

Case study

Role of Ayurvedic Panchakarma Treatment in Male Infertility (Severe Oligoasthenozoospermia)

¹Dr. Md. Mehedi Hasan, ²Dr. Md. Fazlul Kabir, ³Dr. Md. Alahi Khandaker, ⁴Dr. Morusupalli Ramavani, ⁵Dr. Mahmuda Akter,

¹Public Health Specialist, Medical Officer (Ayurvedic, AMC), Fertility Clinic (Department of Alternative Medicine), Kurmitola General Hospital, Dhaka.

²Head, Clinical & Diagnostic Services, icddr,b, Dhaka.

³Medical officer (Unani, AMC) Mugda Medical College hospital, Dhaka.

⁴Infertility Specialist, Sri Krishna Ayurvedic Hospital Panchakarma & Infertility Center, Hyderabad, India.

⁵Medical Officer (Ayurvedic, AMC), Shaheed Suhrawardy Medical College Hospital, Dhaka.

Received: 30 August, 2023

Accepted: 30 September, 2023

Published: 06 October 2023

Abstract:

Infertility is one of the global burning issues which affects the couple socially and individually in a negative way. There are numerous etiological factors that play a significant role to it e.g. like hormonal variations, structural abnormality, functional disorders, psychological factors etc. In Ayurveda a separate department (Tantra) known as sexual invigoration (Vajeekarana) is mentioned by Charak Samhita and Sushrut Samhita to address this problem. The study patient reported with oligozoospermia (low sperm count) and Asthenozoospermia (low sperm motility). Where medicinal treatment (shaman chikitsa) and purification therapy (shodhana chikitsa) i.e. panchakarma especially Intra Urethral Uttar Basti (IUUB) is the management. After 4 months of treatment, his condition is improved from severe oligoasthenozoospermia to normozoospermia. Ayurvedic Panchakarma treatment is safe and effective approach for oligoasthenozoospermia.

Keywords: Oligoasthenozoospermia, Panchakarma, Intra Urethral UttarBasti (IUUB).

Introduction:

Infertility issues may represent a stressful situation to the couple's life with various degree of negative psychosocial effects. The ability of conceive depends on the fertility capabilities of both the partners. Infertility, defined as the inability to achieve a pregnancy after 12 months of regular, unprotected intercourse (WHO) [1]. Male infertility is the most disturbing and burning issue which is considered to contribute approximately one-half of all infertile couples globally. There is numerous etiological factors play a significant role to it. In Ayurveda a separate department (Tantra) called as Sexual invigoration (Vajeekarana) is mentioned by Charak Samhita and Sushrut Samhita to tackle with such abnormalities [4]. However, oligoasthenozoospermia is a major sperm disorder that involves two conditions at the same time, Oligozoospermia (low sperm count) and asthenozoospermia (low sperm motility) [5]. In Ayurveda oligoasthenozoospermia can be co-related with Kshina Shukra, which is discussed in Asta-vidha that are Shukradushti (abnormal seminal parameter) [3]. Kshina Shukra is one among the Asta-vidha Shukra dushti, in which qualitative as well as quantitative vitiation of Shukra dhatu [2]. Vagbhat Acharya explained Kshina Shukra as a pathological condition caused by vitiated Vata and Pitta that

ultimately alter the quality and quantity of the sperm and resulting into abnormal seminal parameter [6]. To diagnose male infertility following, comprehensive clinical review of the patient, semen analysis is the key initial test, which identifies the abnormalities of seminal parameters that may provide the fundamental information on which clinicians base their initial diagnosis. This condition was understood in terms of oligospermia (ksheena sukra) and low motility (dusta sukra) as patient was diagnosed with Oligoasthenozoospermia. Ayurveda emphasis to the treatment of Oligoasthenozoospermia by purification therapy i.e. panchakarma especially IUUB procedures [3]. Which increases the sperm count and motility, apart from, regular Panchakarma is a highly acclaimed procedure in Ayurveda to treat infertility. IUUB (Uttarabasti) is introduction of medicated decoction into the bladder through urethra in males [7]. Along with these, diet and lifestyle modifications are also advocated which will not only help in better conception but also in producing healthy offspring [7].

Case Report:

A male 37-year-old, non-smoking and non-alcoholic patient married for seven years reported with primary infertility. After performing routine physical examination, there was no

significant abnormality in external genitalia including both testes in scrotal sac. Semen analysis revealed that the patient has severe oligoasthenozoospermia. The clinical symptoms identified in the present case report correlate to Kshina Shukra comprehended in Ayurvedic classics. [Fig-1]

As per Ayurvedic treatment guideline, the initial management is done by Shodhan Chikitsa i.e. panchakarma including Intra Urethral Uttar Basti (IUUB) for consecutive 3-5 days in each month upto 4-5 months and recommended Shaman Chikitsa (Medicinal treatment) for 4 months [Fig-2].

SEMEN ANALYSIS

COLLECTION PROCEDURE	: Masturbation
QUANTITY	: 2 ml.
COLOUR	: Whitish
REACTION	: Alkaline
TOTAL COUNT OF SPERM	: 04 Million/ml.
MORPHOLOGY	: 30% are with normal morphology.
MOTILITY (within one hour of ejaculation)	: Actively motile : 00% Feebly motile : 00% Non-motile : 100%
PUS CELL	: 4-6 /HPF
EPITHELIAL CELLS	: 0-2/HPF
COMMENTS	: Severe Oligoasthenozoospermia

Figure: 01 (Semen analysis report before treatment)



Figure: 02 [Male Intra Urethral UttaraBasti (IUUB)]

Table 1: Comparing parameters before and after treatment by semen analysis

SL. No.	Seminal Parameters	Before Treatment	After 4 months of treatment
1.	Collective Procedure	Masturbation	Masturbation
2.	Volume	2 ml	2 ml
3.	Color	Whitish	Whitish
4.	Reaction	Alkaline	Alkaline
5.	Total sperm count	04 million/ml	38 million/ml
6.	Morphology	30% are with normal morphology	60% are with normal morphology
7.	Motility (within one hour ejaculation)	Actively Motile: 00%	Actively Motile: 40%
		Feebly motile: 00%	Feebly motile: 20%
		Non motile: 100%	Non motile: 40%
8.	Pus cell	4-6/HPE	5-6/HPE
9.	Epithelial Cell	0-2/HPE	0-2/HPE
10.	Comments	Severe Oligoasthenospermia	Normozoospermia

After four months of treatment, there were significant improvement in the seminal parameter sperm count will increase from 04 million/ml to 38million/ml, Sperm motility, actively motility increase from 00% to 40%, Feebly motile increase from 00% to 20%, non-motile decrease from 100% to 40% and before treatment the normal sperm morphology was 30% and morphological parameter improved from 30% to 60% shown in table table-1. [Fif-3]

Lifestyle modification (Nidanparivarjana)

Controlling of causative factors is the foremost treatment of any diseases. Unhealthy dietary habits should be changed. Intake of unhealthy foods (Mithaya Aahara) like pizza, burger and cold drinks should be avoided. Daily exercise, practice of Yoga Pranayama will help in weight reduction as well as in hormonal regulation.

Conclusion:

Infertility is one of the disorders which are most common observed in OPD or Clinics. Based on treatment guideline of Ayurveda is the combination of both medicinal treatment and purification therapies like IUUB with verechana. After completing 4 months of treatment, the study patient was improved the seminal parameters from severe oligoasthenozoospermia to satisfactory level of Normozoospermia. The mentioned treatment approach can be effective and give promising results in such cases.

Reference:

SEMEN ANALYSIS

QUANTITY	: 2 ml.
COLOUR	: Whitish
REACTION	: Alkaline
TOTAL COUNT OF SPERM	: 38 Million/ml.
MORPHOLOGY	: 60 % are with normal morphology.
MOTILITY	: Actively motile : 40 % Feebly motile : 20 % Non - motile : 40 %
PUS CELL	: 5-6 /HPF
EPITHELIAL CELLS	: 0-2/HPF
COMMENTS	: Normozoospermia.

Figure: 03 (Semen analysis report after treatment)

1. Gianpiero D. Palermo , Justin Kocent , Devin Monahan , Queenie V. Neri , and Zev Rosenwaks, Treatment of Male Infertility, Zev Rosenwaks and Paul M. Wassarman (eds.), Human Fertility: Methods and Protocols, Methods in Molecular Biology, vol. 1154, DOI 10.1007/978-1-4939-0659-8_18
2. Yogita B. Kanhere¹ , Varsha N. Sane² , Pournima Daware³, LITERARY STUDY OF PANCHAKARMA INFERTILITY – A REVIEW ARTICLE, AMJ: Volume 3, Issue 5, June - July, 2019
3. Arun NK*, Mahesh Kumar Sharma², Gyan Prakash Sharma³, Sarita Devi⁴, AYURVEDIC MANAGEMENT OF OLIGOASTHENOZOOSPERMIA - A SINGLE CASE STUDY, IJAPR | March 2022 | Vol 10 | Issue 3
4. Dr. Palak Rathod¹ * and Dr. Manjunath Adiga², OLIGOASTHENOTERATOZOOSPERMIA – A CASE STUDY, ejpmr, 2020,7(9), 480-482.
5. ShivaniKarnwal, MANAGEMENT OF MALE INFERTILITY (OLIGOASTHENOZOOSPERMIA) WITH AYURVEDA, IAMJ October 2020, 4903-4905.
6. Jiji V1*, Priyanka R1, Asha ST2, Asha Sreedhar3, AYURVEDIC MANAGEMENT OF MALE INFERTILITY DUE TO OLIGOSPERMIA AND VARICOCELE: A CASE STUDY, IJAPR | December 2020 | Vol 8 | Issue 12
7. Treatment Guideline for Ayurvedic Medicine, 3rd Edition, Department of Homeo & Traditional Medicine and Alternative Medical Care (AMC), DGHS, Mohakhali, Dhaka.

Copyright (c) 2023 The copyright to the submitted manuscript is held by the Author, who grants the Clinical Medicine and Health Research Journal a nonexclusive license to use, reproduce, and distribute the work, including for commercial purposes.



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)