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Case Study

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FROM ZERO TO TWENTY MILLION: SUCCESSFUL MANAGEMENT OF AZOOSPERMIA THROUGH *VAJIKARANA CHIKITSA* – A CASE REPORT

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ABSTRACT

Introduction: Male infertility is a significant global health concern, contributing to 20–40% of infertility cases. Among infertile males, 45% exhibit oligozoospermia or azoospermia. Conventional therapies offer limited success in managing these conditions. Ayurveda describes seminal defects under *Shukra Dushti* and sexual dysfunctions under *Klaibya* within *Vajikarana Chikitsa*. This case report explores the efficacy of Ayurvedic management in a patient with azoospermia. **Methodology:** A 30-year-old male presented with primary infertility and generalized weakness. A prior semen analysis confirmed azoospermia. Clinical and Ayurvedic assessments revealed *Shukravaha Srotas Dushti* with *Vata* predominance. The patient underwent a three-month *Vajikarana*-based intervention, including *Manmantha Rasa*, *Pushpadhanwa Rasa*, *Makaradhwaja Rasa*, *Poornachandrodaya Rasa*, *Swarna Vanga Rasa*, *Shukramruta Rasa*, and *Kapikacchu Choorna*, along with *Shilatone* capsules. **Outcome:** Follow-up semen analysis demonstrated sperm count improvement from 0 to 20 million/mL, with motility enhancement (RLP+SLP: 35%). While azoospermia resolved, mild asthenozoospermia and reduced semen volume persisted. The patient also reported improved physical strength and well-being. **Conclusion:** This case demonstrates Ayurveda's role in managing male infertility, demonstrating significant improvements in seminal parameters. *Vajikarana chikitsa* offers promising potentials in azoospermia management.

KEYWORDS: *Ayurveda*, Azoospermia, *Shukra Dushti*, *Vajikarana Chikitsa*.

INTRODUCTION

Infertility is a global health concern, affecting approximately 15% of married couples. Among these cases, male factor infertility accounts for 20–40% of cases. According to a WHO multicentred study, 45% of infertile men are affected by oligozoospermia or azoospermia.[1] Male infertility is attributed to various factors, including sperm-related abnormalities such as azoospermia (absence of sperm in semen), oligozoospermia (low sperm count), asthenozoospermia (poor sperm motility), and teratozoospermia (abnormal sperm morphology). Additionally, sexual dysfunctions, including erectile dysfunction, premature or delayed ejaculation, and orgasmic disorders, contribute to impaired male reproductive function.

In Ayurvedic literature, seminal defects and male sexual dysfunctions are described under *Shukra Dushti* and *Klaibya* in *Vajikarana Chikitsa* (reproductive and sexual medicine).[2] *Shukra Dushti* encompasses seminal abnormalities such as azoospermia, oligospermia, teratozoospermia, and oligoasthenoteratozoospermia (OAT) syndrome, whereas *Klaibya* refers to conditions characterized by impaired sexual function, including impotence and erectile dysfunction. The etiology of these conditions is attributed to depletion of *Rasadi Dhatus* (tissue elements), which naturally occurs with aging or due to dietary and lifestyle factors, such as the consumption of *Avrishya Ahara* (non-aphrodisiac foods).

In Ayurveda, *Shukra Dhatu* represents the metabolic product of *Annaposhana* (nutritional transformation) and is responsible for *Bala* (strength), *Varna* (complexion), and *Upachaya* (tissue development). This conceptual framework suggests a correlation between *Shukra Dhatu* and the endocrine system, particularly the hypothalamic-pituitary-gonadal axis, which regulates male reproductive function. Given the limitations of conventional therapies in addressing multifactorial male infertility, Ayurveda-based interventions targeting *Shukra Dushti* and *Klaibya* offer a promising approach to restoring reproductive health. This case study, deals with the solely Ayurveda management and promising

outcomes in condition like Azoospermia in the purview of *Vajikarana Chikitsa*.

CASE HISTORY

Patient Information: A 30-year-old male patient, resident of Varanasi, Uttar Pradesh; presented with the complaints of no issues from one year in spite of unprotected coitus associated with generalized weakness and decreased body strength. The patient has been explained his condition as 'low sperm count' for which he has taken allopathic medication for last seven months but saw no improvement in the seminal parameters. On 16.11.2024, patient presented himself to OPD No. 16-C (Panchakarma) of Sir Sunder Lal Hospital, BHU Varanasi seeking Ayurvedic treatment for the same. Case reporting follows the CARE case report guidelines.

Clinical Findings: The patient was subjected to a detailed examination which was done based on the information provided by the patient. No pallor, icterus, cyanosis, clubbing or lymphadenopathy was noted on physical examination. No abnormality was detected on systemic examination of respiratory, gastrointestinal, central nervous and musculoskeletal systems. Also, on regional (male genitalia) examination, no abnormality was detected in the scrotum, testes, penis, glans penis, urethra and the urethral meatus.

Personal history revealed a normal bowel habit, with no constipation; proper urination; with good appetite and a sound sleep. The patient smokes and also consumes alcohol. The sexual history revealed proper libido with satisfied intercourse with frequency of 2-3 times per week, with proper erection and penetration, along with proper and timely ejaculation, with no post-coital complaints. Partner profile (wife) also showed no abnormalities with menstrual cycle and no any sexual dysfunctions. Since, the patient was subjected to Semen Analysis on 09.11.2024, no new semen analysis was advised and further management was taken forward.

The *roga pareeksha* (disease assessment) and *rogi pareeksha* (assessment of the patient) of the patient exhibited *rasavaha* and *shukravaha srotas* involvement with *sanga* (obstruction) pathology, making the prognosis *sukhasadhya* (easily manageable).

Diagnostic Assessments: The initial diagnostic assessment utilized the semen analysis which was done on the 09.11.2024 which revealed the condition as Azoospermia. The detailed report has been mentioned in **Table No. 1.** Based on the Ayurveda parameters, the predominantly deranged dosha was vata, along with vitiation in rasa and shukra dhatu, based on which the management was planned and executed.

Table No. 1: Semen Analysis.

Seminal Parameters	Before Treatment	After Treatment
Date	09.11.2024	10.01.2025
Semen Volume	5.0 mL	1.0 mL
Colour & Appearance	Greyish White	Greyish White
Odour	Aromatic	Aromatic
Liquefaction Time	15 mins	30 mins
pH	7.5	7.5
Sperm Count	NIL (00 million/mL)	20 million/mL
Condition	Azoospermia	Asthenozoospermia*

After treatment, Asthenozoospermia (decreased sperm motility), was noted, but marked improvement in sperm count is noted.

Timeline: The timeline of the events for the case is exhibited in Figure 1.

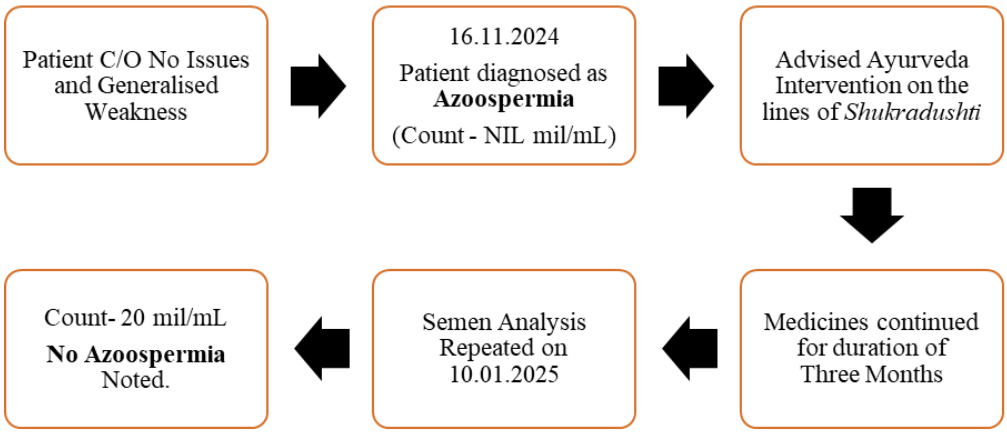

Figure No. 1: Timeline of Events.

Therapeutic Intervention: The line of management followed the *Vajikarana chikitsa* protocol based on principles of *Shukra dushti* and *nashta shukra*. Based on same; a combination of *Manmantha Rasa* 200 mg, *Pushpadhanwa Rasa* 200 mg, *Makaradhwaja Rasa* 200 mg, *Poornachandrodaya Rasa* 75 mg, *Swarna Vanga*

Rasa 100 mg, *Shukramruta Rasa* 200 mg and *Kapikacchu Choorna* 4 grams; was given twice daily with water before food. A proprietary medicine, namely *Shilatone* Capsule was also prescribed to be taken in quantity of two capsules only at the night time. The said mediations were continued for a duration of three months.

Follow-up and Outcomes: Following treatment, there was a notable improvement seen in the seminal parameters. After three months of follow-up, on 10.01.2025 the patient showed remarkable improvement in sperm count along with other parameters with improved body strength. The updated semen analysis is reported in **Table No. 1.** Since, some parameters were not reported in the first analysis report, they were also recorded in the follow-up report. On 10.01.2025, with an abstinence of 3 days, the motility showed RLP – 20%, SLP – 15%, NP – 15% and Immotile – 50% (Normal motility – RLP + SLP = 40%); 3-5 pus cells per HPF (Normal 3-5/HPF), occasional epithelial cells and morphology as Normal – 92%, Head defects – 00%, Neck and Mid-piece defects – 02%, Tail defect – 04%, Cytoplasmic Droplet and Pin heads – 00% (Normal Morphology = >4%).

Though the condition of azoospermia was resolved successfully with a count of 20 million/mL (Normal – >15million/mL) but there was reported a decrease in the volume i.e.1.0 mL (Normal = >1.5 mL/ejaculate) along with <40% of total motility i.e., RLP + SLP = 35% accounting the condition to be Asthenozoospermia. Since, there was no visible sperm noted in earlier sample, visible sperms with 35% motility in this sample could be recorded as a significant outcome of the earlier mentioned treatment.

DISCUSSION

Vajikarana Chikitsa, a specialized branch of *Ayurveda*, is dedicated to enhancing reproductive and sexual health. The therapeutic use of *Vajikarana Dravya* (aphrodisiac medicines) plays a crucial role in the management of infertility, addressing both seminal defects and sexual dysfunctions in males. The present case demonstrates significant improvement in seminal parameters following *Vajikarana chikitsa*, reinforcing the potential of these formulations in male infertility management.

Manmantha Rasa, a key component of this herbo-mineral formulation, contains *Abhraka Bhasma*, which is traditionally known for its rejuvenative and aphrodisiac properties. *Abhraka Bhasma* has been documented to mitigate age-related debility, enhance vigour, and promote overall vitality. Another ingredient, *Shatavari* (*Asparagus racemosus*), functions as a *Rasayana* (rejuvenator), contributing to cellular longevity, immunity enhancement, and mental well-being. Its adaptogenic properties mitigate stress, a significant contributor to sexual dysfunction, thereby improving sexual performance. Additionally, *Vidarikand* (*Pueraria tuberosa*), a potent aphrodisiac and rejuvenator, plays a vital role in fortifying the reproductive system.

Pushpadhanva Rasa[3], another essential formulation in infertility management, possesses properties such as *Yogavahi* (synergistic enhancer), *Dhatu Vriddhikara* (tissue-nourishing), *Virya Vardhana* (semen-enhancing), and *Agni Diptikara* (digestive stimulant). The herbal triturating agents (*bhavana dravyas*) like *Dhatura*, *Bhanga*, and *Nagavalli* exert a stimulatory effect on the neuroendocrine system, potentially influencing both systemic and localized responses in the testes and accessory sex glands. This mechanism contributes to improvements in semen volume, sperm count, and motility. The *Vrishya* (aphrodisiac) and *Rasayana* (rejuvenating) properties of these ingredients further enhance physical endurance, reduce exhaustion, and alleviate sexual weakness. Additionally, their adaptogenic and endocrine-modulating effects potentially regulate neural pathways, reducing anxiety levels and ultimately enhancing sexual drive, erection quality, and overall satisfaction.

Makaradhwaja Rasa and *Poornachandrodaya Rasa* [4] formulations contain purified *Swarna* (gold), *Parada* (mercury), and *Gandhaka* (sulphur) in specific proportions, levigated with *Kumari Swarasa* (*Aloe barbadensis*) and *Rakta Karpas Pushpa Swarasa* (*Gossypium herbaceum*). The synergistic interaction between minerals and herbs enhances their therapeutic potency, contributing to improved reproductive function. *Swarna*, known for its *Vrishya* (aphrodisiac) property, is potentiated by the *Yogavahi* action of *Gandhaka*-processed *Parada*, facilitating its bioavailability. The *bhavana* (trituration process) with herbal extracts results in the formation of organometallic compounds, improving drug homogeneity and therapeutic efficacy. These physicochemical transformations enhance drug assimilation, ultimately improving seminal parameters and addressing male infertility.

Swarna Vanga,[5] incorporates *Vanga* (tin), *Parada* (mercury), *Gandhaka* (sulphur), *Navasadara* (ammonium chloride), and *Sarjikshara* (potassium nitrate) through a *Kupipakwa* (sealed heating) process. The preparation of *Kajjali* (black sulphide of mercury) and controlled heating patterns are pivotal in rendering *Swarna Vanga* a potent rejuvenator. Clinically, it has been utilized for testicular regeneration, improving spermatogenesis, and managing conditions such as oligospermia and asthenozoospermia. Its anti-diabetic properties further support metabolic regulation, which can indirectly influence reproductive health.

Kapikacchu (*Mucuna pruriens*) [6] seeds, both black and white varieties, exhibit significant improvements in erectile function, sexual desire, and overall satisfaction. Notably, the black seeds demonstrate a higher efficacy in enhancing semen volume, pH, total sperm count, and sperm motility while reducing the proportion of non-

progressive and immotile sperm. This suggests *Kapikacchu's* efficacy in improving both sperm quality and functional parameters. Its neuroprotective and adaptogenic properties further contribute to stress reduction, which is a known factor affecting male fertility.

Shukramruta Rasa and *Shilatone* capsule, proprietary Ayurvedic medicines, contain essential components like *Shilajatu*, *Makardhwaja Rasa*, *Lauha Bhasma*, *Abhraka Bhasma*, *Vanga Bhasma*, *Shuddha Vishamushti*, and *Akakarabha*. These formulations are traditionally indicated for managing *Klaibya* (male sexual dysfunction) and *Shukra Dushti* (semen-related disorders). Their multifaceted actions, including adaptogenic, immunomodulatory, and endocrine-regulatory effects, contribute to optimizing seminal parameters and overall reproductive health.

CONCLUSION

In today's fast-paced world, various physical stressors like dietary, lifestyle and environmental factors along with mental stressors, plays a pivotal role in manifestation of infertility, in both genders. Male infertility, where seminal defects and sexual dysfunctions are the key parameters involved in infertility, this case delved into the realms of seminal defects and its solely *Ayurveda* based management with positive outcomes. Utilization of ayurveda based herbal, herbo-mineral and mineral drugs prove effective in taking the sperm count from zero to twenty million per milliliter in this case, hence showing a promising potential of *Vajikarana chikitsa* in the spectrum of seminal defect associated male infertility. Such cases encourage further exploration and research in reproductive health and sexual medicine.

LIMITATION OF STUDY

Though the results are promising in this case study, a major limitation is a non-elaborative semen analysis report based on the WHO Manual for Semen Analysis, which could provide a strong backing to the outcomes of this study.

INFORMED CONSENT

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/ have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published, and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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