

WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

SJIF Impact Factor: 5.922

Review Article
ISSN 2455-3301
WJPMR

OLIGOZOOSPERMIA & MALE INFERTILITY WITH HOPE IN AYURVEDA – A REVIEW ARTICLE

Dr. Parmod Kumar¹* and Dr. Shrimant G. Chavan²

¹PG Scholar, Department of Panchakarma, Himalayiya Ayurvedic (P.G) Medical College and Hospital, Dehradun.

²Associate Professor, Department of Panchakarma, Himalayiya Ayurvedic (P.G) Medical College and Hospital, Dehradun.

*Corresponding Author: Dr. Parmod Kumar

PG Scholar, Department of Panchakarma, Himalayiya Ayurvedic (P.G) Medical College and Hospital, Dehradun.

Article Received on 23/07/2023

Article Revised on 13/08/2023

Article Accepted on 03/09/2023

ABSTRACT

Infertility is most common problem effecting large group of married couple almost ranging almost 7-8% of married couples. Etiology lies being in both male and females. Male infertility issues are studied and developed recently and there line of management lies in Ayurveda way back 5000 years ago. Multiple factors responsible for the male infertility. Male infertility secondary to oligozoospermia is most common. Although a majority of cases are idiopathic, remaining can be caused by endocrine dysfunction, anatomic abnormalities, medications, or environmental exposures. The work-up includes excluding reversible factors such as hormonal deficiency, medication effects, and retrograde ejaculation and identifying any underlying genetic syndrome and treating reversible medical causes. If there is no definite treatment found in case of multiple above said etiology than assisted reproductive technology should be initiated. Oligozoospemia can be a isolated factor and presents along with the remaining co morbid pathologies which are most common. Ayurveda long ago mention about the various factors which are responsible for the male infertility and possible managements for them. This review study has been carried out for the oligozoospermia and their present possible treatments in both Ayurveda and conventional system of medicines.

KEYWORDS: Ayurveda, Male infertility, Shodhan, Shaman, Semen analysis.

INTRODUCTION

Infertility, defined as the inability to achieve a pregnancy after 12 months of regular, unprotected intercourse, affects up to 15% of couples worldwide. [1] A male factor is thought to contribute to roughly half of cases, as a sole contributor in about 20% of infertile couples, or acting in conjunction with a female infertility factor in 30% of infertile couples.^[2] In the course of evaluation of the infertile male, following a comprehensive clinical review of the patient, semen analysis is the key initial test. Semen analysis identifies abnormalities in seminal parameters that may be contributing to infertility. The World Health Organization has published data illustrating the distribution of measured semen characteristics in fertile men, noting fifth percentile ranges of semen parameters. [3] It is important to recognize that these reference limits do not constitute cutoffs for fertility, but that they merely serve as indices of the distribution of the measured characteristics among the studied population of fertile men. Indeed, it is suspected that there is a significant degree of overlap in semen characteristics between fertile and infertile men. [4]

Oligozoospermia refers specifically to the condition in which sperm concentration below the lower reference limit of 15 million sperm/mL of ejaculate. Oligozoospermia can be further classified as mild (between 10 and 15 million sperm/mL), moderate oligozoospermia (between 5 and 10 million sperm/mL), and severe oligozoospermia (less than 5 million sperm/mL).^[5] In contrast, azoospermia refers to the condition in which no sperm can be detected in the ejaculate during semen analysis. Of note, the measurement of sperm concentration, being affected by the volume of seminal fluid that dilutes the spermatozoa at ejaculation, does not provide a direct measurement of testicular sperm output; the measurement of total number of sperm in the ejaculate is more suitable for this purpose. The goal of this article is to provide an overview of the nonsurgical management oligozoospermia, beginning with a discussion of potential etiologies, before delineating the diagnostic approach and available treatment options. [6]

Ayurvedic perspective – Infertility is defined as the inability to achieve Pregnancy after one year of unprotected coitus. Of all infertility cases, approximately

www.wjpmr.com | Vol 9, Issue 10, 2023. | ISO 9001:2015 Certified Journal | 46

40-50%, the cause is male factor defect and 2% of all men exhibit suboptimal sperm parameters. Most significant among these is reduced count, (oligospermia) reduced sperm motility (asthenospermia), abnormal morphology (teratozoospermia) or combination of these.^[7]

There is qualitative and quantitative abnormality in Shukra, leading to its Dushti due to In dulge in faulty dietics, various traumatic & psychological factors and chronic debilitating illness. Ksheenasukra, caused due to vitiation of both Vata and Pitta Dosha is managed by using Vajeekarana dravyas which are Sukran janak a and Sukrapravarthaka in nature and have Dhatu vridhikara property. [8] The increased pus cells and the abnormal viscosity of the semen report is suggestive of features of Sukradusht Oligospermia is a condition in which there is reduction in sperm count and can be correlated with Ksheenasukra or Sukrakshaya (decreased sperm) mentioned in the classics. The treatment mainly aims at increasing sperm count using Vajikarana dravyas (aphrodisiac drugs) which have Sukrajanana (production and Sukrapravarthaka properties (ejaculation). [9]

DISCUSSION

According to Ayurveda, Sodhana (purificatory process) is a pre requisite before Vajikarana (aphrodisiac). Virechana (purgation) is the mode of Shodhana (purificatory therapy) adopted as it lowers the Pitta and brings Vatanulomana (pacify vata). [10] It helps in removing the Srothorodha (blockage of channels) of Sukravahasrotas (semen carrying channels). It also facilitates the proper functioning of Dhatwagni (metabolic energy) leading to formation of new Sukradhatu (semen).

There is better absorption and assimilation of Oushadas (medicines) after the process of Sodhana (purificatory therapy). The various treatment protocols has been provided for the oligozoospermia and shukragat vicar in ayurveda. Both shaman and shodhan therapy has been adopted for needful.^[11] The study here conducted the emphasize on the treatment must followed shodhan karma first followed by the shaman karma as per the decision made by the treating physician.

CONCLUSION

Sexual health is also as important as good physical health. One should never feel shy to share their sexual problems. Sometimes these problems ruin self-esteem and social life. Oligospermia has been diagnosed with low sperm count after doing a semen analysis. Oligospermia is one of the major leading causes of infertility. Ayurveda, the science of life, prevention and longevity, is the oldest and most holistic and comprehensive medical system available. It uses the inherent principles of nature to help maintain health in a person by keeping the individual's body, mind, and spirit

in perfect equilibrium with nature. Ayurveda has advocated a separate branch which deals with the management of defective semen and spermatogenesis along with sexual potencification, is called as Vajikarana tantra (Aphrodisiac medicine). Vajikarana Therapy is recommended in Ayurveda for men who are above 16 and below 70 to maintain optimum sexual activity and healthy semen. [13] The treatment of Oligospermia comprises of administration of rasayanas and vajikara dravyas or medicines (virilificatory or aphrodisiacs) internally, Panchakarma & Vajikarana therapies for detoxification and rejuvenation along with diet and lifestyle modifications, will not only help in better conception but also in producing healthy offspring. [14]

REFERENCES

- Zegers-Hochschild F, Adamson GD, de Mouzon J, et al.; International Committee for Monitoring Assisted Reproductive Technology; World Health Organization. International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology. Fertil Steril, 2009; 92(5): 1520-1524.
- Thoma ME, McLain AC, Louis JF, et al. Prevalence of infertility in the United States as estimated by the current duration approach and a traditional constructed approach. *Fertil Steril*, 2013; 99(5): 1324-1331.e1.
- 3. Diagnostic evaluation of the infertile male: a committee opinion. *Fertil Steril*, 2015; 103(3): e18-e25.
- 4. World Health Organization, ed. WHO Laboratory Manual for the Examination and Processing of Human Semen. 5th ed. Geneva: World Health Organization, 2010.
- 5. Shaw W, Padubidri V, Daftary S, Howkins J, Bourne G. Infertility and sterility. In: *Shaw's Textbook of Gynaecology*. 16th ed. New Delhi, India: Elsevier, 2015; 237-262.
- 6. Punab M, Poolamets O, Paju P, et al. Causes of male infertility in 1737 patients. *Hum Reprod*, 2017; 32(1): 18-31.
- Anawalt BD, Braunstein GD. Testes. In: Gardner DG, Shoback D, eds. *Greenspan's Basic & Clinical Endocrinology*. 10th ed. New York, NY: McGraw-Hill Education, 2017.
- Chaukhamba orientalia Varanasi, Sharirsthana, Chapter 2, Verse 33, Page 26. 1, edition 2004. Yadavji Trikamji, Editor charak samhita of Agnivesha Chikitsasthan: Reprint Ed. Varanasi: Chaukhambha Prakashan, 2011; 30: 154-641.
- Agnivesha, Charaka, Charaka Samhita with Ayurvedadipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Acharya, published by Nirnaya Sagar press, Bombay, Chikitsasthana, 1941; 30/135137; 640.
- 10. Vaidya Jadavaji Trikamaji Acharya, Sushruta Samhita Sharira Sthana, Chaukhamba Surbharati Prakashana, Varanasi, Reprint, 2008; 2/4.

- 11. Vagbhata, Ashtanga Hridayam, with Sarvangasundara of Arunadatta and Ayurveda Rasayana Tika of Hemadri, Chaukhambha Orientalia, Varanasi, 2011; 743.
- 12. Madhavakara Madhava Indiana, 3rd Ed, Translated by Prof.K.R.Srikanta Murthy, Chaukhambha orietalia, 2000; 71.
- 13. Sahasrayogam, Sujanapriya vyakya, edited by K.V. Krishnan Vaidyan and S.Gopala Pillai, Vidyarambam Publishers, 544: 367.
- 14. Sharma Priyavratta, Dravyaguna Vijyaana, second volume, Chaukhamba Bharti Academy, Varanasi, 13 the edition, 1991.