

MANAGEMENT OF KSHEENA SHUKRA (OLIGOZOOSPERMIA) AYURVEDIC PROSPECT: A CASE STUDY

Jitendra Varsakiya¹, Kishore Patel², Alisha³, Divyarani Kathad⁴

¹ Assistant Professor, Department of Kayachikitsa, Chaudhary Brahm Prakash Ayurved Charaka Samasthan, Najafgarh, Khera Dabar, New Delhi 110073, India

² Research officer, Central council for research in Ayurvedic Science, Janakpuri, New Delhi, India

³ MD Scholar, Department of Kayachikitsa, Chaudhary Brahm Prakash Ayurved Charaka Samasthan, Najafgarh, Khera Dabar, New Delhi 110073, India

⁴MS Scholar, Department of Shalakya Tantra, Government Akhandanand Ayurveda College, Ahmedabad, India

Email: jeet12989@gmail.com

ABSTRACT

Background: Male infertility is one of the major issues now a day's and incidences of this problem increases day by day due to the disturbed pattern of living style. Men may not know they have this unless they are having trouble in conceiving with a partner. The oligozoospermia is one of the conditions related to male infertility defined as low sperm count. Ayurveda the science of Indian medical system described various terms related to male infertility such as; *Kshina Shukra*, *Kshina Retasa*, *Alpa Retasa* and *Shukra Dosh* which resembles conditions associated with Oligozoospermia. Other system of medicine has very expensive treatment with no any surety. Ayurveda is best choice of this disease to manage with use of herbs and herbo- mineral formulations with life style and diet control, etc. **Aims and Objectives:** To evaluate the role of Ayurveda medicine in the oligozoospermia. **Material and Method:** A 33 years old, healthy male patient visited the OPD of Kayachikitsa with complains of unable to conceive her partner even after having nine years of married life. Semen analysis of this patient revealed low sperm count (10 million/ml) with no other abnormalities. This case was managed with *Virechana* procedure followed by *Shaman Chikitsa* for eight month. After this treatment, sperm count increased to 65 million/ml. The detail of this case highlights the role of *Shodhan* and *Shaman Chikitsa* in the management of Oligozoospermia.

Keywords: Infertility, Oligozoospermia, *Shaman*, *Shodhan*, *Shukra*, *Virechana*

INTRODUCTION

Infertility is on the rise in India with about 27.5 million couples, who are actively trying to get pregnant, suffering from it. Among them 30-40 percent cases are due to male infertility. The traditional text of Ayurveda provides great knowledge related to various diseases and their management including sexual prob-

lem. Oligozoospermia is the male infertility issue defined as low sperm concentration in the ejaculation. As per World Health Organization (WHO), a low sperm count is less than around 15 million per ml^{[1],[2]}. *Vajikarana* is one of the branches of Ayurveda that deals with the preservation and amplification of sex-

ual potency of a healthy man and conception of healthy progeny as well as management of defective semen, disturbed sexual potency and spermatogenesis along with treatment of seminal related disorders in man^[3]. *Ksheena Shukra* is denoted among eight type of *Shukra Dushti*, enumerated in Ayurveda classics. Acharya Sushruta clearly defines the condition of *Kshina Shukra* to be *Vata- Pitta* predominant and *Upachaya* is stated as treatment in this condition.^[4] In present case study, a patient suffering from Oligozoospermia has been treated with *Virechana* procedure followed by administration of Shaman drugs those are *Agnitundi Vati*, *Ashwagandha Churna*, *Pippali Churna*, *Vang Bhasma*, *Sh. Makardwaj* and Cow Ghee.

Materials and Methodology:

Patient came to CBPACS, *Kayachikitsa* OPD. After taking full history of patient he was advised to investigate for Semen Analysis. After the investigation and proper history taking of patient was diagnosed with *Ksheena Shukra* (Oligozoospermia). Patient became treated with *Shodhan (Virechana)* followed by *Shaman Chikitsa* for eight month. After three and eight month, he was investigated again for Semen Analysis and then he was kept under observation for few months with advice of *Pathya- Apathya* for further period.

Place of study: Ch. Brahm Prakash Ayurveda Charak Sansthan, New Delhi, *Kayachikitsa* special OPD

Name of patient: xxxx

Registration No. - 42176

Date of first visit: 20/06/18

Age: 33 years

Gender: Male

Wt-65 kg

HT-5.7 inches

BMI-29.16 KG/M²

Chief Complaints: Patient was married since 9 years and the couple had an issue. His wife failed to conceive in spite unprotected frequent intercourse even during 12 to 18th day of menstruation since last 8years. The woman was normal at the clinical and Endocrinological examination. On inquiry, his complain premature ejaculation, decreased sexual desire, general debility and fatigability. Personal history re-

vealed that he worked in company as manager, he continue deal with the laptop with habits of tobacco, drinking occasionally, with stressful life. He was not having past medical history of tuberculosis, mumps, orchitis, hydrocele, vericocele, trauma to gonadal part or history of any other long-term debilitating disorder or life threatening emergency, he was not having history of previous surgical intervention like herniorrhaphy, vasectomy reconstruction and no history of consumption of gonadotoxic agent. No other parameters except sperm count, motility and morphology were altered in the male subject. He was advised semen analysis after proper abstinence of 3 days. Before starting medicine semen examination report revealed very low sperm count 10 million/ml out of which about 50% sperms were motile and 10% sperms were sluggishly motile while 40% were non-motile. 10% sperms were abnormal. Smear showed 8-10 pus cells.

General Examination: On Examination of patient, pallor was absent, tongue was clear and he is vegetarian in diet style. His appetite was good and he usually prefers salty and spicy diet. He has disturbed sleep and frequency of micturition was 7-8 times in day time and 1-2 times in night time. His bowel habits are irregular with the complain of constipation.

Investigations: 1. Semen Analysis

Diagnosis: Ksheena Shukra (Oligozoospermia)

TREATMENT PLAN:

Shodhan:

Virechan Karma: *Dipan Pachan* with *Agnitundi Vati* 500 mg 2 tab twice a day with lukewarm water before meal was done for 3 days before starting *Snehapana*. *Snehapana* was done with *Go-ghrit* for 5 days starting with 30 ml, 60 ml, 100 ml, 130 ml, and 150 ml in increasing pattern. *Snehapana* was done until *Samyak Snehasidhdhi Lakshan* was achieved. After *Snehapana*, 3 days *Sarvang Abhyang Swedan* was done with *Bala Taila*. Next day *Virechana* was done in classical method with *Triphala Kwath*, *Munakka* 100mg and *Trivrat Avleha*. *Pravar* type of *Shudhdhi (29 Vegas)* was gained. *Sansarjan karma* was advised for 7 days.

Drug Posology:

Drug	Dose	Anupana	Time
Ashwagandha Churna (<i>Withania somnifera</i>) 2 gm Pippali Churna (<i>Piper longum</i> Linn) 2 gm Vang Bhasma (Sn.)125 mg Sh. Makardhwaja 125mg	Mixer 4-5gm	With cup of luke warm milk and Cow ghee	Before food earl morn- ing and after food at night

Shudhha Makaradhwaja is an important metallo-mineral formulation of which herbs are also as inevitable and vital part and is an effective *Kupipakva* preparation (a specific type of pharmaceutical practice in which medicines are prepared by gradually increasing heating patterns using a vertical electric muffle furnace). The main components are *Suddha Swarna* (purified gold), *Suddha Parada* (purified mercury), *Suddha Gandhaka*(purified sulphur) in the ratio 1:8:24 and titrated (*Bhawana*) with herbal juice like *Kumari Swarasa* (juice of Aloe Vera *Barbadensis*) and *Rakta Karpas Pushpa Swarasa* (juice of *Gosypium Herbaceum*).^[5]

Pathya-Apathya^{[6],[7]}

Pathya:

Patient was asked to take *Shalidhanya, Godhuma, Mamsa, Ksheera, Dadhi, Ghrita, Navnita, Kharjura, Amalaki phala, Lashuna, Guda-sharkara*. Patient was

advised to take proper *Nidra* (Adequate sleep at night), *Abhayanga* (Oil Massage), *Sanana* (Bath), Stay clean environment, *Padatraana dharna* (Brisk walking) and *Vyayam* (light exercises), *Vega Adharana* (Evacuation of urges like Urine, Faeces etc. at proper time)

Apathya-

Patient asked to avoid *Dahi Sevan, Ati Katu- Tikta-Lavan Rasa Sevana, Sarshap Taila, Guru-Virudha Bhojan*, Excessive intake of Oily, fried, Spicy food items, Fast food, Ice cream, Cold drink, Bread, biscuit, Alcohol, Tobacco, Tea and Coffee.

Patient also asked to avoid *Ati maithun* (excessive coital act), *Amaithun* (ignorance of coital act), *Atisahasa* (excessive exercise), *Shukra Vega Dharan* (Suppression of urge of ejaculation), Suppression of natural urge, intercourse during menstruation cycle, Fasting, Stress and strain etc.

RESULT:

Table 1: Examination of Seminal Fluid

Test	On 23/06/18	On 08/09/18	On 15/02/19
Method	Masturbation	Masturbation	Masturbation
Abstinence	3 days	4 days	3 days
Collected At	09:35 A.M	11:45 A.M	09:30 A.M
Examined At	09:55 A.M	12:05 P.M	09:50 A.M
Physical Examination			
Quantity	2.00ml	2.0ml	2.0ml
Colour	Grey White	Grey White	Grey White
Odour	Normal	Normal	Normal
Viscosity	Viscid	Viscid	Viscid
Liquefaction	Within 30 min.	Within 30 min.	Within 30 min.
Reaction (pH)	Alkaline	Alkaline	Alkaline
Microscopic Examination			
Total Sperm Count	10 mill/ml	46 milL/ml	65 mill/ml
Sperm Motility			

Actively Motile	50%	35%	50%
Sluggishly Motile	10%	25%	30%
Non-Motile	40%	40%	20%
Abnormal Forms	10%	8%	8%
Other Abnormalities			
Pus Cells	8-10/HPF	2-3/HPF	2-4/HPF
R.B.C Cells	NIL	0-1/HPF	1-2/HPF
Epithelial Cells	1-2/HPF	1-2/HPF	0-1/HPF

DISCUSSION

The main line of treatment in Oligozoospermia is “*Ksheene Sukrakari Kriya*”^[8] means the *Dravyas*, which increases *Shukra* i.e. having *Sukrakara* properties^[9] like *Madhura Rasa* (Sweet Taste), *Snigdha* (unctuous) *Guru* (heavy quality), *Jivana* (promotes quality of life) and *Brmhana* (nourishing property) *Dravyas* should be given. *Sukra Dusti* should be treated on the lines of involved Dosa i.e., in case of Oligozoospermia (*Ksheenasukra*) treatment has to be planned in line with *Vataja Pittaja Sukradustihara Yogas*.^[10]

Effect of Virechana Karma: In Ayurveda classics mentioned the fruitfulness of *Shodhana* Karma as, by the administration of these therapies disease are cured and his normal health is restored; the sense faculties, mind become clear; he gains strength, plumpness, offspring and virility.^[11] With the *Shodhana* procedure *Shukra* also increased in qualitative as well as quantitatively^[12]. In Ksheena Shukra main vitiated Doshas are Vata and Pitta, In order to remove the vitiated *Pitta Dosh*, *Virechana* is administered. It also eliminates the *Srotrodha* and active transformation of *Dhatu* through *Dhatvagni Vyapara* and the most desirable *Shuddha Shukra* is procured. The whole process helps in eliminating the free radicals (oxidants) present in the micro circulatory channels of *Shukra Vaha Srotasa*, which interferes with the function of *Shukra* and by doing so, increases the activity of *Shukra* (motility) as well as *Shukra Vaha Srotasa* and the respective *Dhatvagni* thereby facilitating the production of more *Shukra Dhatu*. (Volume, Count). *Virechana* is an important modality and eminent bio cleansing process for vitiated *Pitta Dosh*. Through *Shodhana*, *Srotoshudhi* (Clearing of channels) can be accomplished.^[13]

Ashwagandha (*Withania somnifera*) effectively reduced oxidative stress as assessed by decreased levels of various oxidants and improved level of diverse antioxidants. Moreover, the levels of Testosterone, LH, FSH and PRL were increased which are good indicators of semen quality^[14]. Acharya Charaka included it in *Balya* and *Brimhana-gana*. It is attributed with *Balya*, *Vrishya* and *Rasayana* properties.^[15]

Banga Bhasma^[16] (calcined tin) is one of the most popular drugs used as *Vrishya*, i.e. to improve the quantity of *Shukra* as well as to treat the *Shukra Dosh* (vitiation of *Shukra*). *Vanga Bhasma* has been acclaimed to be efficacious in *Shukra Dosh*, *Swapanmeha* (night emissions), and also for prevention of *Shukrakshaya* (diminution of *sukra*). It is also used as *Balya* (increases strength), *Shukra Vardhak* (increases *Shukra*) and has a *Medohar* (hypolipidemic) effect. Based on these properties of *Vanga Bhasma*, it was taken as trial drug for evaluation of its property as *Vrishya* on seminal parameters, sexual dysfunction and quality of sexual life.

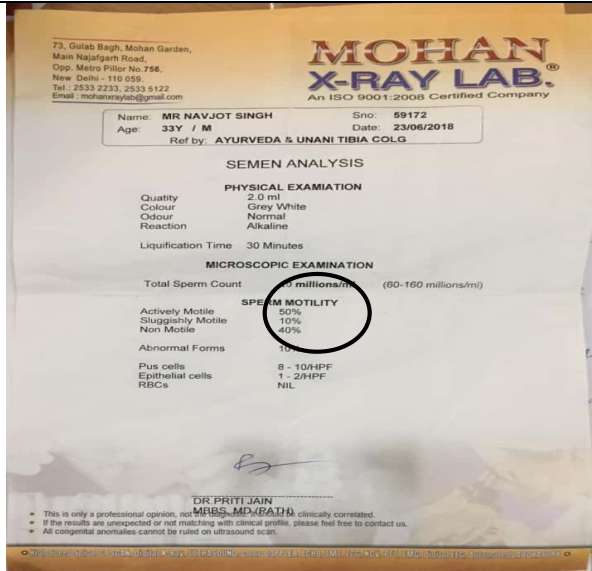
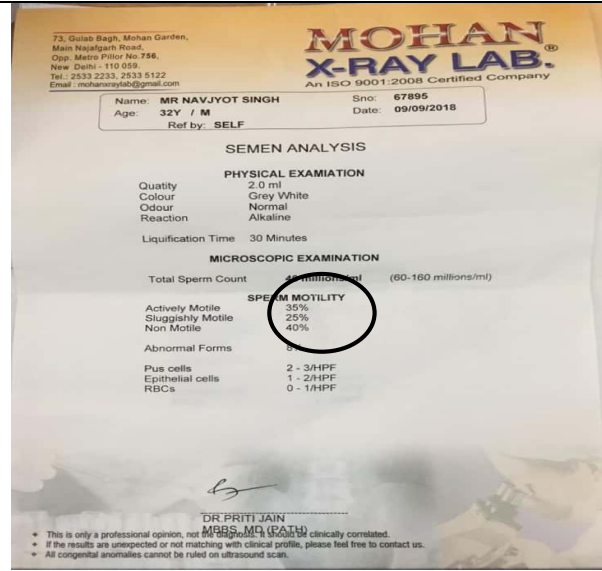
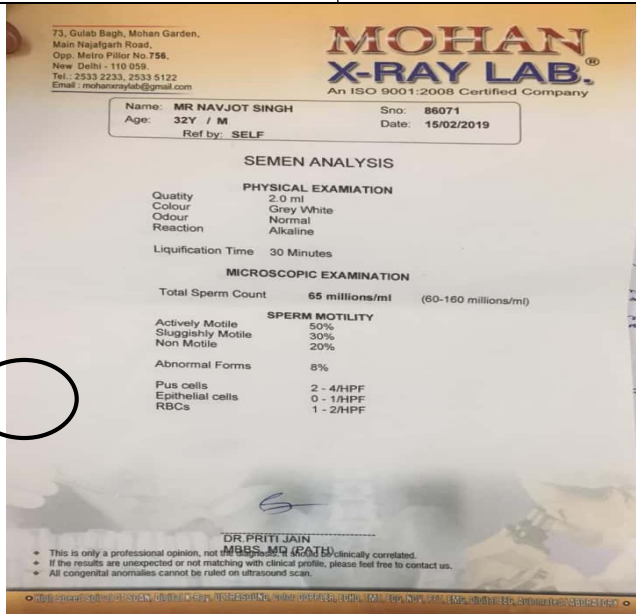
Makaradhwaja Rasa: Charaka says “*Nakra Retaso Vrishyanam*” ie *Nakra Retasa* is best for fertility^[17]. *Nakra* refers to *Makar* or crocodile; *Dhwaja* refers to *Veerya / Shukra*, therefore the preparation which gives the power of fertility like *Makar* is *Makaradhwaja rasa*. The term *Makaradhwaja* is a synonym of *Kama Deva*, the god of lust and love. The *Swarna Bhasma* is aphrodisiac, cardiac tonic, promoter of eye sight as well as intellect and rejuvenating. *Parada* has *Yogavahi* property (incorporating and enhancing the properties of drugs with which it is used). *Gandhaka* is rejuvenating agent, *Yogavahi*, aphrodisiac, alleviates *kapha*, *vata*. *Karpasa Pushpa* has *Saumanasyajanana* effect (soothing to mind), an essential factor for *Garbha Dharana* (conception).

Kumari increases the blood circulation to Garbhashaya (uterus).^[18]

CONCLUSION:

Ayurvedic drugs are key to clinical success. The application of Virechana is a broad spectrum clinical modality, and well known purification process for

Pitta Dosha. Srotoshuddhi is achieved by its virtue of Shodhana, and thus it improves the Dhatu Poshana Krama. Application of Vajikarana Aushadha following Virechana gives better result due to better absorption and utilisation without any other complications as compared to modern medication.

Before treatment	After 3 month
 <p>MOHAN X-RAY LAB. An ISO 9001:2008 Certified Company</p> <p>Name: MR NAVJOT SINGH Sno: 89172 Age: 32Y / M Date: 23/06/2018 Ref by: AYURVEDA & UNANI TIBIA COLG</p> <p>SEMEN ANALYSIS</p> <p>PHYSICAL EXAMINATION Quantity: 2.0 ml Colour: Grey White Odour: Normal Reaction: Alkaline Liquification Time: 30 Minutes</p> <p>MICROSCOPIC EXAMINATION Total Sperm Count: 41 millions/ml (60-160 millions/ml)</p> <p>SPERM MOTILITY Actively Motile: 50% Sluggishly Motile: 10% Non Motile: 40% Abnormal Forms: 10%</p> <p>Pus cells: 8 - 10/HPF Epithelial cells: 1 - 2/HPF RBCs: NIL</p> <p>DR PRITI JAIN M.B.B.S., M.D. (AYURVEDA) This is only a professional opinion, not to be clinically correlated. If the results are unexpected or not matching with clinical profile, please feel free to contact us. All congenital anomalies cannot be ruled on ultrasound scan.</p>	 <p>MOHAN X-RAY LAB. An ISO 9001:2008 Certified Company</p> <p>Name: MR NAVJYOT SINGH Sno: 67895 Age: 32Y / M Date: 09/09/2018 Ref by: SELF</p> <p>SEMEN ANALYSIS</p> <p>PHYSICAL EXAMINATION Quantity: 2.0 ml Colour: Grey White Odour: Normal Reaction: Alkaline Liquification Time: 30 Minutes</p> <p>MICROSCOPIC EXAMINATION Total Sperm Count: 44 millions/ml (60-160 millions/ml)</p> <p>SPERM MOTILITY Actively Motile: 35% Sluggishly Motile: 25% Non Motile: 40% Abnormal Forms: 5%</p> <p>Pus cells: 2 - 3/HPF Epithelial cells: 1 - 2/HPF RBCs: 0 - 1/HPF</p> <p>DR PRITI JAIN M.B.B.S., M.D. (AYURVEDA) This is only a professional opinion, not to be clinically correlated. If the results are unexpected or not matching with clinical profile, please feel free to contact us. All congenital anomalies cannot be ruled on ultrasound scan.</p>
<p>After treatment</p>	
 <p>MOHAN X-RAY LAB. An ISO 9001:2008 Certified Company</p> <p>Name: MR NAVJOT SINGH Sno: 86071 Age: 32Y / M Date: 15/02/2019 Ref by: SELF</p> <p>SEMEN ANALYSIS</p> <p>PHYSICAL EXAMINATION Quantity: 2.0 ml Colour: Grey White Odour: Normal Reaction: Alkaline Liquification Time: 30 Minutes</p> <p>MICROSCOPIC EXAMINATION Total Sperm Count: 65 millions/ml (60-160 millions/ml)</p> <p>SPERM MOTILITY Actively Motile: 50% Sluggishly Motile: 30% Non Motile: 20% Abnormal Forms: 8%</p> <p>Pus cells: 2 - 4/HPF Epithelial cells: 0 - 1/HPF RBCs: 1 - 2/HPF</p> <p>DR PRITI JAIN M.B.B.S., M.D. (AYURVEDA) This is only a professional opinion, not to be clinically correlated. If the results are unexpected or not matching with clinical profile, please feel free to contact us. All congenital anomalies cannot be ruled on ultrasound scan.</p>	

REFERENCES

1. WHO Criteria for normal semenogram 2010. Impact of the new WHO Guidelines on diagnosis and practice on male infertility, the open reproductive science journal, Vol-3, 2010 page 7-15.
2. D.C. Dutta, Edited by Hiralal Konar, Textbook of Gynecology, Jaypee Health Science Publisher, Seventh Edition Reprint 2016, Page No. 190.
3. Yadavji Trikamji Acharya, Agnivesha, Charaka Samhita, Chikitsa Sthana, Chaukhamba Surbharati Prakashan, 5th edition 2001, PP 738, Page no 397.
4. Vaidya Jadavaji Trikamaji Acharya, Sushruta Samhita, Sharira Sthana, Chaukhamba Surbharati Prakashana – Varanasi, Reprint 2008, Verse No. 2/4
5. Bhatt Gopal Krishna. Ashok D Satpute. Rasendra Saar Sangraha. Reprint ed. Varanasi. Krishna Das Academy Publications; 2009.p.616.
6. Jitendra Varsakiya Et Al., Review On Ksheena Shukra(Oligozoospermia) – Male Infertility: A Medico Social Problem Its Management In Ayurveda, European Journal Of Biomedical And Pharmaceutical Sciences, 2018, Volume 5, Issue 6 306-313.
7. Khute Ramesh Kumar, A Clinical Study of Gokshuradi Modak and Asthanan Basti in the management of Klaibya (erectile dysfunction), WJPR, ISSN 2277–7105
8. Kunte Anna Moreshwar, Vagbhata Ashtanaga Hridaya, Chikitsa Sthana, Choukhamba Surabharati Prakashana, Varanasi 2002, PP 956: Page no 365.
9. Yadavji Trikamji Acharya, Agnivesha, Charaka Samhita, Chikitsa Sthana, Chaukhamba Surbharati Prakashan, 5th edition 2001, PP 738, Page no 160
10. Yadavji Trikamji Acharya, Susruta Samhita, Sutra Sthana, Choukhamba Orientalia, Varanasi, PP 824, Page no 344.
11. Yadavji Trikamji Acharya, Susruta Samhita, Sutra sthana, Vaidya, Chikitsa Sthana, Choukhamba Orientalia, Varanasi, Ch.16, Verse 17-18; Page No. 315.
12. *Vridhha Jivaka Tantra, Kashyapa Samhita, Vidhotini* commentary, Pandit Hemaraj Sharma. Chaukhmbha Sanskrita Sansthan, Varanasi. edited reprinted 2013. *Sutra Sthana Adhyaya-2*, page no 7.
13. Jitendra Varsakiya et al. Role of virechana karma in increasing sperm count in the case of oligozoospermia: An open labelled clinical trial. Int. J. Res. Ayurveda Pharm. 2017;8 (Suppl 2):134138 <http://dx.doi.org/10.7897/2277-4343.08298>.
14. Ahmad MK et al, Withania somnifera improves semen quality by regulating reproductive hormone levels and oxidative stress in seminal plasma of infertile males, Fertility and Sterility, 2009 Jun 5
15. Nishteswar K., K.Hemadri, Dravyaguna Vijnana, Chaukhambha Samskrit Pratishthana, First edition, P121
16. Sadananda Sharma, Ras Tarangini, commentary by Haridatta Shastri, edited P Kashinath Shastri, 18th Chapter Vanga-Vigyaniya- Taranga, 11th edition, Motilal Banarsidas; 2009. p. 442.
17. Charak. Kashinath Shastri. Charak Samhita. 8th ed. Chaukhamba Sanskrit Sansthan; 2006. Vol.1.p.318.
18. Priya Madhulika & Arya Umang: Review Of Makardhwaja Rasa In Infertility. International Ayurvedic Medical Journal, ISSN: 2320 5091, 2018.

Source of Support: Nil

Conflict Of Interest: None Declared

How to cite this URL: Jitendra Varsakiya et al: Management Of Ksheena Shukra (Oligozoospermia) Ayurvedic Prospect: A Case Study. International Ayurvedic Medical Journal {online} 2019 {cited June, 2019} Available from: http://www.iamj.in/posts/images/upload/984_989.pdf