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STUDY OF MANAS HETUS OF SHUKRAVIKRITI & MALE INFERTILITY

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ABSTRACT

Infertility is an emerging public health priority. Infertility due to abnormalities in male partner is equally important. In Ayurved classics various Shukravikrits are mentioned. It is need of hour to study Hetus of Shukravikriti in detail; so that appropriate treatment of the same can be done. Shukra Vikriti Hetus are classified under Ahariya, Vihariya and Manas Hetus. This paper is focused on study of role of Manas Hetus on Shukra Vikriti. Much research in the field of medicine has focused on the change of sperm quality in men exposed to stress. The study by Colledel et al provides insight regarding the impact of psychological stress on the male reproductive function. In Ayurved also it is mentioned that Chinta, Shoka, Krodha, Bhaya, Irshya, Utkantha & Udvega etc Manas Hetus are responsible for Shukra Kshaya. Dhairya & Harsha are the Karma of Shukra. Bhaya & Dhairya are exact opposite entity of each other. Bhaya can be examined by Vishada & Dhairya by Avishada. If Shukra is in normalcy, then Dhairya will be fine. Hence Bhaya and Shukra Vikriti are associated with each other. In this study, survey of 50 pre-diagnosed patients of Male Infertility has been done focusing Manas Hetu. It is observed that Bhaya, Chinta etc. Manas Hetu plays significant role in pathogenesis of Male infertility. Hence it can be concluded that knowledge of Manas Hetu described in Ayurveda classics and its use in assessment of the patients of male infertility can play a key role for its diagnosis & treatment.

KEYWORDS: Male Infertility, Shukra, Shukra Vikriti, Manas Hetu, Stress.

INTRODUCTION

Charakacharya has enlightened the importance of fertility in Vajikarana chapter. Love,

strength, happiness, excellence, fame are dependent upon children[1] & for that fertility is required. Infertility, the inability to conceive a child is an emerging public health priority. According to National Family Health Survey.[2] (NFHS-3) fertility decreased by 0.5 children between NFHS-1 [3.4 children per woman] and NFHS-2 [2.9]; It decreased less rapidly by 0.2 children between NFHS-2 and NFHS-3 [2.7] In Indian society most of the time, females are blamed for infertility however infertility due to abnormalities in male partner is equally important.[3]

Diagnosis for male infertility

Diagnosis of male infertility is classified under Idiopathic 48.5%, Idiopathic abnormal semen analysis 26.4%, Varicocele 12.4%, Infection 6.6%, Immunologic factor 3.1%, Other abnormalities 3.0%, Acquired factor 2.6%, Congenital anomaly 2.1%, Coital factor 1.7%, Endocrine abnormality 0.6% (Distribution of diagnoses for male infertility (WHO; n=7057) Adapted from EAU guidelines on male infertility 2005)**.** In this report idiopathic causes or diagnosis has major share in the list. Idiopathic is an adjective used primarily in medicine, meaning arising spontaneously or from an obscure or unknown cause. It shows that there are some factors which cause infertility but are currently unknown to the medical fraternity.

Lacunae in current knowledge: According to WHO multi-centric studies of infertility in India[4] 40 percent of women and 73 per cent of men had no demonstrable cause of infertility. Here Ayurved concepts can play a key role to understand the cause. According to Ayurved Rutu (fertile period), Kshetra (reproductive organs), Ambu (nutrient) and Beeja (Shukra & Shonita – sperm and ovum) are the factors responsible for conception. For proper conception all above factors should be in the state of normalcy. Abnormalities in one or all above mentioned factors may lead to infertility.[5]

In Ayurved classics various Shukra Vikriti (Shukra disorders) are mentioned. Amongst all of them Shukra Dushti (vitiation of Shukra), Shukra Kshaya (oligospermia), Shukra Rodha (obstruction), Shukra Apravritti (impaired semen emission) are commonly seen in today's society. It is need of hour to study the causes of Shukra disorders in detail; so that appropriate treatment of the same can be done.

Hetus of infertility can be classified under Ahariya Hetu (dietary factors), Vihariya Hetu (behavioural factors) and Manasa Hetu (psychological factors). Ahariya Hetus like Gramyahara (intake of substandard diet), Asaatmya Aahaara Sevana (consumption of

incompatible food), Lavana Rasa Sevana (consumption of salty food); Vihariya Hetus like Akale Maithuna (intercourse at improper time), Ati Maithuna (excessive indulgence in sexual activity), Ayoni Maithuna (coitus through path other than vagina) and Manasa Hetus like Bhaya (fear), Chinta (worry), Moha (confusion), Shoka (grief) are few of them. This paper is focused on study of role of Manas Hetus on Shukra Vikriti & its correlation with Male Infertility.

Stress and male infertility

Shukra may be correlated with sperms including spermatic fluid and even testosterone etc sex hormones in male.[6] Normalcy in quality and quantity of sperms is essential for fertility. Due to various factors sperms become abnormal and cause infertility. Much research in the field of medicine has focused on the change of sperm quality in men exposed to stress induced by fear, anxiety, worries etc. A recent study[7] has assessed the effect of the Lebanese civil war on sperm parameters. It was reported that the sperm concentration was significantly lower during the war compared with the postwar period. The significant decline in sperm concentration could be attributed to the increased stress level during the war. Supporting evidence is provided in a study by Fukuda et al that reported decreased sperm quality subsequent to a natural disaster such as an earthquake. Spermatozoa concentrations, motility index and percentage of rapid progressive motility decreased under stress. The "read through" variant of acetylcholinesterase (AChE-R) provides another pathway for stress-induced infertility. AChE-R is involved in the cellular stress response in a variety of mammalian tissues. Transgenic mice over expressing AChE-R displayed reduced sperm counts, decreased seminal gland weight, and impaired sperm motility compared with age- matched non-transgenic controls. The study by Colledel et al[8] provides additional insight regarding the impact of psychological stress on the male reproductive function. The data clearly illustrates that sperm quality was declined in a group of men identified as stressed. Sadness, depression, anxiety (Slade et al., 1997), hopelessness, and anger (Ardenti et al., 1999) are common in infertile couples undergoing IVF treatment.[9] Collodel G[10] stated that stress is an additional risk factor for idiopathic infertility. Stress causes dysfunction of GnRh which impairs normal function of FSH and LH. It effects on activity of testosterone. All this factors effect on spermatogenesis and it leads to Male infertility.

Above references illustrate the direct relation of stress and infertility. Likewise, stress is also act as indirect cause of infertility. Stress causes hypertension. Prolonged use of

antihypertensive drugs impairs spermatogenesis. Habits of smoking and alcohol consumption are increased day by day due to stress. Smoking effects on sperm density and alcohol intake in large quantity lead to impairment of liver function and in turn lead to increased oestrogen level, decreased sexual performance and depressed spermatogenesis.[11] The concept that emotional stress might lead to oligospermia was further supported in a report describing testicular biopsies obtained from men awaiting sentencing after raping and impregnating women.[12]

In light of all the data suggesting that psychological symptoms may interferes with fertility, success of infertility treatment and the ability to tolerate ongoing treatment. The relationship between emotional distress and infertility has been studied by several authors. Some have suggested an important pathogenic role for psychosocial factors in 'functional' infertility, but the extent of correlation of psychosocial factors to infertility is not yet clear.[13]

Ayurved classics states positive correlation between stress induced by Manas Hetus (psychological causative factors) like Chinta (worry), Shoka *(*grief), Krodha *(*anger), Bhaya (fear), Irshya (jealousy), Utkantha (anxiety) etc. These Manas Hetus are responsible for Shukra Kshaya.[14] In this paper scholar has attempted to explain stress induced by Bhaya as a Hetu for Shukra Vikriti, critically.

Concept of Bhaya

Bhaya[15] is feeling of fear, being afraid of (someone or something) as likely to be dangerous, painful, or harmful. Inference of Bhaya can be done by Vishad. Vishad is apprehension or state of sorrow arising from one's desires and attachment to sense- objects.

Possible outlooks of Shukra Vikriti due to Bhaya

1. Krodha, Shoka, Bhaya & Chinta leads to vitiation of Pitta and Vata, which causes Rasa-Rakta Dushti. Dushit Rakta gets lodged in Shukravaha Srotas (channels carrying semen specifically the component of sperm) that result in Shukravaha Srotodushti, which finally leads to Shukra Vikriti.[16]

2. Again it leads to Shoshan of Aap Mahabhuta *(*decreases moisture by drying the liquid element in the body*)*, which results in to significant increase in Agneya Bhava (fiery element). As Shukra is Saumya in nature, this increased Agneya Bhava is responsible for Shukra Kshaya. *(*oligospermia*).*

3. Consumption of food with the fearful mind leads to formation of Ama i.e. toxic morbid metabolic waste material formed due to improper digestion. It leads to formation of improper Aahara Rasa *(*food essence*)* and finally Shukra Kshaya.[17]

4. Vyapagata Bhaya (fearless mental condition) is responsible for Amit Ayu (graceful and long life). This can be interpreted as Vyapagata Bhaya is associated with Prakrit (normal) Shukra. (If Bhaya is present Shukra will become vitiated).[18,19]

5. Dhairya *(*Courage*)* & Harsha *(*pleasure*)* are the Karma *(*function*)* of Shukra. Fear & courage are exact opposite entity of each other. Fear can be examined by Vishada *(*apprehension*)* & Dhairya by Avishada. If Shukra is in normalcy, then Dhairya will be apt. Hence Bhaya and Shukra Vikriti are associated with each other.

6. The entity that produces Harsha is known as Vrishya (aphrodisiacs). If Bhaya is present pleasure of mind is not possible. It proves that Bhaya is directly responsible for Shukra Kshaya.[20]

Survey study: To verify the information available related to Manas Bhava on Shukra Vikriti, a survey study was carried out by the scholar. In this study, survey of 50 pre-diagnosed patients of Male Infertility has been done. A questionnaire was prepared focusing Manas Hetu. After collecting the data, it was analyzed. It was found after analysis of survey that Chinta was found in 88% patients, Bhaya was found in 76% patients, Krodha was found in 70% patients and Shoka was found in 54% patients, It shows the association between Manas Hetu and Male Infertility.

CONCLUSION

Stress developed due to Chinta, Shoka, Bhaya, Krodha is one of the leading causes of infertility. Since psychological factors play an important role in the pathogenesis of infertility, exploration of this is also an important task to manage this devastating problem and hence infertility should always be treated as a psychosomatic entirety. Knowledge of physiological factors described in Ayurved can play a key role to treat the patients of male infertility where modern medicine shows insufficiency stating ‘no demonstrable’ or ‘idiopathic’ cause of infertility. It was observed in the survey conducted for this study that Chinta induced stress has been found in maximum patients followed by Bhaya induced stress.

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