

**A CASE STUDY ON THE EFFECT OF BASTYANDA BASTI IN SHUKRAKSHAYA
W.S.R. TO AZOOSPERMIA****Dr. Anjana Saxena*¹ and Dr. Sujata Kumari²**¹Reader, Department of Prasuti Tantra evum Stri roga, RAC, Varanasi.²Junior Resident, Department of Prasuti Tantra evum Stri roga, RAC, Varanasi.***Corresponding Author: Dr. Anjana Saxena**

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ABSTRACT

Infertility is defined as the inability to conceive after 12 months of unprotected coitus. It affects up to 15% of reproductive-aged couples worldwide. According to World Health Organization estimate the overall prevalence of primary infertility in India is between 3.9 to 16.8%. The major focus of infertility in the past has been the female patient but with the advancement of diagnostic technology, it was found that males are also responsible for infertility. Out of many causes of male infertility Oligospermia and Azoospermia are the leading causes. This can be described as shukra-kshaya in terms of ayurveda, it could be due to various causes like age, stress, disease, over exertion which causes emaciation, fasting and even excessive coitus. Acharya Sushruta explains in detail about the factors absolutely necessary for conception (garbha-sambhav samagri) - ritu (fertile period/ovulation), kshetra (healthy reproductive system), beej (healthy ovum and sperm), ambu (nourishment). Abnormality of any of these factors can lead to infertility. In the present case, a couple who has been married for last 5 year visited PTSROPD of RAC, Varanasi with the chief complaint of want issue. They were previously taking allopathic treatment and had undergone Intra-uterine Insemination three time (once in 2019 and twice in 2021) but could not achieve pregnancy. On the basis of patient's previous report, the male partner was diagnosed with Azoospermia. Bastyanda basti (uttar basti) was planned and ultimate result i.e., conception was achieved.

INTRODUCTION

A couple may be considered as infertile if not conceived even after one year of regular sexual intercourse without any contraception. In 40% of infertility cases, it is due to male sexual dysfunction, due to the factors like Oligozoospermia, Asthenozoospermia, Azoospermia etc. For successful fertility sperm count should be 40 mill/ml or more but studies have shown that if sperm cells are having good progressive motility besides of less sperm count (even less than 10 million/ml), there is probability of conception. Hence, it can be concluded that a good progressive motility of the sperm is more important than the total count, 32% of total count. Low sperm motility is the main cause of male infertility and male factor is responsible for 40% of infertility cases. Healthy sperm should be able to travel through the female reproductive tract to reach the egg. Sperm motility is an important factor for successful conception and low sperm motility leads to infertility. At least 4% of the total sperms should be of normal morphology. The incidence of infertility is increasing in developed and developing countries due to various causes, out of these many are preventable. It has become quite common in India due to change in lifestyle and behavioral aspects. More than 90% of male infertility cases are due to low sperm counts, poor sperm quality. "Male factor" infertility is seen as an alteration in sperm concentration and/or motility and/or

morphology in at least one sample of two sperm analyzes collected 1 and 4 weeks apart.

According to Ayurveda, Shukra is the 7th dhatu of the body. For a good quality shukra, formation and nourishment of each previous dhatu is important i.e. from rasa rakta mamsa meda asthi majja and shukra, the healthy development of previous dhatu (in order) will result in healthy later dhatu. In this case, the shukra kshaya means decreased sperm count. Shukra dushti of 8 types has been explained by acharya charak and decreased sperm count is one of its types. The siddhanta of Charak – "sarvada sarva bhavanam samanyam vridhikaranam..." which means that use of drugs/food of the similar properties will result in increase of the similar dosha, dhatu, mala and aja (goat) has been described as shrotoshudhikara by acharya bhavprakash and many acharyas have mentioned it to be sharir dhatu samanya and anabhishtyandi which means that the corresponding part of the goat taken will cause the vridhhi of the corresponding part in human. This is the logic why bastyanda basti has been given to this patient. The testes of goat were taken and cooked in pure cow ghee; this ghee was used to give uttar basti 40-50 ml. A total no. of 8 basti's were given. The before and after semen analysis have been attached below.

UTTAR BASTI

It is the oil/decoction enema administered through the urethra. It is one among the panchkarma treatments and it targets the diseases of urinary and reproductive systems. It can be given in two passages urethra of male and female and the vaginal route in female. It is given through the utara marga i.e. the opening present in the anterior part of body. Uttar means best, due to the benefit it imparts it is called uttar basti.

Method of administration

Purva karma- the rogi roga pariksha is done, according to the prakriti of the patient the dose of sneha/decoction is decided. According to acharya shushruta the quantity of sneha administered should be 4 tola which is approximately 48 gms and 1 prasruta which is approximately 96 gms.

The medicine should be kept ready. The kwatha/oil should be warm and filled in a basti putak. In case of any emergencies, medicines should be kept beforehand like local analgesics oils, suppositories, medicine to bring out the oil/kwatha if they do not come out in time.

Sterilization of all the equipment. Pradhan karma-

The patient is made to sit comfortably in a chair. Sthanik abhyanga and swedana/ local massage and sudation of the abdomen, groins and thighs should be done. Acharya charak indicated to take bath before basti and food mixed with mamsa rasa and milk and Acharya sushruta indicated to use yavagu mixed with ghee and milk before administration of uttar basti. According to acharya Vagbhatta 2/3rd asthapana basti should be given to purify the mala marga.

1. The patient is advised to empty the bladder and rectum.
2. Vitals are recorded.
3. Pubic hair to be removed and painting of the part using disinfectant or panchwalkalkwatha.
4. Position for uttar basti- the patient should be seated on a knee-high, soft seat in a comfortable position. His phallus should be massaged and made erect.
5. Shalaka smeared with ghrita is inserted into the urethra. Basti netra should be introduced according to the size of phallus without any obstruction.
6. In males, the length of basti netra to be introduced in urethra is 12/14 angula.
7. If penetrated too far, it may result in injury to the urinary bladder.
8. Keeping in mind all the basti data dosha, basti netra-putak-dravya dosha, basti should be administered properly. After that the basti netra is withdrawn.

PASCHATA KARMA

1. The pratyagaman kala of uttar basti is 100 vak matra approximately 32 seconds.
2. In the evening, considering the dosha yusha, yavagu or mamsa rasa is given to the patient.
3. If the sneha basti doesn't return, one can wait overnight and if it doesn't return, administration of

shodhan varti is done.

4. According to Acharya Sushruta, if the basti doesn't return and there is no complication one can neglect it but if there are updrava present then teekshna uttar basti is given to the patient.

MODE OF ACTION

The probable mode of action of uttar basti can be explained it has a cleansing action. It clears the genital tract and provides nutrition to genital organs and restored normal function. The lower abdomen and groins are the seat of apana vayu.

Apana vayu deals with the excretion/secretion of urine, faeces, foetus, menstrual blood and sperm. If it is vitiated, this disbalance will disturb the normal physiology of the reproductive organs too. Vyaan vayu which is responsible for distribution of nutrition (ahaar rasa) throughout the body and its circulation. Its vitiation will cause disrupted distribution of nutrition to the dhatus of body causing improper sperm formation. Sneha used in uttar basti will directly instil in the reproductive system and will show maximum absorption as it will not have to go through the first pass mechanism.

The Lukewarm oil or ghrita used for uttarbasti enhances blood circulation of and causes better absorption of drug due to suskshma guna of Sneha. Ghrita has a special property called 'sanskarsya anuvartanat' which means that when ghrita is mixed with other drugs it will add the qualities of the drugs added to it without losing its own qualities. Due to sukhshma guna of Sneha, it enters the micro channel and by snigdha guna it pacifies vata. Due to this property, the drugs used for uttarbasti mostly prepare with oil base. It shows Uttar basti have good efficacy to normalise vitiated vata.

PATIENT'S DETAIL

A male patient of age 28 years presented to PTSR OPD, RAC Varanasi in February 2022, with the chief complaint of want issue for last 5 years. On the basis of patient's complaints and semen analysis reports patient was diagnosed as Azoospermia and shukra kshaya/beejoghata janya klaibya according to Ayurvedic view.

H/O present illness- According to the patient he has been married for past 5 years and his partner has not conceived once in this duration.

His partner (Mrs. xyz) has also consulted gynaecologist in past, all her reports are normal. Her USG has no significant finding. Her HSG shows bilateral patent tubes.

H/O past illness - No H/o any major illness in the past.

N/H/o DM, HTN, Thyroid disorder, TB, Mumps No H/o Trauma, No/H/o Pelvic Surgery
He did not have any kind of allergies with respect to food and medicines.

Personal History

- Diet: Mixed
- Addiction: None
- Sleep: 6-7 hours/Day (Undisturbed)
- Occupation: business
- Bowel Habits: Regular 1time/day
- Micturition: 4-5 times/day

General Examination

- Built: normal
- Gait: Normal
- Clubbing/ Cyanosis/ Icterus/ Edema/
- Lymphadenopathy: Absent
- Pallor: absent

Systemic Examination

- CVS: S1, S2+, No murmurs.
- RS: NVBS, B/L Air entry equal, NAD
- CNS: Higher mental functions were intact.
- Sensory and Mental functions: Normal.
- P/A: Soft, Non-tender, No organomegaly on palpation.

Vital Signs

- Pulse Rate: 78/min (With normal Rhythm and Volume)
- Weight: 68kgs
- Respiratory Rate: 16times/min
- Blood Pressure: 110/70 mm of Hg
- Temperature: 97.6 F

AYURVEDOKTA PARIKSHA**Asthavidha Pariksha**

- Nadi: 78/min (vataj nadi)
- Mala: Regular 1time/day (No vit vibandha; Prakruta Varna, Gandha).
- Mutra: 5-6time/day (Prakruta Varna, Gandha)
- Jiwha: Niraam
- Shabdha: Prakruta, spashta
- Sparsha: samsheetoshna
- Drika: squint in left eye
- Akrti: Madhyama

Dashavidha Pariksha

- Prakruti: vata-pittaj
- Vikruti: Dosha- Vata, Pitta Dushya- Rasa, Majja, Shukra
- Sara : Madhyama
- Samhanan : Madhyama
- Pramana : Madhyama
- Satmya : Madhura, Lavana, Katu Rasa
- Satwa : Madhyama
- Ahara shakti : Abhyavarana Shakti : Madhyama Jarana Shakti : Prakruta
- Vyayamashakti : madhyama
- Vaya : Madhyama

INVESTIGATIONS**Semen Analysis: On 02/11/2021 (before treatment)**

Sperm Count: NIL, Sperm Motility: NIL WBC – 1M/ml
 Impression – Azoospermia, Hypo-spermia CBC (10/12/2021) – Hb: 16.3g/dl, NAD
 Sr. Testosterone – 476.82ng/dl

Semen analysis: On 25/05/2022 (after treatment)

Sperm count: 6 M/ml, PH-7.5, rapid progressive motility: 20%, nonprogressive: 20%, immobility: 40%
 Abnormal forms – head defect: 4%, mid piece defects: 0%, tail defects: 6% Pus cells: 1-2/hpf, epithelial cells: occasional, RBC's- nil, bacteria-WNL

Semen analysis: On 21/06/2022 (after treatment)

Sperm count: 8 M/ml, PH- 7.5, rapid progressive motility: 40%, nonprogressive: 15%, immobility: 30%
 Abnormal forms – head defect: 5%, mid piece defects: 5%, tail defects: 10% Pus cells: 30-40/hpf, epithelial cells: occasional, RBC's- 0-1/hpf, bacteria- +

The following treatment was given to the patient:

1. Veerbahuti churna – 250mg

Vanga bhasma - 250mg	} twice a day
Makardhwaja - 250mg	
Kapikacchu churna - 500mg	
2. Arogyavardhini vati 2 TDS
3. Pushpadhanva rasa - 125mg

Abhrak bhasma - 250mg	} twice a day
Ashwagandha churna - 500mg	
Shunthi churna - 500mg	
Vidarikand churna - 500mg	
4. Chandraprabha vati 2BD
5. Erand tail 20 ml HS and naabhipurana

Along with this matra basti and uttar basti with bastyanda ghrita was given to the patient.

Matra basti in amount of 50 ml was given to the patient for 15 days in 2 sittings with a gap of 1 week and uttar basti in amount of 30 ml, for 4 regular days with a gap of 3 days and 3 sitting of uttar basti was given.

His wife's UPT came positive on 21/06/2022 and her recent USG has been attached below.

Conclusion- Infertility is a matter of concern for a family. Now-a-days many couples are facing infertility

but it can be of reversible or irreversible nature. In reversible cases, the necessary approach should be taken and in irreversible cases, one should be counselled and other alternatives should be advised. To be parents and enjoy parenthood is a blessing. Infertility causes more psychological stress and even disrupts marital harmony. Along with treatment, counselling of the couple is much needed in today's time.

Male infertility is defined as the inability of a male to make a fertile female pregnant, also for a minimum of at least one year of unprotected intercourse. The male is solely responsible for about 20% and is a contributing factor in another 30% to 40% of all infertility cases. As male and female causes often co-exist, it is important that both partners are investigated for infertility and managed together. Overall, the male factor is substantially contributory in about 50% of all cases of infertility.

There are several reasons for male fertility to occur, including both reversible and irreversible conditions. Other factors that could influence each of the partners could be their age, medications, surgical history, exposure to environmental toxins, genetic problems, and systemic diseases, certain jobs. The key purpose for evaluating a male for infertility is to identify his contributing factors, offer treatment for those that are reversible.

Male Infertility is mainly discussed under the heading of *Klaibya* and *Purusha Vandhyatwa* with some scattered references relating to the symptoms in *Shukragatavata*, *Shukravrutavata*, *Shukra Kshaya* and *Sama Shukra* conditions.

However, after the results of this case, it can be concluded that the *bastyanda basti* has proved to be very efficient in cases of *Azoospermia* and *Progressive Oligo-asthenozoospermia*. It not only improved the sperm count but also gave the desired result i.e., pregnancy. We need more extensive studies and greater span of time whether ultimate goal of *Vajikarana* i.e., conception is achieved in all cases of male infertility through this line of treatment. The present case study highlights the efficacy of *Bastyanda* use. But study on a larger sample size is required.

Ayurveda is one of the world's oldest holistic healing systems. It is based on the belief that health and wellness depend on a delicate balance between the mind, body and Spirit. The primary focus of Ayurvedic medicine is to promote good health, rather than fight disease. Fertility problems are increasing these days for many young couples. There are many factors which account for this like Lifestyle, delayed marriage, diet, etc. But Ayurveda not only does explain how to increase fertility with herbal supplements, but it also focuses on how to have healthy children.

For a pregnancy to be healthy and successful, a couple needs to take care of the following four essential factors:

1. Ritu (ovulation)
2. Kshetra (healthy reproductive system)
3. Beej (healthy sperm and ovum)
4. Ambu (nourishment)

Reproductive health in both men and women depends on the health of the reproductive tissue or *shukra dhatu*. In women, *shukra* creates the ovum as part of the monthly cycle, and in men, the semen is formed due to sexual stimulation. The *shukra* is created as part of a long chain of metabolic transformations. It starts with the digestion of food, then goes on to the transformation of food to nutrient fluid, blood, muscle, fat, bone, bone marrow, and finally, to *shukra* tissue. Healthy *shukra* tissue, then, according to Ayurveda, depends on the health of all the other tissues in the body.

Goat has been described to have qualities like- *guru*, *snigdha*, *laghu vipaka*, *tridosha nashak*, *avidahi*, *ruchikara*, *peenas nashak*, "*dehadhatusamaanatvaad*", *anabhishtyandi*, *deepanam*.

Dehdhatusamaanatvaad means that *dhatu* of goat have similar qualities like *dhatu* in human body. This is based on the *Siddhanta* - "*Sarvadhya Sarvabhavanam Samanyam Vruddhikaaranam*". Based on this, there is reference in *Charaka Samhita* *sutra sthan 1/44* like *Rakta Raktena*, *Mamsam Mamsena*. In the same way *Shukram Shukrena* in which testicles and semen of some animals and birds were used as *Shukra Vruddhikara Dravya* in old days. (Eg: *Nakra Retas* acts as *Shukra Vruddhikara Dravya* if taken orally). *Basta* means *Aja* (Goat) and *Anda* means *Testicle* i.e., we have used Goat testicle for therapeutic purpose in male infertility.

CONCLUSION

Nidan Parivarjan is the first step towards *chikitsa* of any disease. *Shukra* has an important functions, *Shukra* provides *Dhairya*, *Prasannata* (happiness), *Bala* (strength), *Praharsh* and *Bija* for *Garbhutpatti*. Due to modern life style *Dhatu poshan* gets vitiated. The result of *Dushitdhatuposhan*, *Shukra dhatu* is not nourished in proper way that is quantity and quality which leads to *Shukra kshaya*. It reflects in following symptoms of *Shukra kshaya* are *Dourbalya*, *Pandutva*, *Medhravedana*, *Vrishanvedana*, *Shukra avisarga*, *Chirat praseka*, *Maithuna ashakti*. Also, the qualitative and quantitative vitiation of *Shukra dhatu* results in infertility. The loopholes can be fixed if identified timely.

"*Sarvadhya Sarvabhavanam Samanyam Vruddhikaaranam*"- means after proper *rogi-roga pariksha* and to use the drugs of the same qualities will result in increase of the affected *dhatu*. Hence, the testes of the goat were used.

REFERENCE

1. <https://www.ncbi.nlm.nih.gov/books/NBK562258/>

2. <https://www.medicalnewstoday.com/articles/324821#improving-sperm-counts>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4649578/>
4. <https://www.ncbi.nlm.nih.gov/books/NBK562258/>
5. <https://www.jaims.in/jaims/article/view/391>
6. Charaka Samhita, Sushruta Samhita