

Conceptual Study Of Shukrakshaya Wsr To Male Infertility

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Abstract

Regeneration is an important aspect of human life Shukra (Sperm) plays an important role in this process. Any disruption in this process leads to male infertility. Nowadays male infertility is big problem of our society, in general population prevalence of infertility is 15-20 % and of this the male factor is responsible for 20-40%. Unhealthy life style and work modalities plays an important role in this disruption. Shukra Kshaya is a condition which involved both the qualitative and quantitative vitiation of Shukra dhatu. Shukra kshaya can be correlated with any one of the conditions explained in modern aspect, all of them are associated with defects either quantitatively or qualitatively.

INTRODUCTION-

Infertility can complicate the most intimate relationships. It brings many strains - on time, finances, ability to make decisions and even the job. Although, both the partners experience it at the same time, each one is likely to have different feelings, often widely divergent ones, about one impaired fertility. Misunderstandings often occur, and one or both may begin to feel isolated and alone.

According to Ayurveda dosha, dhatu and mala are basic constituents of a living body. Their imbalance results in disease condition. There are seven dhatus in our body. Shukra dhatu is last dhatu in our body and considered as the sara of all other dhatus. Shukra dhatu comprises of both male as well as female reproductive system. Chakrapani gives little description about shukra that it has factors which are responsible for production of offspring^[1]. White and silvery substance ejaculated during sexual act is considered as Shukra^[2]. Shukra Kshaya is a condition which involved both the qualitative and quantitative vitiation of Shukra dhatu. In Ayurveda factors such as ahar and vihar are considered as causative factors for shukra dushti. Kshina can also have other meanings like less power. When we take such a meaning into account Shukra kshaya cannot be compared with oligospermia. However there is a condition known as Asthenozoospermia in which the motility power of spermatozoa is greatly reduced. In such a condition we can compare Shukra kshaya as asthenozoospermia.

When we correlate Kshina with the power of strength of sperm to do its function, i.e. fertilisation capacity, yet another condition known as teratozoospermia can be compared with Shukra kshaya where fertilization capacity of sperm is reduced. The severe stage of Oligospermia is azoospermia, and it can be correlated with the vishuska Shukra. So in short Shukra kshaya may be any one of the above described conditions of modern aspect, all of them are associated with defects either quantitatively or qualitatively which is the typical character of Shukra kshaya.

Ayurveda very long back had realized the factors governing fertility and their defects that give rise to Vandhyatva and Klaibya. Eight Retodoshas are mentioned among which, the concept of shukra kshaya holds good to present day Oligospermia. In this condition the sperm count comes below 20 milli/ml. The corresponding desire in likely hood of conception is associated with decrease of sperm count.

Aim

To study Shukra kshaya wsr to Male infertility from literature.

MATERIALS AND METHODS

Classical Ayurvedic texts and Modern texts.

SHUKRA DHATU:

White and silvery substance ejaculated during sexual act is considered as Shukra According to ayurveda, Shukra is the terminal tissue element of the body. It is considered as the sara of all other dhatus.

SHUKRA KSHAYA:

It is broadly classified Primary (Alpharetta's) and Secondary (Acquired)

Primary (Alparetas)

This is seen in male hypo gonadism, in this condition body does not produce enough hormones which plays important role in masculine growth. Generally it may be due to chromosomal aberration or congenital cause.

Secondary (Acquired):

This type Shukrakshaya is further divided into

- Physiological (Vishuushaka)
- Pathological

ANATOMICAL CONSIDERATION OF SHUKRA

➤ Mahabhautic Composition:

Shukra is originated from jalamahabhut and is considered as saumya as per Susrut¹⁵.

Charakacharya consider that Shukra contain all the bhutas except akash. All the remaining four bhutas (Vayu, agni, prithvi and ambu) individually share one fourth of the attributes of each of the mahabhutas¹⁶.

➤ Embryological Origin:

Shukra is considered to be produced as a pittrija bhava¹⁷.

➤ Doshik Configuration:

Acharyas, include Shukra in Kaphavargiya dravya¹⁸, since it belongs to Kapha varga, the articles having predominance of Jalabhuta¹⁹ and drugs having madhura rasa and other properties like singhada, guru will enhance Shukra²⁰. Shukra is also considered as one of the asrayasthana of kapha dosha²¹

➤ Rasa of Shukra:

According to classics Shukra dhatu possesses shadarasa²².

➤ Shukra as Pranayatan:

Pranayatana are the seats of life. All acharyas consider Shukradhatu as one of the pranayatana of the body²³.

➤ Shukra- THE ULTIMATE DHATU:

According to ayurvedic science body elements (tissue) are seven in number. First dhatu is Ras, Shukra the last. Since Shukra is the last dhatu produced by dhatus, it is considered as the teja or the essence of all the dhatus²⁴.

➤ Shukra Dhatu - QUANTITY:

Half anjali is the measurement of Shukra dhatu as per Charkasamhita and Astang Hridaya. However Bhelacharya gives the measurement of Shukra dhaut as one anjali.

➤ Shukra-vaha Srotas:

Concepts of srotas are unique contribution of ayurvedic science. The pathways of transportation of dhatus under metamorphosis are known as srota²⁷. Vikritis happening in these srotas can produce disease.

Physiological (Vishushka):

This condition is seen in Vriddhavastha (elderly) above 70 years with the extremely low level of Shukra dhatu^[3]. This maybe effectively due to degeneration.

FUNCTION OF SHUKRA:

Function of Shukra can be categorised into three classes namely:

1. Sarvadaihika or Systemic function
2. Maithuna Gata -Functions related to Sexual Behaviour
3. Retas- Functions related to Semen

❖ CORELATION BETWEEN MODERN AND AYURVEDIC CONCEPT

Modern view	Ayurveda view
Oligospermia	DoshajaShandtva, VyadhijanitShandtva.
Pre-testicular Azoospermia	Doshaja(Vatadoshaja) Shandtva.
Testicular Azoospermia	SahajaShandtva, BijopghatajaShandtva.
Post-testicular Azoospermia	SahajaShandtva, VatadoshajaShandtva.

Pathological:

This condition is also associated with moderately low or decreased level of Shukra dhatu. But the Characteristic feature in this condition is that the patient is in the middle age and the conditions are produced by certain etiological factors^[4].

Here growth, pubertal development and levels of Shukra may be normal in the earlier stage but deficiency occurs later. Virudhahara, Abhighata, Vyadikarshana etc are some of the causes in this condition.

Nidana of Shukra Kshaya:

Different etiological factors are described as the causative factors of Shukra kshaya in classics can be concluded as Shukra dushtikar aharas and viharas can be considered as the primary cause^[5].

Shukra is the sara of Sapta dhatus. So the factors which make the Kshaya of dhatus can be considered in the nidana^[6].

The factor which leads to Shukravaha sroto dushti plays an important role in producing Shukra kshaya^[7].

The doshas involved in Kshina-Shukra are vata and pitta so the causes for vitiation of vata and pitta doshas can be taken into account^[8].

The diseases such as sthaulya, Prameha etc causing or predispose to Kshina Shukra. Thus these types of nidanarthkrara vyadihis are also including in the etiology.

The consumption of drugs like kshara, lavana etc. can lead to Kshina-Shukra.

Samprapti



Purvaroop of Shukra kshaya:

Purvaroop of Shukra kshaya has not been mentioned in Ayurvedic classics.

ROOPA OF SHUKRA KSHAYA (SIGNS AND SYMPTOMS):

Details description of signs and symptoms of kshina-Shukra are available in Ayurvedic classics. These can be divided as

1. Sarvadhikika Lakshnas:

- Daurbalya (General debility)
- Bhrama (Dizziness)
- Pandu
- Sadana^[9]
- Shrama (Easy fatigability)
- Medhra Vrishana vedana
- Medhravrishna dhumayana
- Mukhashosha (dryness of mouth)
- Timir darshana
- Shosha^[10] (Loss of weight)
- Klaibya^[11] (Erectile dysfunction)
- Maithune ashakti^[12]

- Alpa retas
- Shukra avisarga^[13]
- Chirat praseka. (Delayed ejaculation)
- Alpa – rakta yukta shurka pravriti
- Majjamishra^[14]

2. Mansik Lakshanas

- Stridvesha.^[15]

SHUKRA KSHAYA & OLIGOSPERMIA:

According to Vagbhatacharya Shukra kshaya is a pathological condition caused by vitiated vata and pitta. Considering above sign and symptoms retodosha can be correlated with oligospermia.

Shukra kshaya is a vyadhi in which Shukra dhatu is quantitatively and qualitatively vitiated. The word Kshina can have different meanings. When we take meaning of kshin as alpa and it may be taken as either low volume of ejaculated or low sperm count. When we correlate the low sperm count it can be compared with oligozoospermia.

Kshina can also have other meaning like less power. When we take such a meaning into account Shukra kshaya cannot be compared with oligospermia. However, there is a condition known as Asthenozoospermia in which the motility of spermatozoa is reduced. In such a condition we can compare Shukra kshaya as asthenozoospermia.

When we correlate Kshina with the strength of sperm to do its function, i.e. fertilization capacity, yet another condition known as teratozoospermia can be compared with Shukra kshaya where fertilization capacity of sperm is reduced due to abnormal morphology of sperm cell. The severe stage of Oligospermia is azoospermia, it is the condition in which there is absence of sperm cell in semen and it can be correlated with the Vishuska Shukra. So in short Shukra kshaya may be any one of the above described conditions of modern aspect, all of them are associated with defects either quantitatively or qualitatively which is the typical character of Shukra kshaya.

OLIGOSPERMIA:

Oligospermia highly resembles with kshina shurka vyadhi. However Shukra Kshaya is a condition in which Shukra dhatu is quantitatively and qualitatively reduced.

So, this is a condition in which sperm count is reduced. Oligospermia can be considered as a less severe form of azoospermia. Sperm concentration of less than 20 million sperm per milliliter, and severe oligospermia is less than 5 million sperm per milliliter^[16]

Major Cause of Oligospermia:

1. Drug and Alcohol

Excessive alcohol intake and consumption of substances such as cocaine and marijuana can reduce sperm count.

2. Obesity

Over weight hampers hormones production and further leads to low sperm count.

3. Exposure to chemicals and metals

Pesticides, cleaning agents are some of the chemicals that can lead to low sperm count

4. Overheating of testicles

Sitting frequently, working for long time near heat, wearing tight cloths causes increase in temperature near testicles and temporarily reduces sperm count.

5. Hormonal imbalance

Imbalance in hormones production can cause low sperm count.

6. Medications

Beta blockers, antibiotics may cause ejaculation problem and reduce sperm count.

7. Ejaculation issues

Patients with oligospermia can have normal ejaculation, but some ejaculation issues can reduce sperm count. Retrograde ejaculation is condition which reduces sperm count

8. Infection

Patients with STD can have low sperm count.

9. Varicocele

Varicocele can also lead to low sperm count.

10. Congenital:

Cryptorchidism or undescended testis are some of condition that can cause low sperm count.

11. Genetic:

Klinefelter's syndrome and xx Male syndrome are two genetic defects which lead to defective spermatogenesis.

12. Sexual:

Too frequent intercourses decrease the spermatogenesis and sperm cell activity.

13. Psychological:

Increased stress conditions also produce low quality of semen.

DISCUSSION

Shukra is last dhatu produced among all 7 dhatus in our body. It is whitish silvery in colour with sticky appearance. It is main component in our body and has capacity of Prajotpadan. In this study shukra kshaya wsr to male infertility was studied. Shukra Kshaya is a condition which involved both the qualitative and quantitative vitiation of Shukra dhatu. Shukra dushtikar aharas and viharas can be considered as the primary cause of shukra kshaya. Along with this factor which make the Kshaya of other dhatus can also be considered as the nidana of shukra dhatu kshaya. The doshas involved in Kshina-Shukra are vata and pitta so the causes for vitiation of vata and pitta doshas can be taken into consideration. The diseases such as sthaulya, Prameha etc causes Kshina Shukra. Daurbalya (General debility), Medhra Vrishana vedana, Medhravrishta dhumayana, Shosha (Loss of weight), Klaibya¹⁵⁵ (Erectile dysfunction), Maithune ashakti, Alpa retas, Shukra avisarga, Chirat praseka. (Delayed ejaculation), Alpa – rakta yukta shurka pravriti are some of the sign and symptoms seen in shukra kshaya. Shukra kshaya can be correlated with any one of the conditions explained in modern aspect, all of them are associated with defects either quantitatively or qualitatively which is the typical character of Shukra kshaya.

CONCLUSION-

In *Ayurveda*, *Acharya Sushruta* while defining the *Vajikarana –tantra* quoted the terms like *Kshinaretasa*, *Alparetasa*, indicating towards Oligospermia. Some other terms *Shukarakshaya*, *Kshinashukara* also indicate Oligospermia. Oligospermia highly resembles with kshina shurka vyadhi. However, Shukra Kshaya is a condition in which Shukra dhatu is quantitatively and qualitatively reduced.

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