

Prakriti and Quantity of Semen: An Observational Clinical Study

V.G. Huddar*, B.S. Prasad**

Abstract

Prakriti is the genomic configuration of an individual by birth. Seven no of *Prakritis* are explained where every individual *Prakriti* have specific *laxanas* (characters). *Kapha Prakriti* person will have more quantity of semen compared to *Pitta* and *Vata Prakriti* person. Hence in this study, *Prakriti* was assessed in 33 apparently healthy individuals concerned to semen quality by using a special questionnaire and correlated with their semen quantity. Statistical analysis shown *Kapha prakriti* persons will have more quantity of semen. *Vata prakriti* will have less semen quantity and *Pitta prakriti* will hav moderate quantity of semen as compared to *Kapha prakriti*.

Key words: *Prakriti*; Types of *Prakriti*; *Prabhuta shukra*; Semen analysis; Quantity of semen.

Introduction

Literally *Prakriti* means the original, natural form, primary substance, character, constitution, temper, unalterably fundamental form (1). An individual's *Prakriti* is decided at the time of conception in accordance to the *doshic* dominance. This predominance of *Dosha* may be with *Sukrasonita Prakriti*, *Kalagarbhasaya Prakriti*, *Maturaharavihara Prakriti*, *Mahabhutavikara Prakriti*. The *Prakriti* thus resulted may be *Vatala*, *Pittala*, *Sleshmala* or combination of *doshas* and *samadhatu Prakriti* (2).

Carakacharya enlisted *Prakritis* as *Sleshmala*, *Pittala*, *Vatala* and *Samadhatu*. *Tridoshas* are called as *Dhatu*s in a state of normalcy and *Doshas* in pathological state. *Samadhatu* is certainly indicative of *Doshas* within the physiological range and the other *doshic* varieties are as pathological conditions.

However, these *doshic* varieties though pathological, may be considered as *prakrita* for the respective individual, as they are present since birth. On the basis of the above explanations *Prakriti* may broadly classified as *Doshaja* and *samadhatu*; *Doshaja* again divided into *ekadoshaja* and *samsrista*. Except *samadhatu Prakriti* remaining all other types of individuals can be considered as *aturas* (3).

Kapha Prakriti person is '*Prabhootashukravayavayapathya*', *Pitta Prakriti* person is having '*Alpashukravayavayapathya*' and *Vataja* person is '*Alpapatnya*' (4) and even *Alpa shukra*. Accordingly here an effort is made to analyse quantity of the semen based on individual *Prakriti* and the results are statistically analysed. A special questionnaire was used for assessing the *Prakriti* (5).

Materials and methods

Objectives of the study

To make evidence based document representing the relation between the *Prakriti* and the quantity of semen in different individuals as told by *Charka* in *Vi. 8th Chap.*

Author's Affiliation: *MD (KC), (PhD), Lecturer, Department of Kayachikitsa, KLEUBMK Ayurveda Mahavidyalaya, Shahapur, Belgaum. **MD (KC), PhD, Principal, KLEUBMK Ayurveda Mahavidyalaya, Shahapur, Belgaum.

Reprint's request: Dr. V.G. Huddar, MD (KC), (PhD), Lecturer, Department of Kayachikitsa, KLEUBMK Ayurveda Mahavidyalaya, Shahapur, Belgaum. Mob: 9986697942, E-mail: drvghuddar@gmail.com

E-mail: sidkam83@rediffmail.com

(Received on 25.01.2012, accepted on 19.03.2012)

Source of data

The sexual health awareness education was given to the students of different colleges before starting the study. All apparently healthy individuals concerned about semen quality, attending the *Srishti* fertility centre OPD, KLEU Ayurveda Hospital, and KLE Ayurveda city clinic, Belgaum were selected for the study.

Inclusion criteria

1. Apparently healthy male individuals willing to undergo semen analysis concerned to semen quality were selected for the study.
2. Aged between 18 to 30 years

Exclusion criteria

1. Diagnosed cases of infertility
2. Abstinence period more than 5 days and less than 3 days.
3. Individuals suffering from severe systemic illness
4. Individuals with bacterial and viral infections
5. Chronic alcoholics and tobacco chewers

Study Design

It was a clinical observational study. All apparently healthy individuals who are willing to undergo semen analysis concerned to their semen quality were selected for the study. The semen analysis of 33 individuals was carried out as per the WHO guidelines for semen analysis (6). Volunteers' samples were collected for the study after three to five days of abstinence. The *Prakriti* assessment of individuals was done by special self-assessment questionnaire (5). The dominance of *Prakriti* was considered based on the percentage given by the participant himself. The quantity of the semen is measured and the results are statistically analysed using correlation regression technique. Total duration of the study was six months.

Result

Analysis of results

Considering the individual *Prakritis* as independent variables and the semen quantity as the dependent variable the statistical analysis was carried out using the correlation and regression technique. By this the relation existing between these independent variables and the dependent variable is established.

Using SPSS software (7)

Considering the variables as C1=semen quantity, C2=*Vata*, C3 =*Pitta*, C4=*Kapha*

Correlations: C1, C4

1. a) Pearson correlation coefficient between C1 and C4 = 0.400

b) $H_0: \rho = 0$ against $H_1: \rho \neq 0$,

Calculated value, $|t| = 2.427$

Tabulated value, $t_{0.05, 31} = 1.96$

c) P-Value = 0.021

Here correlation coefficient (r) is 0.400 which lies between 0 and +1. Hence C1 and C4 are having moderately positive correlation, which was significant at the level of 0.05. Thus it can be said that, as the percentage of *Kapha Prakriti* increases the quantity of the semen also increases.

Here correlation coefficient (r) is -0.211 which lies between 0 and -1. Hence C1 and C2 are having moderately negative correlation indicates, as the percentage of *Vata Prakriti* increases the quantity of the semen decreases. P-Value = 0.238 which is > 0.05 , indicates statistically not significant. We can say that the *Vata Prakriti* persons are having less semen quantity.

Here correlation coefficient (r) is 0.302 which lies between 0 and +1. Hence C1 and C3 are having moderately positive correlation indicates, as the percentage of *Pitta Prakriti* increases the quantity of the semen increases. P-Value = 0.088 which is > 0.05 , indicates statistically not significant. Thus it can be said that *PittaPrakriti* individuals will have less

Table 1

Sl. No.	PNR No.	Prakriti					Semen Quantity (ml)
		Vata(%)	Pitta(%)	Kapha(%)	Ekadoshaja Prakriti	Dwandwaja Prakriti	
01	02	80	40	73	V	VK	2.5
02	04	12	70	81	K	KP	3
03	05	8	29	37	K	KP	2.2
04	07	73	63	69	V	VK	3
05	21	54	69	47	P	PV	1.7
06	22	58	98	85	P	PK	5
07	23	07	37	65	K	KP	2
08	24	17	58	68	K	KP	3
09	25	16	75	76	K	KP	3
10	26	60	40	65	K	KV	3.5
11	27	20	31	75	K	KP	3.5
12	28	28	41	55	K	KP	3
13	29	79	43	40	V	VP	1.5
14	30	04	75	83	K	KP	3
15	01	85	60	42	V	VP	0.5
16	03	61	50	25	V	VP	1.5
17	06	55	22	81	K	KV	4.5
18	08	85	68	39	V	VP	1.2
19	09	81	32	86	K	KV	4.5
20	10	21	84	92	K	KP	3.3
21	32	19	70	83	K	KP	4.2
22	11	71	80	20	P	PV	2.8
23	12	73	40	83	K	KV	3.5
24	33	88	25	69	V	VK	2
25	13	23	78	61	P	PK	3.5
26	14	24	23	39	K	KV	3
27	15	76	90	19	P	PV	5.2
28	16	31	71	86	K	KP	5.1
29	17	58	33	78	K	KV	2
30	18	65	55	50	V	VP	2
31	20	50	65	45	P	PV	2.5
32	31	81	90	26	P	PV	4.2
33	32	19	70	83	K	KP	6.1

Note: * V=Vata, P=Pitta, K=Kapha, VP=Vata Pitta, VK=Vata Kapha, KV=Kapha Vata, KP=Kapha Pitta, PV=Pitta Vata, PK=Pitta Kapha. First highest percentage among the three observations of individual participants is considered as the *Ekadoshaja Prakriti*. First highest and second highest percentages together are taken as *dwandwaja Prakriti*. Ex: In patient PNR no 2, the 3 observations are V=80%, P=40%, K=74%. Here the patient is considered *Vata Prakriti* (80%) – *Ekadoshaja* and *VataKapha Prakriti* (80%, 73%) – *Dwandwaja Prakriti*.

semen quantity compared to *KaphaPrakriti* individuals.

Discussion

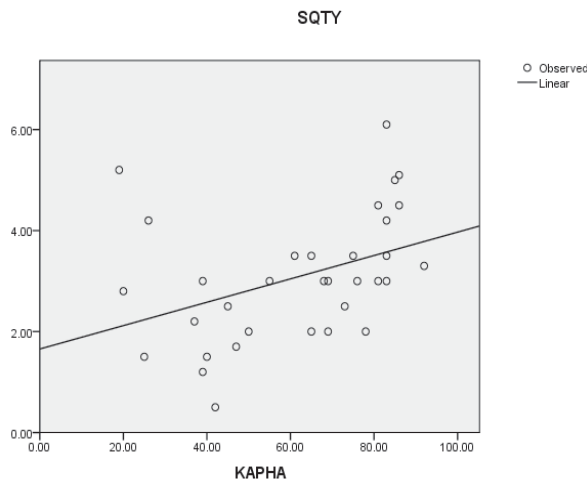
According to present era many facts told by our acharyas are not well supported by the

evidence based medicine. Here is an effort to see the relation between the semen quantity and the individuals *Prakriti*. *Charakacharya* says the *Kaphaja Prakriti* person has *Prabhootashukravyavayapathya'* and *PittaPrakriti* person has *'Alpashukravyavayapathya'*.⁴ Though the

Table 2

Ekadoshaja (No of individuals)		Dwandwaja (No of individuals & % of Prakriti)	
<i>Kapha</i>	18	<i>Kapha - Pitta</i>	12
		<i>Kapha - Vata</i>	06
<i>Pitta</i>	07	<i>Pitta - Kapha</i>	02
		<i>Pitta - Vata</i>	05
<i>Vata</i>	08	<i>Vata - Kapha</i>	03
		<i>Vata - Pitta</i>	05

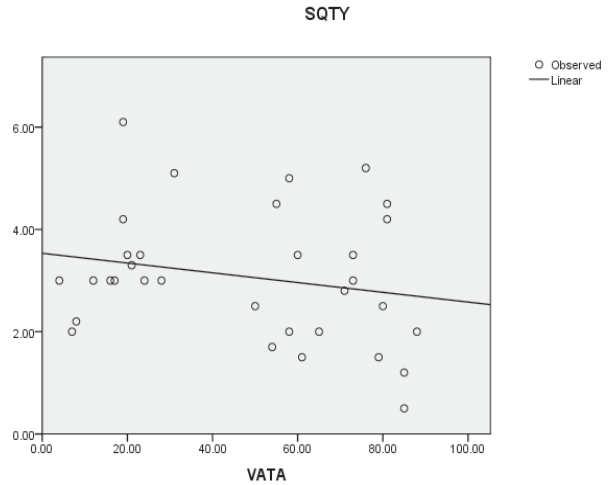
**Figure 1: Regression line is shown below:
SQTY = Semen Quantity**



Correlations: C1, C2

- 2. a) Pearson correlation coefficient between C1 and C2 = -0.211
- b) $H_0: \tilde{n} = 0$ against $H_1 \neq 0$,
Calculated value, $|t| = 1.204$
Tabulated value, $t_{0.05, 31} = 1.96$
- c) P-Value = .238

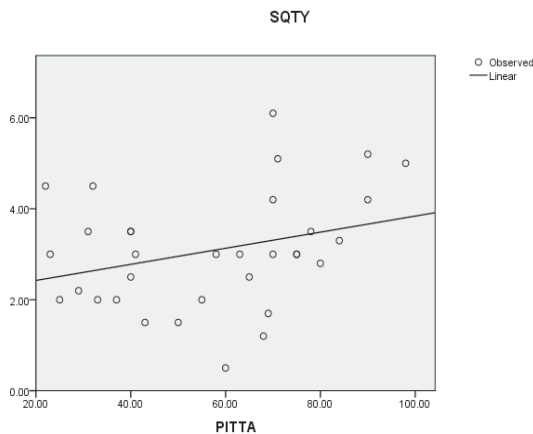
Figure 2: Regression line is shown below



Correlations: C1, C3

- 3. a) Pearson correlation coefficient between C1 and C3 = 0.302
- b) $H_0: \tilde{n} = 0$ against $H_1 \neq 0$,
Calculated value, $|t| = 1.76$
Tabulated value, $t_{0.05, 31} = 1.96$
- c) P-Value = .088

Figure 3: Regression line is shown below



Regression Analysis: C1 versus C2, C3, C4

The regression equation is

$$C1 = 0.59 - 0.00209 C2 + 0.0197 C3 + 0.0239 C4$$

Table 3

Predictor	Coef	SE Coef	T	P
Constant	0.591	1.046	0.57	0.576
C2	-0.002090	0.007678	-0.27	0.787
C3	0.019688	0.009337	2.11	0.044
C4	0.023880	0.009882	2.42	0.022

S = 1.13956 R-Sq = 27.6% R-Sq (adj) = 20.1%

R-Sq = 27.6% indicates the semen quantity and the *Prakriti* of an individual are correlated at the extent of 27.6% and the quantity of semen also depends on the many other parameters other than *Prakriti* about 72.4%.

Acharya has not directly commented on the quantity of the semen in *Vata Prakriti* person, rather only told '*Alpapathyah*', logically it can be understood that the *Vata Prakriti* individuals have less semen quantity compared to *Kapha* and *Pitta Prakriti* and the present study also supported the same. By analysing the data it is observed that the *Kpaha Prakriti* and the quantity of the semen are having moderately positive correlation indicating the the *Kapha Prakriti* individuals have more quantity of semen. *Pitta Prakriti* is also has moderately positive correlation which indicates the *Pitta Prakriti* persons has moderate quantity of semen as compared to *Kapha Prakriti*. *Vata Prakriti* has moderately negative correlation which indicates they are inversely proportional. Hence *Vata Prakriti* individuals have less quantity of semen.

Changes in seminal parameters depend on many factors apart from *Prakriti* like *Kala*. In *Adaana kala* the sperm count and percentage of actively mobile sperms will be more as compared to *Visarga kala* (8). Apart from the present proforma of assessing the *Prakriti*, many other methods are also mentioned by different authors. One opinion is rather than considering the characters in assessing individual *Prakriti*, one has to consider the *Gunas* which will be more suitable and precise because the *Guna* covers almost all the characters mentioned in the text about individual *Prakriti* (9). The seminal parameters change even according to *Desha*. A survey

Table 4: Analysis of Variance

Source	DF	SS	MS	F	P
Regression	3	14.341	4.780	3.68	0.023
Residual Error	29	37.659	1.299		
Total	32	52.001			

The effect of treatment is statistically significant since $p < .05$.

($t = \frac{r}{\sqrt{1-r^2}} \sqrt{n-2}$), r is the correlation coefficient and n is the number of observation.)

study carried out in gold mine and non gold mine area showed that the semen volume, sperm count and motility were better in goldmine area in comparison to non goldmine area. This observation certainly indicates towards some action of gold in spermatogenesis (10). The *vikrita* conditions like *Varicocele* also depend on *Prakriti* of an individual. Study shown that the highest number of patients (34.5%) found belong to *Pitta Prakriti*. *Pitta Vata Prakriti* by 24.1%- *Pitta Prakriti* individuals with *mrudu* predominance may have *shithilangata* (11). Hence these individuals have moderate semen quantity as in *Pitta prakriti* individuals.

Conclusion

The quantity of semen is found to be more in *Kapha Prakriti* Persons, and will increase as the percentage/Intensity of *Kapha prakriti* increases. *Pitta Prakriti* persons have moderate semen quantity as compared to *Kapha Prakriti*. *Vata Prakriti* persons have less semen quantity compared to *Kapha* and *Pitta Prakriti*. There are many factors other than *Prakriti* which influence on the quantity of the semen like, *Kala*, *Desha* etc. There are different methods of assessing *Prakriti* are mentioned by different authors and needs to be standardised. Study on larger samples is the further scope of the study with standard *Prakriti* assessment proforma.

Acknowledgement

My gratitude to Dr. B. S. Prasad, Dr. Kishore. Pathavardhan, Mr. S. R. Mumbaraddi, Dr. Shivakumar. Harti, Dr Madhusudan I K, Dr Shweta H, for their feedback on various drafts of this paper. And for helping while doing the research work.

References

1. Williams M M. *A Dictionary of English and Sanskrit*. 1st ed. Delhi; Parimala publications, 2008; 951.
2. Agnivesa, Acharya Jadavji Trikamji. *Charaka Samhita*, 5th ed. Varanasi; Choukambha Sanskrit sansthan publishers, 2001; Verse 95: 277.
3. Agnivesa, Acharya Jadavji Trikamji. *Charaka Samhita*, 5th ed. Varanasi; Choukambha Sanskrit sansthan publishers, 2001; Verse 40: 52.
4. Agnivesa, Acharya Jadavji Trikamji. *Charaka Samhita*, 5th ed. Varanasi; Choukambha Sanskrit sansthan publishers, 2001; Verse 96-82: 77.
5. Patwardhan K, Sharma R. Prakriti: a self-assessment questionnaire. *Journal of All India Sharir Research Institute* 2005; 1(5): 11-16.
6. WHO laboratory manual for the examination and processing of human semen, 5th ed. Switzerland; World Health Organisation, 2010; 50.
7. Statistical Package for Social Sciences (SPSS) [computer programme]. Version 16.0. California; Norman H. Nie, C. Hadlai Hull, 2008.
8. Prasad BS, Rao BCS. Kala and seminal parameters. *Jnana srotas* 2008; 4(1).
9. Prasad BS. Prakriti-An Analysis. *Jnana srotas* 2005; 2(3).
10. Prasad BS, Gurudeep Singh, Skandhan KP. Fertility potentiality and seminal plasma gold concentration among male population of gold mine and non gold mine area - A survey study. *KLE University Health Science Journal* 2010; 3(2): 41-47.
11. Prasad BS, Rao BCS. Prakriti and Varicocele. *Journal of Ayurveda* 2007; 1(2): 22.

Red Flower Publication Pvt. Ltd,

CAPTURE YOUR MARKET

For advertising in this journal

Please contact:

International print and online display advertising sales

E-mail: redflowerppl@vsnl.net / tel: +91 11 22754205

Recruitment and Classified Advertising

E-mail: redflowerppl@vsnl.net / tel: +91 11 22754205