

Baladiyapana Basti in Sukra Kshaya W.S.R Male Infertility: A Case Study

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ABSTRACT

WHO (1976) has estimated incidence of the most global infertility as 16.7%. Oligoasthenozoospermia is one of the most common causes of male infertility. It is an alteration that involves two semen parameters commonly known as decreased sperm count and reduced motility of sperms. In Ayurveda, it can be correlated with Vataja Shukradusti in which Shukra dhatu is quality and quantitatively depreciated.

This study attempts to explore the effect of Baladiyapana basti on Vataja Shukradusti (Oligoasthenozoospermia). In this case study, 32yrs old male patient visited Panchkarma OPD, R. P. Karadi Ayurvedic Hospital, ILKAL, Karnataka with the reports of low sperm count and reduced sperm motility, therefore Couple can't Conceive. He was treated with Baladiyapana Basti for 15 days. This treatment yielded improvement symptomatically as well as in semen analysis.

KEYWORDS: Male Infertility, Vataja Shukradusti, Oligoasthenozoospermia, Baladiyapana Basti

INTRODUCTION

Making query about the real nature of śukra, the disciple of Ātreya commented that the śukra is composed of four proto elements.

1. “Śuklayati tyjāyati śuklam rejatam śuklam veeryam”
(Krishna Dhātupātha 9/68)
2. “Āharasya param dhāman śukram tadrakshya ātmanam” (Ca.Ni. 6).

In the explanation regarding this, perceptor Ātreya states that śukra is made of vāyu, agni, prithvi and ambu in the state of their excellence. All these factors individually share one fourth of the attributes of each of the mahābhootas.

Acharya Charaka mentioned about the types of klabhya, and Vandhyatava separately in sutrasthana and Sharirshatana respectively.

चत्वारि क्लेब्यानीति बीजोपघाताद्धवजभङ्गाज्जरायाः
शुक्रक्षयाच्च (५)

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“Chatvari beejopghatatdhawjhangajarayashukrakshya”
(Ca.su 19/5). *klaiyanti*

Reto dosha

Retas refers to sperm^[5] so various clinical conditions in which sperm is vitiated can be denoted as common term *reto dosha* (Sperm disorders) such as oligospermia, azoospermia and sperm dyskynesia. Sub classification of *reto dosha* has been done on any alteration in physical characteristic of *retas* with impaired spermatogenesis and impaired sperm emission.

The four types of impotencies are explained as Bhejopghataja (due to affiliation of sperm) Dhawjabhangaja (due to erectile dysfunction) Jaraja (old age) and Sukraskhayaja (due to deminution of semen). Classical Ayurvedic Literature Charaka Samhita The detailed description of śukra is available in this prime classic.

Śukrakshaya lakshanas¹, śukrapradoshaja vikāras², different types of napumsaka³, general nidānas of klaibya⁴, specific nidānas⁵ and its management⁶ etc are explained in detail. Charaka has given much importance to Vājeekaraṇa which is justified by inclusion of one separate chapter with four 'pādas' in cikitsāsthāna. He has devoted a special chapter for explaining merits and demerits of vāta⁷. The chapter is an ideal example of symposium held in ancient days and the summary of the proceeding is given nicely. Apart from the properties, locations and functions vitiated symptoms are detailed in different chapters. Gatatwa concept of vāta is presented in the cikitsāsthāna – 28th chapter and in this śukragatavāta lakshanas and treatments are suggested. The last chapter of Carakasamhita⁸ is enriched with description of varieties of yāpanavasti which are having multiple advantages.

In Susruta Samhita, acharya Susruta also explained the sukra and its disorders in detail. He attributed the properties of dhairyā, cyavana and preeti to the śukradhātu⁹.

Different śukradushti lakshanas and their treatments¹⁰ are explained. The vitiation of vyāna and apāna are explained as responsible for the śukradosha¹¹. Śukragatavata laksanas and treatments are described. But no description regarding sukravṛta vāta is available in Suśruta samhita. Suśruta explained vātavyādhi in the first chapter of nidāna. Mādhava nidana 22nd chapter of Mādhavanidana deals with the vātavyādhinidāna. Śukragatavāta lakshanas were explained in it. Mādhavācharya has followed Caraka in the descriptions. Ācārya Śārangadhara has made certain distinct advances in the field by dividing the drugs acting on śukra as śukrala, śukra pravartaka, śukra rechaka, śukrastambhaka and śukra soshaka. Jāteephala (M.fragrans) is exemplified as śukrastambhaka. Śārngadhara explained 'nābhi' as the sthāna of prānavāyu. Bhāvaprakāśa Seven types of klaibya are explained in the Bhāvaprakāśa along with their management. in śukrakshya should be aimed vrishya, balya, vātahara, medhya and śukrastambhaka properties. Among pañchakarmas vasti is an ideal choice¹² as it controls vāta at its own site.

Aims and Objectives

- To study the semenogram pattern in the patients of sukradushti, i.e Oligoasthanozoospermia.
- To study effect of Baladiyapana Basti and Vajeekaranyogain their combined regimen in patient of Sukradusti.
- To compare the effect of Baladiyapana Basti (Ca. Si. 12/9) & their combined regimen in the patient of sukradusti.

Infertility burning issues now a days because of improper lifestyle. In siddhi sthana, Acharya charaka explained Basti as "ARDHA CHIKISTA". Basti is the major therapy among snehadi karma as it is combination of different drugs and does samshodhan, samshaman, sangaharana of dosha.¹³ Ayurveda put forwards the concept of Ritu, Kshetra, Ambu, Beejasuddhi, Ahara, Vihar, Achara Rasayana, Rasayan and Vajeekarana. These are unique concepts which contributes major role in management of infertility. It is need of time to categorize evaluate the efficacy of treatment especially panchakarma with respect to various factors of sinfertility¹³.

Oligoasthenozoospermia and anxiety, forms a vicious cycle, resulting in male infertility. The signs and symptoms of oligoasthenozoospermia can be compared with *Kshina shukra* of Ayurvedic classics. . The patient with low sperm motility and volume was subjected to Ayurvedic management protocol of initially Counseling, followed by *Shodhana* treatment and then administration of *baladiyapan basti* for 15 days. A marked improvement was observed in seminal parameters and anxiety levels and patient could undergo natural conception, a few months after the treatment, thus focusing on an integrative approach. . The clinical symptoms identified in the present case report correlates to *Kshina shukra* (reduced motility and count of sperm), comprehended in Ayurvedic classics.

Criteria for Assessment

For this particular study we assessed the patient of vataj shinasukra. The semen sample of patient were collected before, during and after the treatment. The analysis was done as per the recommendation of WHO (2010) before and after treatment. Assessment of therapies was made by adopting two parameters, semen analysis and sexual Health Scoring.

Patient selection Criteria

Patient having classical symptoms showing under the heading of the Sukradusti (Vatajshinasukra). In the various Ayurvedic text along with semenogram findings like abnormal physical characters, sperm count motility. The WHO [2010] criteria for semenogram i.e. sperm count <40 million and motility <50% was considered as Oligoasthanozoospermia.

Material and Methods

Case study- A 32 Yrs old patient visited OPD of Panchkarma s.v.m Ayurveda College and PG Research Institute Ilkal and presented with chief complain of failure to conceive in spite of 5 Yrs of their active married life. The associated complaints were decreased appetite and fatigue since last 6 months. His semen analysis report suggests Oligoasthanozoospermia as less number of sperms

Shaman Chikista-

5. Chandra Prabhavati -500mg bd before meal
6. Shatavarighruit 15 at night after food for -2months
7. Kauncha Pak 5 GM BD before meal with milk for- 1 month
8. Sweata musali churna 3 GM BD before meal with milk-1 month
9. Pathya: During Nityasevneeya Ahara are rich in antioxidants and nutrients like hashtishali, Godhuma, Mudga, Saindhava, Amalaki, yava, Ksheera, Sarpi, Madhu, Dadima, Mrudvika,
10. Patola were included in daily diet
11. Vihara: To reduce stress and anxiety yoga, pranayam is advised. Proper following of Achar Rasayan, sadvrutt, Dinacharya, timely voiding of Vegas helps to overcome mental stress.

➤ **MODE OF ACTION OF VIRECHANA:**

- It acts on vitiated pitta dosha, decrease ushna Gina of pitta and incressheeta guns required for formation of Shukradhatu impaired Agni by vikrit pitta also corrected by virechana. Agni is required for Prakritnirmiti of Shukradhatu.

➤ **MODE OF ACTION BALADIYAPANBASTI:**

- mode of action better understand based on the following, Route of administration
- Nature of medicine, Active principal and properties of medicine.

Steps followed poorvakarma and paschatkarma.

| |
|--|
| Abhangya, mridu swedana Acts dilatation of blood vessels thereby enhancing blood circulation and provides nutrition thereby nourishment of Dhatus |
| Dhatu vardhak Rasyana and immune Boosting Baladiyapan Basti |
| Balya, Bruhana, Dhatuvar dhak, Pushtikara, karshyata, acts as vrushya and Rasyana nourishment of Dhatus. |
| Offering more nutritional value consist of higher level of iron helps in nourishment, Calcium, iron, magnesium, phosphorus sodium, zinc, supplement's higher nutrition to the body nourishment of Dhatus, Sadhyo baljananam, Indriyabalparam |
| Improving memory acts as Rasayan, Acts as shukral, Balyakara, enhances maithuna samarthyas |

Result-

| SEMEN ANALYSIS | | | Normal Range |
|---------------------------------|----------|--------------|--------------|
| MICROSCOPIC EXAMINATION | | | |
| SPERM COUNT | : 35 | Millions/fml | 50 - 150 |
| SPERM MOTILITY (%) | | | |
| ACTIVELY MOTILE | : 27 | % | MORE THAN 60 |
| SLUGGISHLY MOTILE | : 31 | % | |
| NON-MOTILE | : 42 | % | |
| MORPHOLOGY | | | |
| NORMAL SPERMS | : 53 | % | MORE THAN 70 |
| ABNORMAL SPERMS | : 47 | % | UPTO 30 |
| SPERM MOTILITY AFTER (%) | | | |
| 60 MIN | : 24 | % | 60 |
| 90 MIN | : 21 | % | 50 |
| 120 MIN | : 18 | % | 40 |
| OTHER FINDINGS | | | |
| PUS CELLS | : 4-5 | | 0 - 1 |
| EPITHELIAL CELLS | : ABSENT | | ABSENT |
| R.B.Cs. | : ABSENT | /HPF | |
| TRICHOMONAS | : ABSENT | | |

Figure 1: Before Treatment

| SEMEN ANALYSIS | | Normal Range |
|---|-------------------|--------------|
| PHYSICAL EXAMINATION | | |
| PLACE OF COLLECTION | : INSIDE THE LAB | |
| METHOD OF COLLECTION | : BY MASTRUBATION | |
| ABSTINENCE | : 3 DAYS | |
| PHYSICAL EXAMINATION | | |
| VOLUME | : 5 ml | 2 - 5 |
| COLOUR | : OPAQUE GRAY | |
| VISCOSITY | : NORMAL | |
| LIQUIFICATION TIME | : 30 mins | 20 - 30 |
| CHEMICAL EXAMINATION (FINDINGS /HPF) | | |
| REACTION (PH) | : ALKALINE | ALKALINE |
| FRUCTOSE TEST | : PRESENT | |

Figure 2: After Treatment

| SEMEN ANALYSIS | | Normal Range |
|---------------------------------|------------------|--------------|
| MICROSCOPIC EXAMINATION | | |
| SPERM COUNT | : 80 Millions/ml | 50 - 150 |
| SPERM MOTILITY (%) | | |
| ACTIVELY MOTILE | : 79 % | MORE THAN 60 |
| SLUGGISHLY MOTILE | : 12 % | |
| NON-MOTILE | : 09 % | |
| MORPHOLOGY | | |
| NORMAL SPERMS | : 83 % | MORE THAN 70 |
| ABNORMAL SPERMS | : 17 % | UPTO 30 |
| SPERM MOTILITY AFTER (%) | | |
| 60 MIN | : 73 % | 60 |
| 90 MIN | : 69 % | 50 |
| 120 MIN | : 65 % | 40 |
| OTHER FINDINGS | | |
| PUS CELLS | : 1 - 2 | 0 - 1 |
| EPITHELIAL CELLS | : ABSENT | |
| R.B.Cs | : ABSENT | ABSENT |
| TRICHOMONAS | : ABSENT | |

Figure 3: After Treatment

Sperm count increased at significant level.

FOLLOW UP AND OUTCOMES

It was observed that there was a marked improvement in the seminal parameters.

The progressive motility was increased from 5% to 56%, non-progressive motility was reduced from 6% to 3%, immotile sperm was reduced from 89% to 31%. Sperm concentration was increased from 3 million/ml to 32 million/ml. Normal morphology was attained in 80%. Head defects were reduced from 6% to 4%, tail defects were reduced from 5% to 2%. The Volume (2.5 ml), colour and appearance (Grey white), pH (7.3) liquefaction time and viscosity were within normal range.

DISCUSSION:

➤ Important cause of infertility is adoption of modern lifestyle. Ayurveda can treat infertility by various methods of panchkarma procedures like BaladiyapanBasti, virechana and using different formulations.

- Proper selection of drug and time of administration is very essential for getting the desired results. With the increase in rate of infertility, significant developments and novel technologies have been incorporated in its treatment.
- Assisted reproductive technologies (ARTs), the most recommended treatment in infertility, include a wide range of procedures involving in vitro fertilization (IVF) and its extended technologies, such as intracytoplasmic sperm injection (ICSI), pre-implantation genetic diagnosis (PGD), and cryotechnology. Studies reveal that stress and anxiety can result in reproductive failure. Lack of awareness regarding the importance of an integrated approach to medical intervention to balance body and mind has grown up as a great challenge to the physicians as well as patients. The present case report correlates to clinical symptoms of *Kshina shukra*.

- Counseling includes caring for the emotional needs of the patient demands continuity and should not be treated as a single event .
- The case has *vata-pitta dosha vikriti* (alteration of *Dosha*) resulting in *Kshina shukra*, that are pronounced through the *lakshanas* of patient. *shatavari ghrita* includes ingredients are mainly of *madhura rasa*, *madhura vipaka* and *snigdha guna* and act as *kapha-vata shamaka*, *anulomana* (carminative) and *srotorodha nivarana* (remove blockage of channels).
- The treatment protocol includes *Koshta shuddhi* through *Virechana* followed by *Shamana Chikitsa* using *brimhana* (nourishing), *bala-varadhana* (promotes strength) and *tarpana dravyas* (nourishing substances) to attain *dhatu samyata*. *Virechana* helps in attaining *Agni Dipti* and *Sroto Vishudhi* (purification of channels) and hence supports the proper *Dhatu Parinama* .
- *Shwetmusali choornam* mainly of *Madhura rasa*, *Guru snigdha guna*, *Sheeta virya* and *madhura vipaka*. Oral administration of *shwet musali choornam* having *brimhana* (replenishing), *vrishya* (aphrodisiac), *rasayana* (rejuvenation), *sukrala* (spermatogenetic) helps in improvement of *Kshina shukra* through *Dhatupusti*, thus creating a satisfactory improvement in the seminal parameters.
- Notable improvement in the symptoms of *Kshina shukra* was observed after the treatment procedure. This protocol could improve the quality and quantity of semen by increasing sperm motility and concentration and by reducing sperm morphological defects. This integrative intervention also maintained the thickness and consistency of semen which might also be helpful in improving the viability and motility of sperms. The seminal parameters after the treatment were considerably improved on a much satisfactory level, so that the patient to undergo natural conception, a few months after the treatment.

Conclusion

This Ayurvedic treatment protocol including a combination of both *Shodhana* and *Shamana* therapies along with counseling were helpful in improving the seminal parameters to a satisfactory level and in reducing the anxiety levels. Hence, this was helpful for the patient to undergo natural conception, a few months after the treatment. Therefore, this approach can be considered in patients with low sperm count and motility when associated with anxiety. In patient perspective, the patient was satisfied with the treatment as he had considerable

improvement in the sperm count and motility values, and reduction in the anxiety levels that made him to undergo natural conception.

The present study tried to make a noble trial in evaluation of different characteristics of *sukra* for its applied aspects. *Baldiyapana Basti* plays vital role to treat male infertility. From review of Ayurvedic text and case study results it is clear that *Panchkarma* can treat infertility successful.

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