen in all cases. In case of other functions of *sukra dhatu* maximum number of defect is seen in *Harsha* followed by *Preeti*, *Cyavana*, *Dhairya* and *Dehabala*.

Keywords: *Harsha Preeti, Cayavana, Dhairya* IIEF.

INTRODUCTION

Besides the prime function of *Garbhautpatti*, *Sukra* possesses other functions *Dhairya*, *Harsha*, *Priti*, *Cyavana* and *Dehabala*, which can be grouped as below

The functions of *Sukra* pertaining to the sexual act are as *SARVADAIHIKA* (Systemic function)- *Dhairya*, *Dehabala*. *MAITHUNAGATA* (related to sexual Behaviour)- *Cyavanam*, *Priti*, *Harsha*. And *RUPA DRAVYAGATA* (Functions related to seminal fluid)- *Garbhautpatti*.

Ācarya Suśruta has beautifully narrated certain important functions of the śukradhātu viz. cyvana, preeti and harsha which have particular importance regarding sexual act. ⁽¹⁾ '*Dhairya*' also have relation with sexual act as well as general psychological and behavioural features. The applied meanings of *Dhairya*, *Cyavana*, *Preeti* and *Harsha*

are being analysed here in detail. The term '*dhairya*' have wider implications. It has been explained as the remedy for mental morbidity Caraka.⁽²⁾ Dalhana describes it as the capacity to fight against any condition⁽³⁾ and is related to the physical and mental alertness (Apte, 1984). In *Klaibya*, one can find loss of this function..⁽⁴⁾ *Bhaya* (fear) is the exact opposite quality of *dhairya*. *Dhairya* is the strength of mind even in dangerous situations without much disruptive anxiety. According to Dalhana *dhairya* is valour and courageousness (*śouryam*, *śooratvam*).⁽⁵⁾ *Cyavana* means the ejaculation of semen. It should be timed optimum. The timing of ejaculation depends on *dhairya*. *Preeti* has been explained as the love towards female sex.⁽⁶⁾ According to Caraka preeti is a variety of pleasure.

Preeti is the pleasure from satisfaction which is reflected by joyous appearance of the face or eyes etc.⁽⁷⁾ *Harsha* is characterized by ‘*amoda*’.⁽⁸⁾ *Harsha* in particular to the sexual act and it generates curiosity and pleasure about repeated sexual acts has been mentioned as a function of *Sukra Dhatu*⁽⁹⁾ Due to *harsha* the man amorously disposed towards female sex.

From the above descriptions it is very clear that the functional characteristics of *sukra* explained by Suśruta can be incorporated in the human sexual response cycle. *Harsha* is the pleasure, joy and the attraction making the arousal, *cyavana* is the optimal timed ejaculation and *preeti*, the resultant satisfaction (orgasm) of sexual act. *Dhairya* is the maintenance of anxiety only at the optimal level, avoid disruption and it is the conditional factor to *harsha*, *chyavana* and *preeti*. These all functions seem to be inter-related.

In this study as all are male infertile patients so *garbhautpatti* function in all case will not be considered here. The applied part of this research work consists of *sukra dhatu* with emphasising the IIEF questionnaire as subjective parameters.

Parameters	Questions	Score range	Maximum score
Erectile function	1-5 & 15	0-5	30
Orgasmic function	9-10	0-5	10
Sexual Desire	11-12	1-5	10
Intercourse Satisfaction	6-8	0-5	15
Overall Satisfaction	13-14	1-5	10

Study Design – The patients with *Sukra dosha* within the age group of 21 yrs to 50 yrs simple random sampling technique comparative observation with case history, clinical finding and laboratory finding.

Sample Size – Clinically diagnosed 24 male infertility patients were studied.

Exclusive Criteria – Infertility occurred due to following causes were excluded. Testicular torsion, Testicular trauma, Varicocele, STD

Inclusive Criteria – Patient having age between 21-50 years.

Data Collection- Patients were thoroughly examined both subjectively and objectively. Detailed history pertaining to the mode of onset, previous ailment, previous treatment

Aim and Objectives:

- Functions of *sukra dhatu* related to sexual behavior are analyzed.
- Functions *sukra dhatu* related to sexual behavior are interpreted with IIEF Questionnaire.

Materials & Methods:

The present study entitles “**Analysis of the Sukra Functions Related to Sexual Behaviour in Male Infertility**” is design to carry out in following way.

- For assessment of abnormalities of *sukra dhatu* functional aspect in relation to male infertility has been assessed in 24 number patients.
- To assess the functions of *sukra dhatu* a part from *Garbha utpatti* i.e. *Dhairya*, *Cayavana*, *Priti*, *dehabala* are tried to established with IIEF Questionnaire.⁽¹⁰⁾

The international Index of Erectile Function Questionnaire (IIEF) is used to calculate below subjective parameters for different aspect of anathophysiological parameter related to reproductive system.

history, family history, habits, *ashta vidha pareeksha* and *dasha vidha pareeksha* and physical examination findings were noted. Routine investigations were done to exclude other pathologies. Radiological features were also investigated.

Sources of Data: a) Patient: Patients were selected from O.P.D of GACH after fulfilling the inclusion and exclusion criteria during 2016-17 b) Investigation was done in GACH laboratory.

Result:

Clinical Interpretation of the IIEF of 24(N) patients in Male infertility patients was seen as below.

Table 1: Erectile Function:

Score	Interpretation	N(24)	%
0-6	Severe dysfunction	0	00%
7-12	Moderate dysfunction	3	12.5%
13-18	Mild to moderate dysfunction	7	29.17%
19-24	Mild dysfunction	7	29.17%
25-30	No dysfunction	7	29.17%

The above table shows distribution of Erectile function in 24 patients. Maximum number of patients in this study found is 7(29.1%) Mild to moderate dysfunction, Mild

dysfunction, No dysfunction in each. 3(12.5%) in Moderate dysfunction but no one is seen with Severe dysfunction.

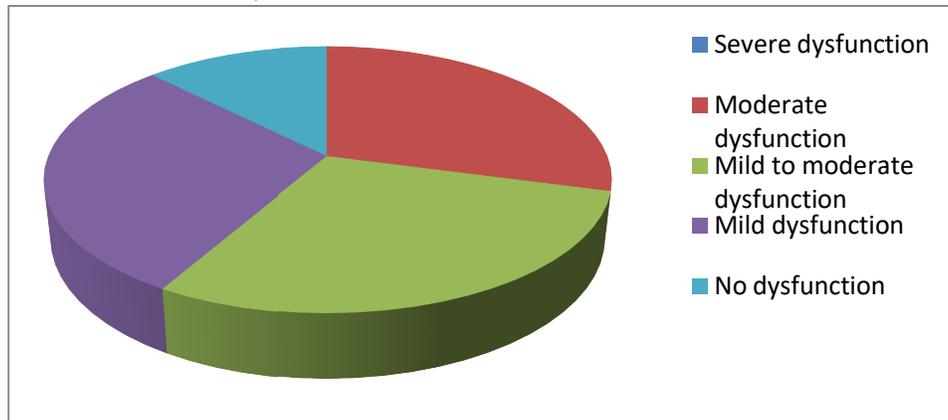


Table 2: Orgasmic Function:

Score	Interpretation	N(24)	%
0-2	Severe dysfunction	0	00%
3-4	Moderate dysfunction	1	4.17%
5-6	Mild to moderate dysfunction	6	25%
7-8	Mild dysfunction	11	45.34%
9-10	No dysfunction	6	25%

The above table shows distribution of Orgasmic function in 24 patients. Maximum number of patients in this study found is 11(45.34) in Mild dysfunction, 6(25%) in

Mild to moderate dysfunction and No dysfunction in each. 1(4.17%) in Moderate dysfunction but no one is seen with Severe dysfunction.

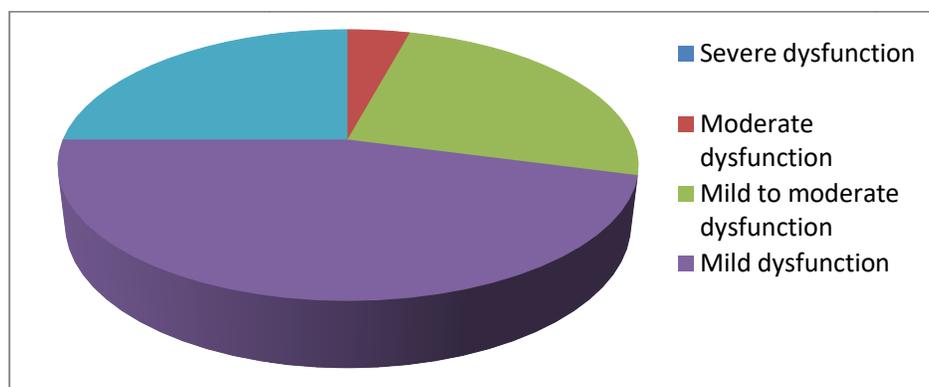


Table 3: Sexual Desire Function:

Score	Interpretation	N(24)	%
0-2	Severe dysfunction	1	4.17%
3-4	Moderate dysfunction	4	16.67%
5-6	Mild to moderate dysfunction	10	41.67%

7-8	Mild dysfunction	5	20.84%
9-10	No dysfunction	4	16.67%

The above table shows distribution of Sexual de-
sire function in 24 patients. Maximum number of patients
in this study found is 10(41.67) in Mild to moderate dys-

function, 6(25%) in Mild dysfunction 4(16.67%) in
Moderate dysfunction and No dysfunction in each. but
1(4.17) is seen with Severe dysfunction.

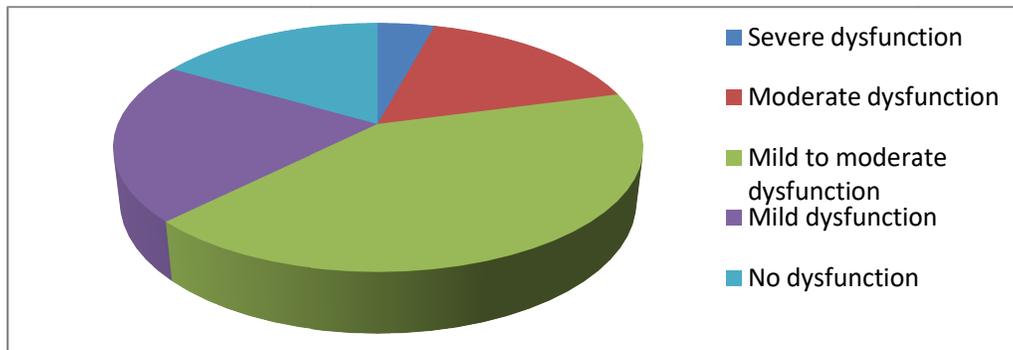


Table 4: Intercourse Satisfaction Function:

Score	Interpretation	N(24)	%
0-3	Severe dysfunction	0	00%
4-6	Moderate dysfunction	4	16.67%
7-9	Mild to moderate dysfunction	3	12.5%
10-12	Mild dysfunction	14	58.37%
13-15	No dysfunction	3	12.5%

The above table shows distribution of Intercourse satisfac-
tion function in 24 patients. Maximum number of pa-
tients in this study found is 14(58.37) in Mild dysfunction,

4(16.67%) in Moderate dysfunction, 3(12.5) in Mild to
moderate dysfunction and No dysfunction in each. but
00% is seen with Severe dysfunction.

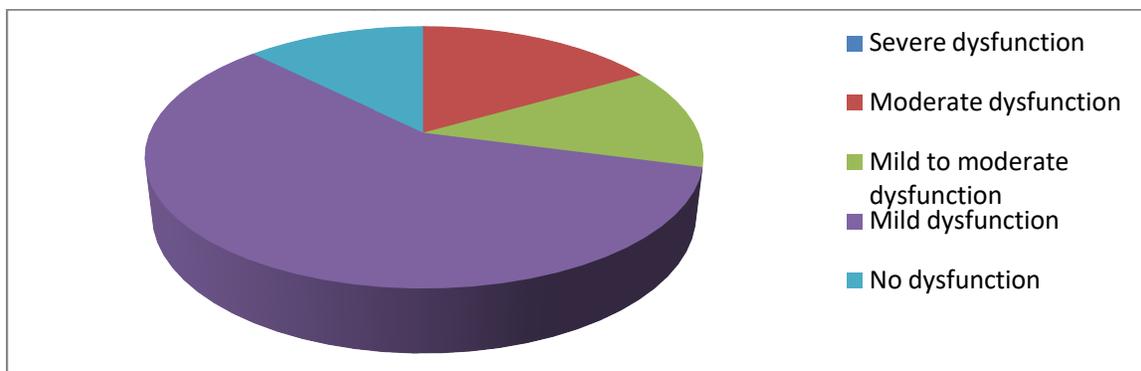
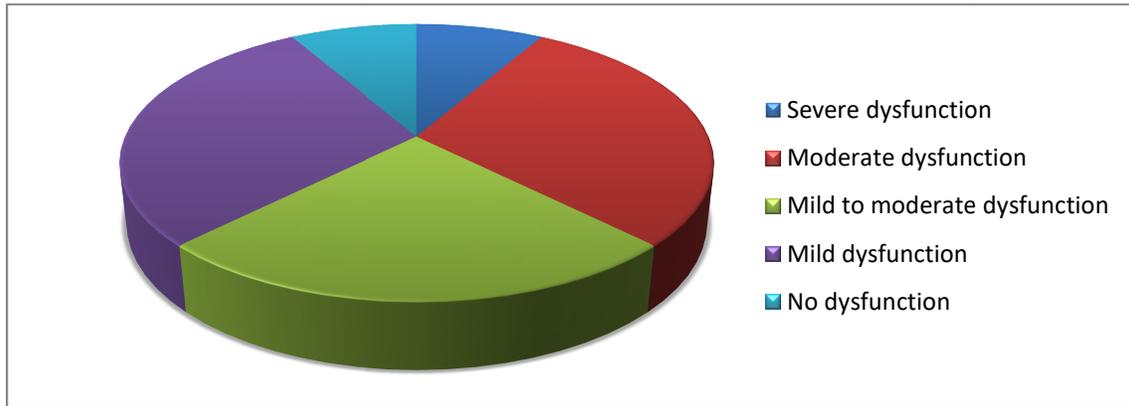


Table 5: Overall Satisfaction Function:

Score	Interpretation	N(24)	%
0-2	Severe dysfunction	1	4.17%
3-4	Moderate dysfunction	7	29.17%
5-6	Mild to moderate dysfunction	6	25%
7-8	Mild dysfunction	7	29.17%
9-10	No dysfunction	2	8.34%

The above table shows distribution of Overall satisfaction function in 24 patients. Maximum number of patients in this study found is 7(29.17) in Moderate dysfunction and

Mild dysfunction in each, 6(25%) in, Mild to moderate dysfunction, 2 (8.34%) in No dysfunction. but 00% is seen with Severe dysfunction.



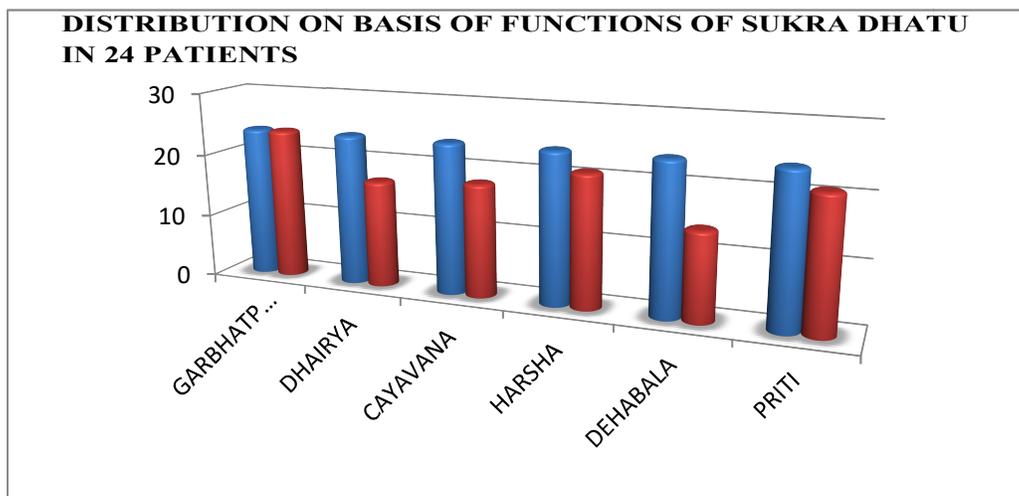
DISCUSSION

All the function like *dhairya*, *chayavana*, *harsha*, *preeti* are assessed from IIEF questionnaire but *Garbhatpadana* function from case history taking and *Dehabala* function from the physical examination like *samhana* and *vyayama*

shakti. Here we have calculated the final result taking the mild dysfunction and no dysfunction from the IIEF as normal function and other parameter like mild to moderate dysfunction moderate dysfunction and severe dysfunction as abnormal function.

Distribution on Basis of Functions of *Sukra Dhatu* in 24 Patients with the help of IIEF Questionnaire:

Sl.no.	Functions	N(24)	%
1.	<i>Garbhatpadana</i> (Production of off-springs)	24	100%
2.	<i>Chyavana</i> (Orgasm function)	18	75%
3.	<i>Harsha</i> (Satisfaction function)	21	87.5%
4.	<i>Preeti</i> (Sexual desire function)	20	83.34%
5.	<i>Dehabala</i> (Physical strength, Enthusiasm, Physical fitness)- {from physical examination}	14	58.37%
6.	<i>Dhairya</i> (Patience, physical and mental alertness)- {Erectile function}	17	70.84%



The above table shows distribution of functional defects of *sukra dhatu* in 24 patients. Here 100% patients are with abnormalities of *Garbhatpadana* function. Maximum number of patients in this study found 21(87.5%%) having

defects of *Harsha* (Satisfaction). 20(83.34%) patients having defects of *Preeti* (Sexual desire), 18(75%) patients having defects of *Chyavana*, 17(70.84%) patients having

defects of the function *Dhairya* and 14(58.37%) patients having defects of the function *Dehabala*.

CONCLUSION:

Abnormalities of *Garbhautpatti* as functions of *sukra dhatu* are seen in all patients. In case of other functions maximum number of patients in this study found 21 i.e. 87.5% having defects of *Harsha* (Satisfaction function) followed by 20 i.e. 83.34% patients having defects of *Preeti* (Sexual desire), 18 i.e. 75% patients having defects of *Cayavana*, 17 i.e. 70.84% patients having defects of the function *Dhairya* and 14 i.e. 58.37% patients having defects of the function *Dehabala*.

The basic functional component of *sukra dhatu* is *Garbhautpatti* is maintained by *sukra* in relation to male and *artava* in relation to female. In the aspect of male infertility patient the character of *sukra* are defective and its influences are observed in deteriorating to qualities of *sukra* function like *dhairya*, *cayavaha*, *preeti*, *harsha*, *dehabala*. Thus the whole concepts hypothesised in establishment of functions of *sukra dhatu* in broader sequences related to the hormonal functional exhibition involving hypothalamo-pituitary gonadal axis.

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