

MANAGEMENT OF OLIGOSPERMIA AND AZOOSPERMIA THROUGH AYURVEDA

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ABSTRACT :

Infertility is a problem of global proportions affecting on an average 8-12% of couples worldwide. Out of many causes of male infertility Oligospermia and Azoospermia are the leading causes. There is no satisfactory treatment in modern medicine for the conditions. Ayurveda is the better option for these conditions. In Ayurveda terms like *Kshina shukra*, *Alpa retasa*, *Kshina retasa*, *Shukra dosha*, *Bijopaghata* are indicating towards Oligospermia and *Ashukara shandatva*, *Nirbeej*, *Abeej* are indicating towards Azoospermia. In this article we are focusing on the management of Oligospermia and Azoospermia through Ayurveda.

Keywords : Azoospermia, Oligospermia, *Nirbeej*, *Alpa retasa*, *Bijopaghata*.

INTRODUCTION: Infertility is a problem of global proportion affecting on an average 8-12% of couples worldwide¹. A Centers for Disease Control and Prevention study analyzed data from 2002 National survey of family growth and found that 7.5% of all sexually experienced men, younger than age 45 years, reported seeing a fertility doctor during their life time – this equals 3.3-4.7 million men, out of these 18% were diagnosed with a male related infertility problem, including sperm and semen problem (14%) and varicocele (6%)². According to national women health information center the annual incidence of male infertility is at least 2 million cases. Recent studies have indicated that the prevalence of Oligospermia is extremely high in the metropolis as well as in smaller towns of India. Male infertility is considerably to be less complicated than female infertility, but can account for 30-40% of infertility³. Except for some physical defect, low sperm count and poor sperm quality are responsible for male infertility in more than 90% of cases. Out of these, in about 30-40% the cause is unexplained, and in rest of the cases critical ill-

ness, malnutrition, genetic abnormality, pollution, side effect of some medicine, hormone and chemical play major role⁴. Azoospermia defined as absence of sperm in the ejaculate; is identified in approximately 1% of all men and in 10% to 15% of infertile male⁵. The term Oligospermia is correlated in the research studies with *Kshina shukra*, *Alpa shukra*, *Shukra dosha*, *Kshina retasa*, *Bijopghata* and Azoospermia is correlated with *Nirbeeja*, *Abeej*, *Ashushkra shandatva* in Ayurveda. Ayurveda considers health and disease both as the product of food and life style. A healthy lifestyle and healthy diet promote health and prevent disease. In this context Ayurveda provides better solution in the form of proper dietary management (*pathya-apathyta*), life style advice (*Dincharya*, *Rutucharya*), *Panchkarma* (Detoxification), *Aahar-vihar*, *Yoga*, Medicinal treatment for management of Oligospermia and Azoospermia.

AIM AND OBJECTIVE:

1) To study treatment of Oligospermia and Azoospermia in Ayurveda.

MATERIAL AND METHOD: This article is based on a review of Ayurvedic texts, material related to Oligospermia and Azoospermia and related Ayurvedic terms and treatment have been collected. The main Ayurvedic text used in this study are Charaka samhita, Sushruta samhita, Ashtanga sangraha, Ashtanga hridayam, Bhavaprakasha, Sharangdhara samhita and available commentaries on these. I have also referred to modern text and searched various websites, research articles to collect information on the relevant topics.

DISCUSSION: Oligospermia or synonymously Oligozoospermia is a condition in which sperm count is reduced. WHO (1992) describes the condition as the one in which total sperm count will be less than 20 millions/ml. (6)

Major causes of Oligospermia : (7)

- 1) Congenital: cryptorchidism or undescended testis.
- 2) Thermal: scrotal temperature should be less than 20 F than the body temperature
- 3) Infection: Syphilis, Non-specific urethritis, Mumps, Orchitis.
- 4) Genetics: Klinefelters syndrome and XX male syndrome are two genetic defects which lead to defective spermatogenesis.
- 5) Endocrinial: Hypopituitarism, Hypothyroidism, Adrenal hyperplasia.
- 6) Sexual: Too frequent intercourses decrease spermatogenesis and sperm cell activity.
- 7) Occupational: Environmental hazards like chemical nematocides, lead, microwave and ultrasound are responsible for oligospermia
- 8) Systemic diseases: AIDS, Renal failure, diabetes Mellitus, Vitamin A deficiency.
- 9) Addiction: Alcohol, Tobacco addiction.

10) Drugs: Antibiotic like Ampicillin, Erythromycin causes oligospermia.

11) Psychological: An increased stress condition produces low quality semen. Azoospermia is a condition in which there is no sperm in man's semen. Is a leading cause of male infertility and is found in 5-10% Or up to 20% of men evaluated for infertility.(8)

Major causes of Azoospermia:

- 1) Obstructive Azoospermia: Infection in testicles, Trauma to sex organ from surgery or Radiation.
- 2) Non-obstructive Azoospermia: genital injury, Varicocele, radiation, chemotherapy, use of steroid, antibiotic, alcohol, smoking, environmental factor like pesticides, heavy metals and extreme heat.

Investigations:

- 1) Complete blood count, urine routine.
- 2) Ultrasonography.
- 3) Two semen sample analysis.
- 4) Physical examination.
- 5) Hormonal testing.
- 6) Genital tract imaging.
- 7) Testicular mapping.

Management through modern medicine: Treatment varies according to cause.(9)

- 1) In obstructive Azoospermia-microsurgical reconstruction.
- 2) Anti-sperm antibody- immune-suppression by cyclic steroid.
- 3) Varicocele- varicocelectomy.(10)
- 4) Epididymal or vasal obstruction- vasovasotomy or vasoepididymostomy.
- 5) In obstruction of ejaculatory duct- Transurethral resection of ejaculatory duct (TURED).
- 6) Artificial insemination (A.I).
- 7) In vitro fertilization (IVF).
- 8) Gamete intra fallopian transfer(GIFT)
- 9) Zygote intra fallopian transfer (ZIFT).
- 10) Intra cytoplasm sperm injection (ICSI).(11)

Causative factors according to Ayurveda:(12)

- 1) *Ativyvaya* (Excessive indulgence in sex).
- 2) *Ativyayam*(Excessive indulgence in exercise or over exertion).
- 3) *Asatmya sevan* (consuming unhealthy diet).
- 4) *Akala maithun* (untimely involvement in sex).
- 5) *Ayonimaithun* (masturbation).
- 6) *Amaithun* (abstinence).
- 7) Habituated to take *Ruksha* (Dry), *Tikta* (Bitter), *Kashaya* (Astringent), *Atilavan* (salty), *Amla*(Sour), *Ushna* (Hot) items.
- 8) *Narinam arasadnyanam*(lack of libido).
- 9) *Jara* (old age),*Chinta* (thinking always), *Shoka* (feeling sorrow), *Bhaya* (Fear), *Krodha* (grief).
- 10) *Vyadhikaran* (Emaciation due to chronic illness).
- 11) *Vegavarodha* (voluntary control of natural urges).
- 12) *Kshata* (Injury).
- 13) *Dosha-dhatu vaishamya*.

Management according to Ayurveda:

Before starting treatment we should know normal characteristics and quantity of *Shukra dhatu*. *Shukra* has characteristic features like; *Sphatika-abham* (alum white), *Dravam* (gel like), *Snigdham* (viscid), *Madhuram* (sweet in taste), *Madhugandhi* (Honey odor).(13) Normal quantity of *Shukra dhatu* $\frac{1}{2}$ *Anjali* (30ml).(14)

Ayurveda bestowed *Vrasya* and *Rasayana* for the management of *Shukra dosha* and *Shandatva*. When causative factor associated with *rasa dhatu*, *Rasayana* is more useful and when associated with *shukra dhatu*, *vajikarana* plays major role.

Treatment according to cause (15)

- 1) *Alpa retasa- Apyayana* means nourishment. According to *samanya-vishesha*

siddhanta(principle) , two substances having the same properties increase quantity and quality both so here *Gunas* of *Go-ghruta*, milk product like *Navnita*, *Dadhi*, *Milk*, *Mamsa* resembles with *gunas* of *shukra*. So it nourishes *shukra dhatu* by quality and quantity both.

2) *Dushta retasa-Prasadana*.*Prasadana* means cleansing or detoxification. Here firstly needed is detoxification that is *shodhana karma*. Due to *shodhana* cleansing of *dhatu* takes place after that we give drugs which can do nourishment of *shukra dhatu*.

3)*Kshin-retasa-upachaya* spermatogenesis e.g.*Kapikachu* has *viryavardhaka* effect.

4) *Vishushka retasa-Janana-regeneration*. Drugs having regeneration properties have *Rasayna* (Rejuvination) and *Vrishya* (Aphrodisiac) effect. E.g. *Yashtimadhu*, *Musali*.Treatment according to *Dravyas*:(16)

1) *Shukrajanaka-* which nourishes *rasaparinatashukra dhatu*, these drugs have similar properties as *shukra dhatu* like *Madhur Rasa*, *Snigdha*, *sheet*, and *guru gunas*. There for it nourishes the *shukra dhatu* according to *samanya-vishesha siddhanta*. E.g. *Mansa*, *Ghrita*, *Musali*, *Ashvagandha*.

2) *Shukrapravartaka*-which helps in ejaculation e.g. *Ucchata churna*, *Bhallataka phala majaa*, *Amalaka*.

3) *Shukrajanaka-pravartaka*. These drugs used in genesis as well as have ejaculatory effect. e.g. *go-ghrita*, *godhuma*, *mansa*,

4) *Shukrasthambhaka-Jatiphala* claimed to control the ejaculation i.e., useful in case of premature ejaculation.e.g *Nagbala*, *Ahiphen*, *Bhanga* have *viryastmbhaka* properties.

Ahiphena due to *kashaya rasa* acts as *viryasthambhaka*, *Jatiphala* due to its *graahi karma* act as *viryasthmbhaka*,

Nagbala due to *kashaya rasa* and *stambhana karma* act as *viryastambhaka*.

Klaibya samanya chikitsa:(17)

1) *Shamana*: a) *Ahara*: *Shalidhanya, Godhuma, Mamsa, Kulatha, Milk, Coconut water, Ghrita, Dadhi, Navnita(butter), Kharjura, Amalaki phala, Pippali, Palandu, Lashuna, Guda-sharkara, Veshavara, Mamsarasa, Amla vilepi, Rasala, Saindhava* all these *ahara dravyas* are *shukrala, vrishya* in nature.

b) *Vihara*: *Abhyanga, Vyayama, Snana, Nidra*.

c) *Aushadha*: *Shukarajanana e.g Mamsa, Ghrita, Shukrashodhana e.g Kshir yukta asthapana, Trivruttcurnayukta ghrita* for *virechana, Balya* e.g *Mamsa, Brimhana e.g Ashwagandha, Vayasthapana e.g Amalaki* are used.

2) *Shodhana*: It is essential to perform *Shodhana* procedure before administering the *Vajikarana* drugs. The *vajikarana* drugs shall be used only after *strotoshuddhi* and after the *shareer* is devoid of *malas*. Then only the *brihana* and *balya* effect of *vajikarana* is felt. It is clearly stated that without *shodhana vajikarana* treatment is of no use. *Shodhana* procedures mainly *Virechana* and *Basti* are described under the management of *shukra doshas* and *klaibya*. In *Klaibya shodhana* is advised after *snehana* and *swedana*.

a) *Virechana*: *Virechana* is meant for *shukra dosha* and *klaibya*.

b) *Basti*: *Basti* is stated as *Kshina shukra vajikaroti*. It is meant for *shukra* and *artava dosha chikitsa*. e.g. 1) *Shukra basti(saindhava 1/2 tola, honey 8 tola, milk 8 tola, ghee 8 tola)*

2) *Kshira basti* is given with *Mamsarasa* to increase *shukra dhatu*.

3) *Yapana basti* is specially indicated in *shukra dosha* and *klaibya*.(18)

4) *Yapana basti* with *brihat panchmula* will useful in *shukrakshaya*.

5) *Guduchyadi niruha basti* for *viryavardhana*.

6) *Dalhana* quoted that totally 18 *Sneha basti* are meant to cure *Klaibya*.(19)

7) *Uttara basti* will be useful in *shukra dushti*.(20)

Sahaja klaibya, Abhigataja klaibya conditions are *Asadhyta* by medicinal treatment.(21)

CONCLUSION: As per above discussion we conclude that Ayurveda is better and economical treatment option for azoospermia and oligospermia cases. Ayurveda also states that some type of *Klaibya* is *Asadhyta* or some are only treated by surgical treatment only.

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