“A case report – Ayurvedic management of Asthenospermia.”

Bhavarthe Kavita Baban*1, T. Vishala2

1. PG Final Year Scholar1
2. HOD & Guide2

Stree rog and Prasutitantra Dept., Yashwant Ayurvedic College
Post Graduate Training & Research Centre, Kodoli, Kolhapur, Maharashtra.

*Corresponding Author – sima2ba@gmail.com

Abstract

Failure of conception and failed to reproduce is a curse in the society, the couple faces a lot of mental agony. A case of Asthenospermia treated with Ayurvedic management with truthful result is presented here. The case of infertility, married since 2 years having age of 29 and 21 years of male and female partners respectively. They were having H/O using contraceptive for 6 months after marriage. Thereafter the couple are not using any contraceptive for 1 year. Failure to conceive within 1 year she came for Ayurvedic treatment. After investigating the couple, it was found that clinically with follicular study of female partner was WNL, while semen analysis of male partner shows Asthenospermia. Thereafter male partner was given Ayurvedic treatment for 3 months, which caused increased in sperm motility and after 7 months the couple get conceived.

Keywords
Shukradushi, Asthenospermia, ShadBhav, Vajikarana, Kaibya

Introduction

Infertility is defined as the inability to conceive after 12 months or more of unprotected sexual activity. Infertility affects 10-15% of couple and about 20-30% of infertility is caused by male factors. Asthenospermia is a common cause of human male infertility characterized by reduces sperm motility, that is less than 40% or less than 32% with progressive motility1.

Charaka described that there are six factors which are unitely responsible for appropriate development of an embryo. He also describes the reason for similarities between offsprings’ and parents’. Heriditory factors are known as shadbhava samudaya.

1) Matrija – Maternal factors
2) Pitrija – Paternal factors
3) Atma – Atma (Soul)
4) Satmyaja – (Wholesomeness)
5) Rasaja-(Nutritional factors)
6) Sattvaja- (Psych/Mind)2
Above six factors are collectively responsible for the development of the embryo. Not single factors can form and develop embryo properly. Following body parts or organs develop from respective bhav. and here we discussed about Pritija Bhav i.e. Male infertility.

Ayurveda, the first codified medical system, defined male infertility at different contexts with different words such as vandhya, kleeba, anapathya. Similarly, retas (the ejaculate), virya (the factor that provides virility), and shukra (which is white) are the words used for semen. Among them, retas (the ejaculate) is the most suitable and appropriate term for semen.

Upon microscopic examination, a low sperm count with low motility indicates a greater likelihood of vata vitiation though this can be found with pitta vitiation as well. A normal sperm count with low motility is more commonly a sign of kapha imbalance.

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), Sperm Vitality (Necrozoospermia), Morphology (Teratozoospermia) or any Combination of these. Oligoasthenospermia is a combination of reduced sperm motility and low spermatozoon count. 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 illness, 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 dhatuvriddhaka, balakara, Shukrajanaka and Shukrapravartaka those in-terms of increasing the sperm count and motility by using Vrishya and Vajeekarana dravya.

Aim and Objective

To enlighten hidden treasure of Ayurvedic treatment principle in present scenario diseases.

Materials

Classical text of Ayurveda and modern texts, various article related to present scenario diseases.

Case Report

A 29 year old man was reported to YAC on with primary infertility since 1 year duration. Physical examination revealed normal vital sign with a BMI 22.5 kg/m2 Normal secondary sex characters. No any past history of major medical illness, No any habits. 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, orchietomy and...
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 (22.12.2017) shows that the sperm count was few non motile spermatozoa..

**Semen Analysis:**

<table>
<thead>
<tr>
<th>Semen Analysis</th>
<th>Before Treatment</th>
<th>After Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(22.12.2017)</td>
<td>(20.03.2018)</td>
<td></td>
</tr>
<tr>
<td>Total sperm count</td>
<td>90 million/ml</td>
<td>110 million/ml</td>
</tr>
<tr>
<td>Active motile</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Sluggishly motile</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Dead sperms</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Pus cell</td>
<td>15-16</td>
<td>5-6</td>
</tr>
<tr>
<td>Transparency</td>
<td>Hazy</td>
<td>Greyish-white</td>
</tr>
</tbody>
</table>

**Treatment**

The following oral medicines were administered for 3 months
A combination in churna (powder ) form

1. Shweta musali churna 30gms
   +
2. Bhringraj churna 30gms
   +
3. Gokshura churna 30gms =1 table spoon twice daily with khadisakhar after food
   +
4. Kapikachhu churna 60gms
   +
5. Trivanga Bhasma 5gms
   +
6. Swarnamakshik Bhasma 5gms

**Assessment criteria**

1. Sperm cell count million/ml.
2. Motility of sperm cells
3. Morphology of sperm cells
4. presence of pus cells

**Result**

Total duration of treatment was 2 months .
Initial sperm count 90 million / ml and motility 30%. After treatment count was 110million/ml , 70% motile sperm . Being “Garbhadharana” occured 7 month after treatment.

**Discussion and conclusion**

The inability to conceive a child is most viewed as a private matter, but public health perspective and still can contribute greatly to out knowledge about infertility and the development of effective and national public policy for prevention access to health care, and regulation of new technologies.

Infertility affects as essential 15% of couple globally amounting to 48.5 million couple . Male are found to be solely responsible for 20-30% of infertility cases and contributes to 50% of cases overall .

In modern view, there are three main parameters that are looked at in a semen sample to determine the fertility.

1. count
2. Morphology
3. Sperm Motility

Sperm motility is the ability of the sperm to move for conception to occur, the sperm need to swim forwards the egg and fertilise it before it disintegrates when the
sperms that can move efficiently are less than 32% is diagnosed as Asthenospermia.

According to Ayurveda, The Agneyaguna of Pitta along with chalaguna of vata dosha is causing the low count and reduced motility, in ksheenashukra Ksheena Shukradusthi involve both quantity and quality of the sperm i.e. Oligospermia and Asthenospermia and The properties of Dravya given as below also Manda Guna of Kapha get increased in Asthenospermia. Here both, Ksheena and Kaphaj Shukradusthi lakshana seen hence we can be correlate Asthenospermia with Vatpradhan pittakaphanubandhakn. Therefor need to administered dravya with having properties Vrishya, Rasayana. Shukrajanan along with Tridosh shamak.

<table>
<thead>
<tr>
<th>Dravya</th>
<th>Rasa</th>
<th>Guna</th>
<th>Virya</th>
<th>Vipak</th>
<th>Karma</th>
<th>Doshaghnata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shweta Musali</td>
<td>Madhur Tikta⁷</td>
<td>Guru, Snigdhha</td>
<td>Shita⁶</td>
<td>Madhur</td>
<td>Vrishya Vajikaran⁵ Rasayan⁷</td>
<td>Vata-Pitta shamak⁷</td>
</tr>
<tr>
<td>Bhringraj</td>
<td>Katu Tikta⁸</td>
<td>Laghu, Ruksha⁸</td>
<td>Ushna⁸</td>
<td>Katu⁸</td>
<td>Vrishya Rasayana⁹</td>
<td>Vata Kapha shamak</td>
</tr>
<tr>
<td>Gokshura⁰</td>
<td>Madhur</td>
<td>Guru, Snigdhha</td>
<td>Shita</td>
<td>Madhura</td>
<td>Vrishya Rasayana</td>
<td>Vata Pitta Kapha shamak</td>
</tr>
<tr>
<td>Kapikacchu¹¹</td>
<td>Madhura Tikta</td>
<td>Guru, Snigdhda¹³</td>
<td>Ushna</td>
<td>Madhura</td>
<td>Vrishya Vajikaran Shukrakar¹²</td>
<td>Vata Pitta Kapha shamak</td>
</tr>
<tr>
<td>Trivanga Bhasma¹⁴</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>ushna</td>
<td></td>
<td>Vrishya Vajikaran</td>
<td>Vaat Pitta Kapha Shamak</td>
</tr>
<tr>
<td>Swarnamakshika Bhasma¹⁵ ¹⁶</td>
<td>Madhura Tikta</td>
<td>Kashaya</td>
<td>Laghu</td>
<td>Shita</td>
<td>Madhura</td>
<td>Vrishya Rasayana</td>
</tr>
</tbody>
</table>

**Mode of Action**

**Shweta musali** improves male sexual health, semen and testosterone, which are the nearest equivalents of *shukradhatu* contains saponin and stigmasterol, which are hypothesized to stimulate the process of spermatogenesis and have a role in increasing the volume of semen.¹⁷

**Kapikacchu** is one of the most powerful Rasayanas in Ayurveda. Kapikacchu is a nutritive tonic commonly used in Ayurveda as an aphrodisiac and to support proper function of the reproductive system. It increases sexual energy and strengthens and tones the reproductive organs. In men, kapikacchu supports potency, stamina and control. It increases the sperm population by improving the testosterone level.¹⁸
**Gokshura** enhance the hormone levels to within a normal range. It can increase the testosterone by increasing the luteinizing hormone and the gonadotropin-releasing hormone. This hormone is effective in building muscles as well as improving fertility and libido. Gokshura has Madhura rasa (sweet), Guru and Snigdha guna (unctuous and heavy quality), Sheeta Virya (Cold in Potency), Vrishya (Aphrodisiac), Rasayana (Rejuvenator), Brimhana (Nourishing therapy), and Vatapittahara properties. Vatapittahara Karma does the Sampapti Vighetata in the Kshina Shukra, as it is a Vata- and Pitta-predominant disease. However, Madhura Rasa, Snigdha, and Guru Guna increase the Shukra Dhatu qualitatively and quantitatively. Gokshur It also increases the production of Testosterone in another natural way. Tribulus leads to the production of the luteinizing hormone (LH). When the LH levels are increased, the natural production of testosterone also increases. LH is a hormone that also deals with sex drive. LH has been used to increase fertility and helps to relieve impotence.

**Bringraj** having all properties which are favourable for Shukra, by Katu and Tikta guna, Vaatshaman occurs

**Trivanga Bhasma**, a trimetallic compound, is an important widely used ayurvedic drug which find uses in the treatment of various diseases such as Napunasakta, Prameha, Ikshumeha, Vandhyatva, Swetapradara, Vata-Pitta dosa and as Shaktivardhaka. It contains oxide of Lead, Tin, and zinc as major elements and some other minor elements oxide like Si, Fe, Al, Cu, Ca, K, MG etc. It also contain some other compound like metallic phosphate, sulphate etc. In different clinical researches the effect of Trivanga Bhasma is evaluated for Shukrajanan effect.

**Swarnakshik** having properties of Vrishya, Rasayana mentioned in Ayurveda science.

Ayurvedic medicine deals with infertility by detoxification and dosha cleaning. It prescribes herbs to reduce stress, build immunity and rejuvenate the core tissue and dhatus such deep nourishment helps the body make healthy and vital sperm.

The formation of shukra dhatu depends on a long chain of metabolic processes starting from digestion assimilation leading to creation of Rakta, Mamsa, Meda, Asthi, Majja and lastly the shukra dhatu. The health of this dhatu is affected by the well being of other Dhatus. When it doesn’t get optimum nutrition due to factors like an unhealthy life style, eating junk food, poor digestion that create toxins in that body which affect the reproductive system.

In the present study we applied Ayurvedic principle to the male patient with problems of infertility mainly due to Asthenospermia. We found that after completion of the proper treatment based on Ayurvedic principle these was significant improvement in most of the semen parameters such as total sperm count sperm motility.

**References**

1. WHO, Global prevalence of infertility, infecundity and childlessness: http://


13. Prof. Siddhinandan Mishra, Bhaishjyaratnavali with Hindi Commentary Siddhiprada,


16. Ayurved Formulation, Pisthi and Bhasma Article by Dr Jagdev Singh Published on March24,2016.

17. Clinical evaluation of root tubers of Shweta Musali (Chlorophytum borivilianum L.) and its effect on semen and testosterone by Sudipta Kumar Rath and Asit Kumar Panja ; 2013 Jul – Sep ; 34(3): 273-275 PMCID PMC3902593 ;PMID 24501522


Conflict of Interest: Non
Source of funding: Nil

Cite this article: “A case report – Ayurvedic management of Asthenospermia.”

Bhavarthe Kavita Baban, T. Vishala