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MANAGEMENT OF OLIGOZOOSPERMIA BY APATYAKAR GHRUT: A CASE REPORT

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Abstract- Infertility is a national embarrassment in many parts of India, overwhelmed by illiteracy and lower socio-economic expectations. Latest studies have shown that the prevalence of oligozoospermia is exceptionally high in the metropolis as well as in smaller cities in India. It affects the internal harmony, conjugal life and social functioning of those involved. Infertility is theinability of a sexually active, non-contraceptive pair to have spontaneous conception in one year.Oligospermia is one of the key factors in male infertility and is characterised as a subnormal concentration of sperm in the penile ejaculate, i.e. less than 20 million per ml. The different drugsare mentioned to encourage fertility, and may be used to treat certain types of cases. Since the condition is still unresolved and there is no full cure available. This patient was treated with oral medicine of Apatyakar Ghrut at a dose of 10 ml orally twice days before food containing lukewarm water as Anupana for a period of two months. Following administration of Apatykar Ghrut, there is a marked improvement in all symptoms of Olisozoospermia and in various semen examination such as sperm count, sperm motility, semen length, pH and liquefaction time within afew days.

Keywords: Apatyakar Ghrut, Ksheen Shukra, Male Infertility, Oligozoospermia.

I. INTRODUCTION

The key cause of infertility was due primarily to deficient spermatogenesis and also to a lack of semen consistency in both morphology and motility. In Oligozoospermia, both limited sperm counts and poor motility are observed. Oligozoospermia therapy should be directed at increasing sperm count and motility.

In Ayurvedic literature, a man incapable of procreation is depicted as a shadowless, single- branched, foul-smelling tree devoid of fruit that has no meaning or has no useful function in the universe. In order to receive the offspring, all spouses should be reasonably fit for which the essential criteria are the undesired and stable conditions of Shukra and Shonita. The possession of Shudha Shukara and the usual status of Manobhava are important for fertility. The sound wellbeing of the offspring is determined even by the Shuddha Shukra. If there is a Dushti in Shukra,the fertility factor will certainly be affected. Vajikarana is a special branch of Ayurveda that deals with certain causes.

According to the modern aspect, as far as male infertility is concerned, 30-40% of infertility is correlated with the male component in which conditions vs. oligozoospermia, high semen viscosity, poor sperm motility and low semen volume are usually found. Efficient reproduction sperm count could be 40 million/ml or more, but tests have shown that if sperm cells have strongprogressive motility in addition to less sperm count (less than 10 million/ml), there is a fair chance of pregnancy.

Acharya Charaka has described a variety of medications that are beneficial in the treatment of Alpa, dushta retas that specifically affect the properties of Shukra janana (spermatogenesis) and shukra shodhana. Apatyakar Ghrut is one of them. Shukrala and Vrishya Karma are made up of 80% of the ingredients of Apatyakara Ghrut, while 60% of the ingredients have the properties of Balya. Go-ghrut is peculiar to all Jangam snehas because it has a special capacity to follow, i.e. Samsakarysa Anuvartanam, and this is Vrushya.

In this case study, attempt was made to investigate the role of Apatyakar Ghrut in the infertile male in which oligozoospermia is the cause of infertility.

II. CASE STUDY

The overall status of the patient was evaluated by recording the weight, sensation of wellbeing etc. The

semen test of the patient was collected before and after the treatment. The semen analysis was done according to the recommendations of World Health Organization (1992). The evaluation of the treatment was made by adopting two parameters, i.e. 1) Semen Analysis (World Health Organization, 1992) and 2) Sexual Health Scoring.

Collection of semen for Analysis

- Abstinence: at least 3 days of ejaculate collection and a limit of 5 days of restraintwere followed.
- Method: The technique of masturbation was chosen for the processing of thesamples.
- Container: a dry, wide-mounted container was supplied by the laboratory.
- Place: The private space adjoining to the laboratory was utilized for the storage ofsemen.
- Time: Semen processing time was limited from 9.30 a.m. to 11.30 a.m.**Patient description & historical examination findings**

This 38-year-old male, the independently employed private business had been analyzed as having low sperm count, low sperm motility and a low level of abnormal sperm cells. He had been married for a very long time yet his better half presently can't seem to conceive. His significant other had been broadly explored for ovulation with the monthly cycle, assessment of fallopian tube and endocrine function. The patient had ordinary degrees of luteinizing, follicle stimulating hormones and testosterone. He has no history of urinary infections or any other sexually transmited diseases. Past family clinical history was non-contributory.

Table 1: General Examination

General Examination	
Height	169 cm
Weight	72 Kg
Blood Pressure	130/90 mm of Hg
Pulse	88/min
External genitalia, testes, epididymis, andscrotum	Normal
Semen Analysis – Physical Examination	
Time of specimen	10:06 AM
Time of examination	11.00 AM
Duration of abstinence	4 days
Liquefaction at 37^0 C	24.00 minutes
Volume	4 ml
Appearance	Viscid opaque
Colour	Whitish
pH	7.2
Microscopic Examination	
Total sperm concentration	21.00 million/mL
Percentage motility	42.00 %

Grade A (Progressive)	20.00%

Local Examination

Male genitalia contain penis, scrotum, testicles, epididymis and spermatic cord. Genital and regenerative history normally matches the historical backdrop of the urinary tract. Subjects were asked some information about penile release, uneasiness or expanding of the testicles and ability to appreciate ordinary sex. These inquiries offered a clue for a timid or hindered patient to visit about sexual or genital issues.

Investigation

Laboratory investigations – Hb%, TLC, DLC, ESR, Blood Sugar (FBS & PPBS), Urine [Routine (Albumin & Sugar) and Microscopic] testing was performed to rule out other pathological conditions.

Semen Study – According to WHO (1993) rules, i.e. Liquefaction time, Colour, Volume, Viscosity, Reaction (pH), Sperm count, Sperm motility and Morphology.

Treatment Plan:

Apatyakar Ghrut Dose – 10 ml orally twice daily before meals, lukewarm water as Anupana for a period of two months.

Table 2: Ingredients

Sr.No.	Drug - Botanical name	Quantity	Part Used
1	Shatavari – Asparagus racemosus Linn.	30 kg	Tuber
2	Kapikacchu – Mucuna prurita Linn.	30 kg	Seed
3	Gokshura – Tribulus terrestris Linn.	30 kg	Seed
4	Vidari – Pueraria tuberose Linn.	30 kg	Tuber
5	Black Gram – Phaseolus mungo Linn.	30 kg	Seed
6	Ghrut – Butryum departum Linn.	30 kg	
7	Milk	240 lit.	

III. RESULTS:

Post-treatment results demonstrated the patient's sperm count had expanded to 55 million/ml, Rapid progressive motility to 63%, sluggish progressive motility to 17%, non-progressive motility 20% and total motile 80%. There was no adjustment in morphology of the sperm cells. The most remarkable improvement in sexual health score for example Sexual desire had expanded to 4, erectile capacity – 5, intercourse satisfaction – 2, Ejaculatory function – 4, orgasmic function – 4, recurrence of copulation expanded to 4-5 times/week and length of sex additionally expanded to 7 minutes. The treatment showed improvement in sperm count and motility alongside other sexual parameters. There was no result seen during the treatment just as after thecompletion of treatment.

IV. DISCUSSION

Ayurvedic medicine has a long history of treating infertility, and many ancient physicians have written extensively regarding the matter. Overall, the ancients have strongly emphasized internal causes as the source of infertility.

The composition Apatyakar Ghrut is a mixture of Shatavari, Kapikachhu, Gokshura, Vidari, Black gram processed with ghrut and milk. The herbs include Madhura Rasa, Guru Guna, Sheeta Virya (Masha and Kapikkachhu – Ushna Virya), Madhura Vipaka, and Vrishya. Madhura Rasa has the Shukra Vardhaka property, which is supported by Shukra Vriddhi. Guru Guna is helping to generate Shukra based on Saamaanya Visesha Siddanta. Sheeta Virya may cause the production of Shukra and may protect it from

Pitta vitiation, where the proper production of Shukra has taken place. Madhur Vipaka is working as ShukraVardhaka. Apatyakar Ghrut, due to its madhura rasa, sheeta virya, snigdha, guru guna, leads to brimhana, balya, rasayan, vasthapana and vata-pitta shamaka properties,leading to increased sperm count and sperm motility.

V. CONCLUSION

This little contextual investigation introduced recommends that gains are made the most of in sperm and motility alongside other sexual parameters. It additionally recommends that Ayurvedic treatment offers a remedy for Oligozoospermia and help thepatients with the expectation of improving their nature of sexual life. Notwithstanding therestrictions of this contextual analysis, presume that the Ayurvedic management might be a effective choice in the treatment of Oligozoospermia.

CONFLICT OF INTEREST

The author/s declare/s that there is no conflict of interest regarding the publication of this manuscript.

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