

A PHYSIOLOGICAL STUDY OF SHUKRA DHATU – A REVIEW

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ABSTRACT

In *Ayurveda*, *Dosha*, *Dhatu* and *Mala* are the basic blocks upon which the body stands. Out of these, *Dhatu* mainly perform the function of holding- together the bodily elements. There are seven *Dhatu* in person; these are *Rasa*, *Rakta*, *Mamsa*, *Meda*, *Asthi*, *Majja* and *Shukra*. *Shukra Dhatu* is a very important component of our body as it locates in entire body and its Moola Sthana are testes and Penis. This *Dhatu* is meant principally for reproduction, Reproduction is not local function of testes to produce sperms and penis to get erected at sexual acts and ejaculate. It is function of entire body, mind and intention towards sexual act, so one should take proper care of *Shukra Dhatu* by proper diet that gives nourishment to *Shukra* and by following proper regimen to benefit *Shukra*.

KEYWORDS: *Ayurveda*, *Shukra*, *Dhatu*, *Semen*.

INTRODUCTION

According to *Ayurveda*, *Dosha*, *Dhatu* and *Mala* are considered as three basic elements of body. Among these, *Dhatu* does *Dharana Karma*. They are seven in number. *Shukra Dhatu* is the 7th *Dhatu*. It is produced from the *Prasada Bhaga* of *Majja Dhatu* with the help of *Bhutagni* and *Shukra Dhatvagni*. *Shukra* is considered under *Kapha Vargiya Dravya* and also *Shukra* is one of *Ashrayasthana (Dhatu)* of *Kapha Dosha*. It is *Jala Mahabhuta* predominant,

pervades all over the body. It gives Valour, *Chyavan*, *Priti*, *Dehabala* and *Harsha* and is meant for reproduction. *Shukra Dhatu* can be compared to Semen in modern science but *Ayurvedic* texts reveal that *Shukra Dhatu* has much broader concept than Semen.

MATERIALS AND METHODS

References related to proposed title are collected from classical texts of *Ayurveda*. Various publications, internet, books, research papers and proceedings of seminars related to the topic are collected.

REVIEW OF SHUKRA DHATU

Vyutpatti And Nirukti Of Shukra

is described in various forms in different literatures like *Shuch Rak ni Kutwam*; *Klee shuch klede rujendragravajreti (Vachaspatyam)*. *Shukra is white pure excellent of all Dhatu*.

SYNONYMS OF SHUKRA

Shukla, *Teja*, *Veerya*, *Retas*, *Beeja* are all synonyms of *Shukra Dhatu*.

Some other words used to indicate *Shukra* in *Ayurvedic* literature are –*Majja Samudbhavam*, *Dhatu Saram*, *Kitta Varjita*, *Paurusha*^[1] *Ananda Samudbhavam*, *Retas*^[2], *Rupadravyam*^[3], *Bijam*^[4], *Veeryam*^[5], *Punsatvam*.^[6]

Sthana (Site) Of Shukra Dhatu

The entire sugarcane plant is pervaded with its juice. Ghee is available in the whole of the curd and oil is available in all parts of seed. Similarly, semen pervades the entire body which has the sensation of touch.^[7]

Shukravaha Strotasa

Concept of *Strotas* is unique contribution of *Ayurveda* to medical system. *Strotasas* are minute hollow pathways or passages through which *Parinamita Dhatus* are transported across body. All the *Brihatrayis* have mentioned *Shukravaha Strotas*.

Mulasthanas of the *Shukravaha Strotas* are summarised in following table –

Reference	Mulasthana
<i>Charaka Samhita</i>	<i>Vrishana</i> (Testis), <i>Shepha</i> (Penis). ^[8]
<i>Sushruta Samhita</i>	<i>Stana</i> (Breast) and <i>Vrishana</i> (Testis). ^[9]
<i>Vagbhata Samhita</i>	<i>Majja</i> , <i>Stana</i> (Breast) and <i>Mushka</i>

Shukradhara Kala

Shukradhara Kala pervades all over body in all living beings, it is seventh kala.^[10] *Shukra* pervades all over body in *Shukradhara Kala* in a such a way *Ghrta* is present in milk and *ikshu Rasa* present in *ikshu*. Though it is described that '*Shukra dhara Kala*' is present all over the body but it is particularly located at the distance of '*Two Angula*' laterally to the right side of '*Bastidwara*' (bladder) & '*Mutra marga*' (urethra and penis).^[11]

Mahabhautic Configuration of Shukra

Shukra is *Saumya*^[12], which has originated from *Jala Mahabhuta* but *Charaka* has differed in opinion and says *Shukra* is *Panchamahabhautic* except *Akasha Mahabhuta*.^[13]

Doshic Configuration of Shukra

Shukra is considered under *Kapha Vargiya Dravya* and also *Shukra* is one of *Ashrayasthana (Dhatu)* of *Kapha Dosha*.

Rasa of Shukra

Shukra Dhatu possesses *Shadrasa*.

Vital Spot (Pranayatana) of Life

Acharya has mentioned that, there are ten resorts in the body called "*Pranayatana* of Body", where in life is mainly centered, *Shukra Dhatu* is one of *Pranayatana* of *Sharira*.^[14]

Ultimate Dhatu of Body

Shukra is seventh in order of *saptha Dhatu* and *Sara* of all *Dhatu*s. *Shukra* is produced as a result of successive evaluative metamorphosis of *Ahara Rasa*.

'Ashraya-Ashrayi' sambaddha

There is *Ashraya-Ashrayi sambaddha* between *Asthi Dhatu* and *Vata Dosha*, *Sweda*, *Rakta Dhatu* and *Pitta Dosha* and other *Dhatu Rasa*, *Mamsa*, *Meda*, *Majja*, *Shukra* and *Kapha Dosha*. So *Shukra Dhatu* has close relationship with *Kapha Dosha*.^[15]

Qualities of Shukra: *Shukra* is *Soumya*, *Avidahi* (Cool), *Drava* (fluid), *Shweta* (white), *Sphatikasannibha*, smelling like honey, *Picchila* (slimy), *Bahala* (abundant) and its colour is like oil or honey.^[16]

Semen which is thick, sweet, unctuous, without any putrid smell heavy, slimy, white and in large quantity, invariably helps in procreation of offsprings.

KARMA

Function of *Shukra Dhatu* is *Garbhotpadana*^[17] (reproduction). It gives Valour, *Chyavan* (get ejaculated smoothly during intercourse), *Priti* (creates loveliness in mind), *Dehabala* (strength to the body) and *Harsha* (Exhilaration) and is meant for reproduction.

Dhairya: *Shukra* in a man confers his capacity to fight against any adverse conditions, both mental and physical readiness. But in *Klaibya* this faculty is lost in a person.

Dehabala: *Shukra* gives man *Deha upachaya* (physical fitness) and *Utsaha* (enthusiasm).

Ojoposoka: The minute component (*sukshma bhaga*) of *Shukra* nourishes *Ojas* (*Sara* or *tejas* of all *Sapta Dhatus*).

Priti: *Shukra* is the factor which is responsible in man for love or attraction toward opposite sex.

Chyavanam: *Shukra* i.e. semen is ejaculated without painful conditions, at the highest point of sexual intercourse associated with immense pleasure.

Harsha: *Shukra* generates pleasure and curiosity about sexual act.

Sushrutacharya says that main function of *Shukra* is *Bejartam* means for production of offspring.^[18]

Quantity of Shukra Dhatu

In human body is half Anjali.^[19]

Shukra Dhatu Utpatti

Starting from *Rasa*, all *Dhatus* are produced by the process of progressive evolutive metamorphosis (*Uttarottar Dhatu Parinaman*). This means, *Rasa Dhatu* is basically produced from *Ahararasa* which is digested by the action of *Jatharagni*, '*Prasadabhaga*' (Nutritive part) of '*Rasa*' produces *Rakta Dhatu*, *Prasadabhaga* of *Rakta Dhatu*, produces '*Mamsa Dhatu*' and so on.

Previous *Dhatu* is precursor of next and higher by the action of respective *Dhatvagni* in it. So from *Majja Dhatu*; *Shukra Dhatu* is produced. The mode of conversion of *Ahararasa* into *Shukra* is explained by three hypotheses namely -*Kshiradadhi Nyaya*; *Khalekapota Nyaya*; *Kedarakulya Nyaya*). From *Prasadabhaga* of *Shukra Dhatu* '*Garbha*' (embryo) forms. Normally *Shukra Dhatu* is in its purest form so there is no formation of '*Mala*'^[20].

Shukra is formed during metabolism of *Majja Dhatu*. By the action of *Dhatvagni*; *Majja Dhatu* is converted into two parts '*Mala*' & '*Prasada*'. *Mala bhaga* is *Akshivit* and *Twaksneha* (oiliness of skin). *Prasad* part is divided into two parts; *Poshaka Ansha*; *Poshyabhaga*, After the action of *Shukra Dhatvagni* on *Poshaka* part of *Majja Dhatu* *Shukra Dhatu* is formed. When semen is further metabolised no refuse comes out as in case of gold heated and blown thousand times, thus gross portion stays as *Shukra*.^[21]

Parinati Kala

Sushrut Acharya says that nearly one month is required for metamorphosis of *Ahara Rasa* into *Shukra*.^[22] But *Parashara* opines that eight days are enough for *Shukra Nirmana*. Finally *Vagbhata* mentioned all the view of different authors, either it may take twenty four hours or six days or one month. *Chakrapani* has correlated all the above opinions and brought the concept according to status of *Dhatvagni*. He says if *Dhatvagni* is at optimum level, then process of *Shukra* production occurs at speed of '*Archi*' (highest) and produced within eight days. If *Dhatvagni* is at moderate level, *Shukra Nirmana* takes place at the speed of '*Shabda*' and produces *Shukra Dhatu* within two to three weeks. If *Dhatvagni* is at mild level, the process of *Shukra* production takes place at the speed of '*Jala*' and it takes one month.^[23]

Upadhatu Of Shukra:- *Acharya Sharangdhara* mentioned *Ojja* is *Updhatu of Shukra*^[24] while *Acharya charaka* and *Sushruta* mentions no *Updhatu* for *Shukra Dhatu*.^[25]

Mala Of Shukra

Acharya charaka and *Sushruta* mentions no waste product for *Shukra Dhatu* due to its pure form.^[26] *Ashtang Hridaya* states '*Ojja*' is *Mala* of *Shukra* While according to *Acharya Sharngadhara*; '*Oiliness and Pitika* 'on face'^[27] are form of *Mala* of *Shukra Dhatu*.

Shukra Dhatu Sarata

These individual are pleasant to look, their eyes looks like filled by milk, always happy, their teeth are set equally, are of *Snigdha Guna* (unctuous) look round, close to each other, their

voice and colour is pleasant, Snigdha. Their pelvic region is broad and females have affinity towards them. They enjoy females. They are strong, achieve happiness, wealth, health, money, felicitation and children.^[28]

Shukra Dhatu Vyaktikaran

Further the *Acharya Charaka* had explained in '*Grahani Adhyaya*' of '*Chikitsa Sthana*' that the unctuous substance (essence) of that Majja (bone marrow), thereafter, gives rise to *Shukra* (semen). Porosity of bones is caused by *vayu*, *akasha* etc. Through these porous holes, exudation of *Shukra* takes place as like exudation of water through the porous walls of a new earthen pot. The entire body is pervaded by fine channels carrying semen. When a person get excited because of the sexual urge, determination and amorous mental attitude, then semen comes out from the entire body through pores to testicles because of heat that is produced during the physical exercise involved at the time of sexual intercourse. This heat causes melting of semen. This happens on the analogy of the melting of ghee by the application of physical heat. From the testicles, semen gets ejaculated as water flows from a higher altitude to a place of lower altitude.^[29]

As water comes out of a wet cloth when squeezed, similarly, the semen trickles out from its site during copulation between man and the woman, because of sex act (*Chesta*), and because of passionate attachment (*Sankalpa*) and physical pressure (*Pidana*).

The semen is ejaculated from body because of eight factors, namely, excitement, passionate desire, fluidity, sliminess, heaviness, *anubhava*(automaticity), *pravana bhava* (the tendency to flow out) and the force of *vayu*. The unmanifested soul which takes different forms in this world, manifests itself in the form of semen.^[30]

Shukra Kshaya

In the event of diminution of *Shukra* (semen) the patient suffers from weakness, dryness of mouth, pallor, lassitude, exertion, impotency, and nonejaculation of semen.^[31]

Acharya Vagbhata added delay in ejaculation, ejaculation accompanied with bleeding, severe pain in the testicles and feeling of hot fumes coming out of the urethra.^[32]

Shukra Vriddhi

Shukra when increased produces great desire for the woman (sexual desire) and even seminal calculi^[33] (hardening of semen).

DISCUSSION

According to *Ayurveda*, whatever is taken in the form of food is converted to *Sara* and this *Sarabhaga* is assimilated. Starting from *Rasa*, all *Dhatus* are produced by the process of progressive evolutive metamorphosis (*Uttarottar Dhātu Parinaman*). This means, *Rasa Dhātu* is basically produced from *Ahararasa* which is digested by the action of *Jatharagni*, '*Prasadabhaga*' (Nutritive part) of '*Rasa*' produces *Rakta Dhātu*, *Prasadabhaga* of *Rakta Dhātu*, produces '*Mamsa Dhātu*' and so on. *Shukra* is the terminal tissue of the body, considered as the *Sara* of all other *Dhatus*, pervading entire body in both sexes, responsible for systemic and functions associated with sexual behaviour. Some form of which comes out of the body at the time of sexual act in visible form (*Roopadravya*) in male as semen. Individuals with *Vishudhha* form of *Shukra Dhātu* has characteristics like gentleness, gentle look, having eyes as filled with milk, cheerfulness, having teeth which are unctuous, round, strong, even and beautiful, clean and unctuous complexion and voice, dazzling appearance and large buttocks. Such individuals are loved by women, they are strong & endowed with happiness, power, health, wealth & children. A man with glossy, white & close set bones, teeth & nails & who has be gotten a large family of children & shows a marked amative tendency should be regarded as a man of *ShukraSara*.

CONCLUSION

Shukra Dhātu is one of the *Sapta Dhatus*, which exist in both sexes, serving as primary tissue, pervading in entire body in invisible form as *Sukshma Shukra* carries out all systemic functions like *Dhairya* (courage), *Preeti*, *Deha Bala*, (strength of the body) etc, and some functions related to sexual act like *Harsha* and *Chyavan* along with entire reproductive physiology.

The chief function credited to *Shukra Dhātu* (*Sarva Sharir Vyapi*) as well as the semen (*Roopadravya*) is *Garbhotpadan*. From *Prasadabhaga* of *Shukra Dhātu* '*Garbha*' (embryo) forms. Normally *Shukra Dhātu* is in its purest form so there is no formation of '*Mala*'.

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