



Case Study

AYURVEDIC MANAGEMENT OF MALE INFERTILITY DUE TO OLIGOSPERMIA AND VARICOCELE: A CASE STUDY

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ABSTRACT

Infertility is defined as the failure of a couple to achieve conception after one year of regular sexual intercourse without any contraception. Male infertility can be defined as any health issue in a man that lowers his chance of impregnating a fertile female partner. Current data reveals that about one third of all infertility cases is due to male factor defect. Oligospermia is a condition of suboptimal concentration of spermatozoa in the ejaculated semen to cause successful fertilization of an ovum. Hence the management of this issue is of utmost importance in the current days. Ayurveda addresses the male factor defects under broad classification of *Ashtavidhasukradushti* in which oligospermia can be correlated to *Ksheenasukra*. A 33yr old male with 3 years of married life diagnosed with oligospermia, increased viscosity of semen and bilateral grade I varicocele and wife aged 26yrs with regular, ovulatory cycles and with apparently no reproductive issues, were treated according to Ayurvedic principles. After *Deepana pachana* with *Pippalyasavam* and *Vicharana snehapana* with *Sukumara ghritha* and *Mahakalyanaka ghritha*, repeated *Virechana* with *Avipathi choornam* was given. *Kokilaksha Kashayam* and *Varanadi Kashayam* was given internally. *Bala thailam* and *Pinda thailam* was advised for external application. Follow up showed improvement in Seminal parameters in terms of sperm concentration, viscosity and resulted in pregnancy. The present case signifies the importance of Ayurvedic treatment in bringing a positive outcome in the field of male infertility.

KEYWORDS: Male infertility, Oligospermia, *Ksheenasukra*, *Virechana*, *Mahakalyanaka ghritha*.

INTRODUCTION

The first and foremost aspect of a human being is to give birth to next generation. Ayurveda, the science of life has given due importance to this process of procreation. Infertility is one of the major issues faced by couples in the modern era.

Infertility is defined as the inability to achieve pregnancy after one year of unprotected coitus¹. Of all infertility cases, approximately 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.

According to WHO, sperm concentration below 15 million sperm/ml is termed as oligospermia. International classification of disease categorization defines sperm concentration below 20 million sperm/ml as oligospermia.

In Ayurveda, the essential factors for conception are mentioned as *Ritu* (reproductive

period) *Kshetra* (female reproductive tract) *Ambu* (nutritional factors) and *Beeja* (sperm & ovum)^[2]. Any abnormality or malformation of any of these has a negative effect on the fertility outcome. Oligospermia is found to have close resemblance with *Shukrakshaya* or *Ksheenasukra*, one of the *Ashtavidhasukradushti* mentioned in the classics^[3].

There is qualitative and quantitative abnormality in *Shukra*, leading to its *Dushti* due to indulge in faulty dietetics, various traumatic & psychological factors and chronic debilitating illness.^[4] *Ksheenasukra*, caused due to vitiation of both *Vata* and *Pitta dosha*^[5] is managed by using *Vajeekarana dravyas* which are *Sukrajanaka* and *Sukrapravarthaka* in nature and have *Dhatuvridhikara* property. The increased pus cells and the abnormal viscosity of the semen report is suggestive of features of *Sukradushti*.

Also the patient is having Grade I varicocele which causes retention of excess *Raktha* in tortuous veins. As a result there is increased transmission of

Ushnaguna to the *Sukradhatu*, declining its formation and quality as *Sukra* is a *Soumyapradhana dhatu*.

Case Report

A couple with c/o inability to beget a child even after a married life of 3 yrs, having unprotected sexual life, attended OPD of GAVCH, W & C Poojapura on 7.10.19. On detailed evaluation of the case, the semen analysis of the male partner aged 33yrs dated on 5.10.19 revealed ejaculated volume 2ml, decreased sperm count of 6.2 million/ml, sperm motility rate of 6%. The sample volume had abnormal viscosity, with liquefaction time of 2hrs, and showed 6-8/hpf pus cells.

Female partner aged 26yrs, reported regular menstrual cycle and did not have any relevant past medical h/o that might affect her fertility status.

On physical examination, the male patient had bilaterally descended testes of normal size and consistency. Palpable tortuous veins were visible in both testes, suggestive of Grade I varicocele confirmed later by scrotum Doppler. Prostrate was normal to palpation. Other general physical examination was non-significant.

Based on the clinical history, physical and lab examination, the case was provisionally diagnosed as Oligospermia with grade I varicocele. From Ayurvedic perspective the same can be equated with *Ksheenasukra*, one among the *Ashtavidha Shukradushti* and the following treatment protocol was adopted.

Initially *Deepanapachana* was done with *Pippalyasavam* 20ml bd for 5 days. Then *Sukumara ghritha* was given as *Vicharana snehapana* in dose of 20gm bd before food for a period of 10 days followed

Personal History

Diet	-	Mixed
Bowel	-	Constipated
Appetite	-	Good
Micturition	-	Normal
Sleep	-	Reduced
Allergy	-	Nil
Addiction	-	Occasional smoking & Alcohol consumption

Ayurvedic Management

Date	Medicines	Dose	Duration
08.10.19	<i>Pippalyasavam</i>	20ml-0-20ml A/F	3 days
11.10.19	<i>Sukumara ghritha</i>	10g-0-10gm B/F	10 days
22.10.19	<i>Virechana</i> with <i>Avipathi choornam</i>	25g with honey	Once in 3 weeks for 3 months
24.10.19 to 24.12.19	<i>Varanadi kashaya</i> tablet	B/F 2 - 0 - 2	2 months
24.10.19 to 24.01.20	<i>Kokilaksha kashaya</i>	90ml bd bf	3 months
	<i>Mahakalyanaka ghritha</i>	5g bd before food	3 months
	<i>Pinda thailam + Bala thailam</i>	External application	3 months

by *Virechanam* with *Avipathi choornam* 25g with honey in early morning. Then *Varanadi kashayam* tablet 2-0-2 before food was given for 2 months and *Kokilaksha kashayam* 90ml bd before food and *Mahakalyanaka ghritham* 5g bd before food was given for a period of 3 months. External application with *Pinda thailam* and *Bala thailam* in equal proportion was advised especially over the genitals. The patient was advised to do *Virechana* with *Avipathi choornam* once in every three weeks.

The following diet and regimens were advised

- Include wheat, milk, milk products, vegetables, fibre rich food and adequate fluid intake.
- Strictly avoid hot & spicy food, alcohol, tobacco & smoking.
- Avoid hot water bath, dark colored tight undergarments, long bike rides.
- Application of cold packs over genitals for short duration.

The follow up semen analysis dated 05.12.19 showed ejaculated volume of 3.5ml, with sperm count 40 million/ml liquefaction time more than 1 hr and normal viscosity. The sample had 20% actively motile sperms and morphologically 20% were normal.

As there is significant progress, the patient was advised to follow the same protocol further. The patient's wife had her LMP on 26.12.19 and she tested positive for UPT on 02.02.20. She consulted an obstetrician and underwent a scan, which revealed SLIUF of 6W 0 Days on 11.02.20 with EDD. 1.10.20. She had an uneventful antenatal period and delivered a male baby of 3.5kg by LSCS on 22.09.2020.

DISCUSSION

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 of sperm) and *Sukrapravarthaka* properties (ejaculation).

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*). 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).

Criteria for Drug Selection

- *Avipathi choorna* is the drug of choice for *virechana* (purgation) as it is the most apt one in *pitta* predominant condition^[6].

- *Mahakalyanaka ghritha* and *Sukumara ghritha* are used for *Vicharana snehapana*.

Mahakalyanakaghritha mentioned in the context of *Unmada* has infertility as one of its indications.^[7] It is *Deepanapachana* (digestive and carminative), *Vrshya* (aphrodisiac) and *Rasayana* (rejuvenative) in nature. Majority of drugs are *Tridoshasamana* (pacify all the 3 humor). *Virechaka* (purgative) nature of drugs like *Haritaki*, *Amalaki*, *Vishala danti* help to remove *Srothorodha*. It causes regulation of *Dhatwagni* and *Bhutagni* (metabolic energy) thus correcting the cellular metabolism, resulting in proper formation of *Uttarotara dhatus* (succeeding tissues) ultimately the *Sukradhatu*.

- *Sukumara ghritha* is *Vatapitta samana* (pacify *Vata* and *Pitta* humor) in nature. The drugs used have *Sophahara* (reducing oedema) *Mutra-virechaneeya* (diuretic), *Raktasodhaka* (blood purifier) properties. *Dasamula* used as *Kashaya Dravya* (decoction) is best *Vatasamaka* (pacify *Vata*). *Trina panchamula* and drugs like *Ashwagandha*, *Satavari*, *Payas*, *Ksheera* and *Guda* are *Brimhana* (nourishing) and have *Sukravardhana* property (increasing semen). *Erandathaila* is best for *Vatanulomana* (pacify *Vata*) and has *Virechana* (purgation) property.^[8]

- *Ghritha* itself is *Madhurarasa* (sweet in taste), *Brimhana* (nourishing), *Yogavahi* (catalytic)

Agnideepaka (carminative) and *Vatapitta samana* (pacify *Vata* and *Pitta*) in nature.

- *Varanadi Kashayam* due its *Kapha medoghna* (decrease *Kapha* humor and body fat) properties helps in reducing inflammation & promotes cellular metabolism.

- *Kokilaksha* is a rejuvenating drug, considered good for men. It has property of increasing *Shukra* (semen) and helps in managing erectile dysfunction. Also due to its aphrodisiac property, improves sexual stamina. *Kokilaksha* is *Vatapittahara* (pacify *Vata* and *Pitta*), *Sothahara* (anti-inflammatory) and *Mutrala* (diuretic) *Amritha* is *Raktasodhaka* (blood purifier) and *Dahaprashamana* (pacify heat). *Pippali* is *Kaphavatghna*, (pacify *Vata* and *Pitta*) *Sothahara*, (anti inflammatory) *Mutrala* (diuretic) and *Rakthashodhaka*^[9] (blood purifier). These properties of the drugs, aids the yoga in managing the symptoms of varicocele.

- *Pinda thailam* and *Bala thaila abhyangam*.

Abhyanga (oil massage) involves applying *Taila* or *Snigdha dravya* (unctuous substance) on any part or whole body, in particular directions, with strokes applying optimum pressure^[10,11]. *Pindathaila* is *Pitta samana* (pacify *Pitta* humor) and *Balathaila* is *Sarvavatavikaranut* (pacify all *Vata* disorders)^[12]. Rubbing & friction involved in *Abhyanga* (oil massage) helps in dilatation of superficial blood vessels, improving venous blood flow and helps in reducing symptoms of varicocele. *Pindathaila* due to its *Sheeta guna* (cold in nature) helps in reducing scrotal temperature aiding in *Sukra* (semen) formation.

CONCLUSION

Infertility is becoming one of the major health concern in the present day life. Male factor defect accounts for a large proportion in such couples, of which oligospermia is the leading cause in about 20-30%. Oligospermia may be multifactorial and an integrated approach through Ayurvedic medication along with dietary and lifestyle modification is found to achieve tremendous result as in this case. Proper *Sodhana* and *Samana* therapies helps in removing *Srothorodha*, pacify the aggravated *Doshas* and promote the process of *Sukrottpathi* leading formation of *Uttama shukra dhatu* which results in conception.

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REFERENCES

1. Charis D. Meletis, Jason Barkar,-Natural ways to Enhance Male Infertility, alternative and Complementary Therapies, February 2004, issue 10(1) page no. 22-27.
2. Srikanthamurthy K. R., Sushrut samhita vol-1, edition 2004, Chaukhamba orientalia Varanasi, Sharirsthana, Chapter 2, Verse 33, Page 26.
3. Yadavji Trikamji, Editor charak samhita of Agnivesha Chikitsasthan: Reprint Ed. Varanasi: Chaukhambha Prakashan, 2011, Chapter 30, verse 154.p.641.
4. Agnivesha, Charaka, Charaka Samhita with Ayurvedadipika commentary of Chakrapanidatta, edited by Vaidya Yadavji Acharya, published by Nirnaya Sagar press, Bombay, 1941, Chikitsasthana 30/135-137; 640.
5. Vaidya Jadavaji Trikamaji Acharya, Sushruta Samhita Sharira Sthana, Chaukhamba Surbharati Prakashana, Varanasi, Reprint 2008, Verse No. 2/4.
6. Vagbhata, Ashtanga Hridayam, with Sarvangasundara of Arunadatta and Ayurveda Rasayana Tika of Hemadri, Chaukhambha Orientalia, Varanasi, 2011, Pp: 743.
7. Madhavakara (2000) Madhava Indiana, 3rd Ed, Translated by Prof.K.R.Srikanta Murthy, Chaukhambha orietalia, 71.
8. Sahasrayogam, Sujanapriya vyakya, edited by K.V. Krishnan Vaidyan and S.Gopala Pillai, Vidyarambam Publishers, Pp 544, Pp.367.
9. Sharma Priyavratra, Dravyaguna Vijyaana, second volume, Chaukhamba Bharti Academy, Varanasi, 13 the edition 1991.
10. Raja Radhakantdev, Shabdhakalpadruma volume. III Varanasi: Chaukhambha Pratishthana; 1984, 641p.
11. Parimala IC. Sankrita English Dictionary. Pandit Publication; 2011, 114p.
12. Shastri A. Susrutha Samhita Vol.I Varanasi: Chaukhambha Surbharati Prakashana; 2008, 75p.

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