

AYURVEDIC MANAGEMENT OF MALE INFERTILITY (OLIGOASTHENOZOOSPERMIA) – A CASE STUDY

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ABSTRACT

Infertility is the failure of a couple to become pregnant after 1 year of regular, unprotected intercourse. Male infertility can be defined as an inability to induce conception, due to defect in spermatogenic functions. The male carrying pathology in semen production includes low sperm count, volume, motility, abnormal forms and sperm functional tests. *Ayurveda* explains *Ashtasukradushti*, which impairs the normalcy of the semen and is considered as the main reason for the infertility. Studies conducted on infertility have revealed that about 1 in every 3 cases are due to fertility issues in male partner. Hence the male fertility in current times is an alarming issue that needs to be given highest attention. A 35 year old male who had been diagnosed as Oligoasthenozoospermia with low sperm count and few non motile spermatozoa with 10 years of married life and his wife with irregular and anovulatory cycles were treated successfully with Ayurvedic management. After having *Snehana* with *Vidaryadi Ghrita* and *Virechana*, the patient was treated with *Yogavasti* course of *Mustadirajayapana Vasti* along with *Vrishya Ghrita* for *matravasti*, showed the improvement in the seminal parameters and resulted in pregnancy. This success story shows the efficacy of Ayurvedic treatment in the management of male infertility.

Keywords: Male Infertility, Sperm Count, *Ashtasukradushti*, *Vasti*

INTRODUCTION

Though population of the world is increasing day by day, yet 20-30% populations of the world are the victims of the infertility. In India, 1 out of 10 couples suffers from infertility are owing to impaired sperm production or its function, improper ejaculation, impaired sperm delivery, due to vicious life styles and abnormal environmental exposure. Infertility is defined as failure of a couple to conceive after 12 months of regular intercourse without using any contraception. Male infertility means inability to cause a pregnancy in a fertile female¹. WHO 's multi-centre study reveals that 20% cases were attributed to Male Factors, 38% cases

were attributed to female factors, 27% had casual factors identified in both partners and 15% could not be satisfactorily attributed to either partner². In Indian couples seeking treatment, the Male factors is the cause in approximately 23%³

Oligoasthenospermia & Shukradushti

The male Infertility can be complete or partial termed as sub-fertility. Males were considered infertile with sperm parameters and the most significant of these are reduced no. of Spermatozoa (Oligozoospermia), Reduced Sperm Motility (Asthenozoospermia) Reduced Sperm Vitality (Necrozoospermia), Abnormal Sperm

Morphology (Teratozoospermia) or any Combination of these. Oligoasthenospermia is a combination of reduced sperm motility and low spermatozoon count.⁴ *Vajikarana* is the specialized branch of *Ayurveda* dealing with *Shukradushti* and *Klaibya*. *Shukradushti* is an acquired quantitative and qualitative abnormality in *Shukra* caused by faulty dietetic, psychological, traumatic factors and chronic debilitating illness⁵ that results the individual becomes *Kleeba* (erectile dysfunction & premature ejaculation) and there is *Aharshana* (decreased sexual desire). *Ksheena Shukra* is included in one of the varieties of *ashtavidha shukradushti*. When both *vata* and *pitta dosha* are vitiated, the quality and quantity of the *Shukra* alters and resulting into *shukradushti* specially *Ksheena Shukra*. *Ayurveda* give emphasis to the treatment of *shukradushti* with *dhatuvridhikara*, *balakara*, *Shukrajanaka* and *Shukrapravartaka* those in-terms of increasing the sperm count and motility by using *vajeekarana dravya*.

CASE STUDY

A 38 year old male patient resident of Udupi district, driver by occupation, moderately build, married for 10 years, attended to OPD of SDMAH, Udupi (OPD NO-308967) with the complaint of **No Issues**. He also had

a complaint of **decreased sexual desire** and **erectile dysfunction** as well as **premature ejaculation**.

His past and personal history was not contributory to the present condition. His Development of secondary sexual characters is normal. He has never suffered from any chronic medical illness, Infections (mumps orchitis, sexually transmitted infections) and genitourinary tract infections. There was no any history of surgical procedures involving the inguinal and scrotal areas (vasectomy, orchiectomy and herniorrhaphy), Drugs and environmental exposures. The physical examination does not show any anatomical abnormalities and there were no signs of inflammation, ulceration or rashes of testes or penis. Laboratory investigations show nothing abnormal. The semen analysis report (06.01.2018) shows that the sperm count was **'few sperms to count and few non motile spermatozoa**.

Based on the history and laboratory investigations, the case of male infertility was diagnosed as Oligoasthenozoospermia decreased number of spermatozoa (Oligozoospermia), decreased motility (Asthenozoospermia), compared to the condition *shukradushti* specially *Ksheena Shukra* and the treatment is planned as mentioned Table 1.

Table1: Planning of Management

PLAN OF THE TREATMENT		
SHODHANA CHIKITSA		
Poorva Karma	Pradhana Karma	Paschat Karma
SNEHNA – Vidaryadi Ghrita (Snehapana For 5 days with a maximum of 250 ml)	VIRECHANA With Icchabhediras 2 tab at 7:30 AM	11 Vegas Peyadi krama For 3 days
SWEDANA - Bhashpa Sweda after Abhyanga for 3 days		
BALAKARA & SHUKRAKARA CHIKITSA	MUSTADIYAPANA VASTI (Yoga vasti pattern) MATRAVASTI (Vrishya Ghrita 70 ml)	

Vasti Karma is the procedure of administration of medicaments through rectal route. Before administration of *Vasti*, *Sthanika Abhyanga* with *Dhanwantarram Taila* and *vastra sweda* was done as *Poorva karma*. *Mustadiyapana vasti* was given in *Yogavasti* schedule (8 days) and it contains *Makshika* (120g) *Lavana* (10g) *Dhanwantarram Tailam* (120 ml), *Kalka* (48g) *Ksheera kashaya* & *mamsarasa* (480

ml) with a total of 720 ml. *Matravasti* is given with *Vrishya Ghrita* (70 ml)

OBSERVATIONS & RESULTS

After Virechana

- There was no much difference found in consistency, volume and liquefaction time in semen analysis report

- There was significant upsurge found in total spermatozoa (from too spermatozoa to see to) 10million/cc and a major difference was found in the motility where from non- motile to 4% actively motile, 06 % sluggishly motile and 90 % Non-motile. There is a great change in the morphology of spermatozoa (85% of Normal forms).

After Mustadiyapana vasti

- The sperm count was increased to 56 Million /cc with an improvement in motility (40% actively motile, 10 % sluggishly motile and only 50 % Non-motile) and significant change in the morphology (86% of Normal forms). [Table.2]

Table 2: Seminal Parameters Before and After Treatment

SEMINAL PARAMETERS				
PARAMETERS		06.01.2018	21.08.2018	22.02.2019
Abstinence		3 days	3 days	3 days
Quantity		1.4 ml	1.4 ml	1.4 ml
Colour & Nature		Whitish & Viscous	Whitish & Viscous	Whitish & Viscous
Liquefaction time		Within 30 min	Within 30 min	Within 30 min
Reaction		Alkaline	Alkaline	Alkaline
Sperm Count		Too few sperms to count	10 Million /cc	56 Million /cc
Motility	Actively motile	-	04 %	40 %
	Sluggishly motile	-	06 %	10 %
	Non motile	Few non motile spermatozoa seen	90 %	50 %
Morphology	Normal forms	-	85 %	86 %
	Abnormal forms	-	10 %	14 %
Pus cells		25-30 / hpf	25-30 / hpf	25-30 / hpf

DISCUSSION & CONCLUSION

According to the data, 10-15% married couples in India face infertility. It is surprising that only 45% of couples visit a doctor when they are trying to conceive⁶. In Oligoasthenozoospermia both less number of sperm and low motility are found. Treatment of Oligoasthenozoospermia should be aimed at to increase sperm count and motility⁷. *Shukradushti* is the causative factor for the infertility. *Ksheenashukra*⁷ is a type of *shukradushti* which can be correlated to Oligoasthenospermia. The treatment of *ksheenashukra* is mainly aims at *Shukrajanaka* and *Shukrapravartaka* in-terms of increasing the sperm count and motility by using *vajeekarana dravya*. *Ayurveda* explains both *shamana* and *shodhana chikitsa*⁸.

The *Agneyaguna* of *Pitta* along with *chalaguna* of *vata dosha* is causing the low count and reduced motility, in *ksheenashukra*. So to treat *ksheenashukra*, the better line of treatment is *Virechana*. *Virechana* is useful in elimination of *pitta dosha* and *vata*

shamana and by its virtue of *Shodhana* property; it clears the *srotas* and improves the *Dhatu Poshana*⁹. Administration of *shukravridhdhikara Aushadha* following *Virechana* gives better result due to better absorption and utilization. *Mustadiyapana Vasti*¹⁰ is said as the king of all *Yapana Vasti* because of its superiority to enhance the status of *Shukra*, *mamsa* and *bala* as well as to promote the all the dhatus. *Madhura Rasa*, *Guru*, *Snigdha Gunas*, *Sheeta Virya*, *Madhur Vipaka*, *Balya*, *Vrishya* and *Shukrala* action of drugs provided a better improvement in sperm count and motility.

Due to improved status of *dhatus* and as well as the action of ingredients showed increased sexual desire, erectile function, ejaculatory function, frequency, duration of coitus, getting an orgasm or sexual satisfaction.

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Annexure - 1

SEMENALYSIS REPORTS	
<i>Before Treatment</i>	
19.05.2012	06.01.2018

After Virechana (21.08.2018)	After Vasti (22.02.2019)
<p>AMRUTHA CLINICAL LABORATORY 1st Floor, Shyam Complex, Opp. Shrinidhi Medical, Manthi Vasthika, Udipi - 570 101. Collection Center at Hag Laith Bldg. (Medical Emporium) K.M. Marg, Udipi. Ph: 8277051341</p> <p>A.R. KINI, M.Sc., DML AMRUTHA, Mysr., Kerala</p> <p>Name: CHANDRAHASS Date: 21-08-18 Age: 40 Yrs. Ref by Dr.: RAMADHVI, MD (AYU) Hospital/Clinic:</p> <p>Collected/Received at: 12:00PM</p> <p>SEMEN ANALYSIS REPORT</p> <p>Colour: WHITISH Nature: VISCOUS Reaction: ALKALINE Liquefaction: WITHIN 30 MINUTES Volume: 1.4 ml</p> <p>Pus Cells: 25 - 30 hpf Sperm Count: 10 million/ml</p> <p>MOTILITY Actively Motile: 90% Sluggish Motile: 06% Non Motile: 04%</p> <p>MORPHOLOGY Normal Spermatozoa: 85% Large Headed: 07% Small Headed: 04% Swollen Neck: 04% Curled Tail: 03% Double Head: 03%</p> <p>1. Three days of abstinence is recommended for good result. 2. Container should be washed & sterilized before use. 3. Sperm count to be performed DIRECTLY into provided container. 4. Potentially sperm count to be observed within 30 minutes of collection and to ensure no delay should not be made to avoid sperm death. 5. Semen samples to be reported preferably for these 3 hrs.</p> <p>ANALYZERS 1. Sysmex SP-100 A (BIOCHEMISTRY) Fully Automated for Hematology 2. E.M. 200 Fully Automatic, Code Check & P.H. 57 & 700000 All Diagnostic & Met source (USA) for Bio-Chemistry 3. Coulter (Met source) for Electrolytes 4. BIO-RAD J. 5700 Fully Automated for HEMO (Clouder) 5. MESA-C (Refractometer) Technology 6. Urine Analyser (Coulter) - L10027 External Quality Assurance Program conducted by CMC, Vellore</p>	<p>AMRUTHA CLINICAL LABORATORY 1st Floor, Shyam Complex, Opp. Shrinidhi Medical, Manthi Vasthika, Udipi - 570 101. Collection Center at Hag Laith Bldg. (Medical Emporium) K.M. Marg, Udipi. Ph: 8277051341</p> <p>A.R. KINI, M.Sc., DML AMRUTHA, Mysr., Kerala</p> <p>Name: CHANDRAHASS Date: 22-02-19 Age: 40 Yrs. Ref by Dr.: RAMADHVI, MD (AYU) Hospital/Clinic:</p> <p>Collected/Received at: 12:00PM</p> <p>SEMEN ANALYSIS REPORT</p> <p>Colour: WHITISH Nature: VISCOUS Reaction: ALKALINE Liquefaction: WITHIN 30 MINUTES Volume: 1.4 ml</p> <p>Pus Cells: 25 - 30 hpf Sperm Count: 55 million/ml</p> <p>MOTILITY Actively Motile: 40% Sluggish Motile: 105% Non Motile: 50%</p> <p>MORPHOLOGY Normal Spermatozoa: 85% Large Headed: 02% Small Headed: 04% Swollen Neck: 03% Curled Tail: 03% Double Head: 02%</p> <p>1. Three days of abstinence is recommended for good result. 2. Container should be washed & sterilized before use. 3. Sperm count to be performed DIRECTLY into provided container. 4. Potentially sperm count to be observed within 30 minutes of collection and to ensure no delay should not be made to avoid sperm death. 5. Semen samples to be reported preferably for these 3 hrs.</p> <p>ANALYZERS 1. Sysmex SP-100 A (BIOCHEMISTRY) Fully Automated for Hematology 2. E.M. 200 Fully Automatic, Code Check & P.H. 57 & 700000 All Diagnostic & Met source (USA) for Bio-Chemistry 3. Coulter (Met source) for Electrolytes 4. BIO-RAD J. 5700 Fully Automated for HEMO (Clouder) 5. MESA-C (Refractometer) Technology 6. Urine Analyser (Coulter) - L10027 External Quality Assurance Program conducted by CMC, Vellore</p>

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