

Effect of Yoga and Naturopathy in the management of Oligoasthenospermia- A Single Case Report

Dhanushya Devi G^{1*}, Indiradevi S², Mangaiarkarasi N³

¹PG Scholar, Department of Acupuncture and Energy medicine, ² Reader, HOD, Department of Yoga Philosophy, ³ Professor, HOD, Department of Acupuncture and Energy medicine, Government Yoga and Naturopathy Medical College and Hospital, Arumbakkam Chennai, India

ABSTRACT:

Oligoasthenospermia is the main cause of male infertility. A survey by the world health organization [WHO] shows that infertility is estimated to affect 10%- 15% of the couples and approximately 50% of these couples are infertile because of male infertility. Male factor subfertility accounts for at least half of all cases of subfertility. In 30-45% of cases, the cause of abnormal semen parameters is idiopathic. We report the case of 31 years old male patient with complaints of decreased sperm count and motility associated with bilateral varicocele. On the basis of clinical examination, semen analysis and investigations the case was diagnosed as Oligoasthenospermia. mention Yoga and Naturopathy interventions was given for 14 days in inpatient ward and after that outpatient follow up for one month. After the intervention his sperm count and motility was improved according to the semen analysis report.

KEYWORDS: Neutral T pack, Oligoasthenospermia. Yoga and Naturopathy.

Received: 04.08.2023 Revised: 01.09.2023 Accepted: 20.09.2023 Published: 02.10.2023

Quick Response code



*Corresponding Author:

Dr. Dhanushya Devi G

PG Scholar, Department of Acupuncture and Energy medicine, Government yoga and naturopathy medical college and hospital, Chennai, Tamil Nadu

E-mail : yashnuthavide@gmail.com

INTRODUCTION:

Oligoasthenospermia is the main cause of male infertility. ^[1] A survey by the world health organization shows that infertility is estimated to affect 10%- 15% of the couples and approximately 50% of these couples are infertile because of male infertility. ^[2] Male factor subfertility accounts for at least half of all cases of subfertility. In 30-45% of cases, the cause of abnormal semen parameters is idiopathic. ^[3] Oligoasthenospermia or Oligoasthenozoospermia is a sperm disorder that involves two disorders, at the same time – Oligozoospermia (low sperm count, below

15 million sperm/ml) and asthenozoospermia (abnormal sperm motility, with more than 60% of sperm being immotile or unable to move in a straight direction). There are multiple causes for male infertility, which can be broadly classified due to their general underlying etiology. These include endocrine disorders (usually due to hypogonadism), urogenital abnormalities, urogenital tract infections [UTI], sexual dysfunction, malignancies, certain medications, sperm transport disorders, environmental toxins-smoking, alcohol, genetic causes, congenital and

testicular defects. [4] According to traditional Chinese medicine infertility is due to kidney yin and yang deficiencies and phlegm, dampness and liver qi stagnation. [5]

Yoga and naturopathy is a drugless system of medicine which believes in inherent healing power of nature and uses non-invasive methods of intervention to create a suitable environment to facilitate the healing of the body by itself. [6] The yoga and naturopathy treatment for oligoasthenospermia requires proper body detoxification control over diet, herbal therapies and acupuncture.

CASE REPORT:

A 31 years old patient admitted in our in-patient ward with complaints of inability to

father a child for past 2 years and lower back pain for past 3 years and feeling of heat sensation all over the body for past 2 years associated with bilateral varicocele for past 5 months. He had disturbed sleep and irregular bowel patterns for past 4 years. He had no history of smoking, alcohol consumption and surgical history. He is working as a photographer and running his own studio. Because of his work nature his sleep was disturbed and his appetite was regular. He had irregular eating habit. He used to skip breakfast every day. His stature was normal, no other systemic illness was noted.

Table-1: Details of Intervention Regimen

Days	Naturopathy Modalities	Yogic practices	Acupuncture regimen
1 to 14	<p>Morning</p> <ul style="list-style-type: none"> Enema (on Day 1 only) Mud pack – Abdomen and eyes – 20mins Neutral T-pack on scrotum area – 20mins 	<p>Evening</p> <ul style="list-style-type: none"> Cold Hip bath – 20mins <p>Practices Given</p> <ul style="list-style-type: none"> Tadasana Katichakrasana Vakrasana Uttanpadasana Sethubandhasana Sarvangasana Bhujangasana Anandabalasana Supta and shavaudharakarshanasana Shalabasana Dhanurasana Suryanamaskar 	<p>Acupuncture given for 14 days – 20mins each day on same time done Bilaterally.</p> <ul style="list-style-type: none"> UB-23, UB-28, UB-32, UB-33. CV-2, CV-3, CV-4, LIV-8, CV-5, SP-6, K-3, DU-20 & H-7.
4 & 13	Full mud bath- 20 mins.		
7 & 10	Full plantain leaf bath – 15mins		

Table-2: Advised Diet Regimen:

DAY	7am (200 ml)	9.30am (225g+25g=250g)	12pm (200 ml)	1.30pm (200g +50g= 250g)	4pm (200ml)	7pm (250g)
Day 1	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Guava juice	Fruit salad + sprouts	Lemon juice	Veg salad + fruit salad
Day 2	Ashgourd juice	Veg salad + fruit salad+ sprouts	Curryleaf coriander mint juice	Fruit salad + sprouts	Amla juice	Veg salad + fruit salad
Day 3	Plantain pith juice	Veg salad + fruit salad+ sprouts	Guava juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad
Day 4	Ashgourd juice	Veg salad + fruit salad+ sprouts	Muskmelon juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad
Day 5	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Beetroot juice	Fruit salad + sprouts	Curryleaf coriander mint juice	Veg salad + fruit salad
Day 6	Plantain pith juice	Veg salad + fruit salad+ sprouts	Amla juice	Fruit salad + sprouts	Amla juice	Veg salad + fruit salad
Day 7	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Curryleaf coriander mint juice	Fruit salad + sprouts	Lemon juice	Veg salad + fruit salad
Day 8	Ashgourd juice	Lemon juice	Beetroot juice	Beetroot juice	Lemon juice	Watermelon juice
Day 9	Plantain pith juice	Amla juice	Ragi milk	Muskmelon juice	Grape juice	Papaya juice
Day 10	Bottle gourd juice	Curry leaf juice	Guava juice	Carrot juice	Beetroot juice	Amla juice
Day 11	Plantain pith juice	Veg salad + fruit salad+ sprouts	Muskmelon juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad
Day 12	Ashgourd juice	Veg salad + fruit salad+ sprouts	Amla juice	Fruit salad + sprouts	Grape juice	Veg salad + fruit salad
Day 13	Plantain pith juice	Veg salad + fruit salad+ sprouts	Curryleaf coriander mint juice	Fruit salad + sprouts	Guava juice	Veg salad + fruit salad
Day 14	Bottle gourd juice	Veg salad + fruit salad+ sprouts	Ragi milk	Fruit salad + sprouts	Amla juice	Veg salad + fruit salad

Table-3: Semen Analysis and Anthropometric Measures:

Vitals	Pre-Treatment	Post-Treatment
Sperm count and sperm motility	7 million/ml of semen and 5% motility	8 million/ml of semen and 10% motility
Height	163cm	163cm
Weight	65kg	61kg
Blood pressure	130/90 mmHg	120/80 mmHg
Pulse rate	80 beats/min	76 beats/min
Body mass index	24.5 kg/metre square	23 kg/metre square
Respiratory rate	19 counts per minute	16 counts per minute
SF- 36 Quality of life questionnaire	62	32

THERAPEUTIC INTERVENTION:

- The treatment protocol was mainly based on the elimination of heat and toxins from the body and to improve the sperm count as well as its motility.
- Treatment was started with cleansing process- Neutral enema (normal water with temperature 92-98 F) on first day.
- T-pack, mud pack (Table-1) abdomen & eyes and cold hip bath was given daily. Patient was under shadow during and after the treatment for 20 minutes treatment duration.
- Full mud bath and full plantain leaf bath was given for four days. Patient was under sunlight for 30-40 minutes.

As a OP follow up he took full mud bath and plantain leaf bath once in a month and diet rich of antioxidants, walnuts, peanuts, fig, almonds and drumstick (moringa oleifera)leaves soup was advised.

RESULTS AND DISCUSSION:

The post sperm count was increased from 7million/ml to 8 million/ml and sperm motility was improved from 5% to 10% after

14 days of intervention as coated in figure 2 post semen analysis report. During raw juice therapy, plantain leaf bath and mud bath, the eliminative and cleansing capacity of the organs of elimination, namely lungs, liver, kidneys and the skin is greatly increased and masses of accumulated metabolic waste and toxins are quickly eliminated. Mudpack and hip and spinal bath has shown improvement in microcirculation and vasomotion score, as reported by Poensin et al [7]. Pranayama activates the body's lymphatic system which is responsible for the removal of waste. Yoga and pranayama also helps in reducing the stress level. [8] Acupuncture reduces the pro-inflammatory cytokines IL-4, IL-8 and TNF-alpha and reduces the pain. The effect of transcutaneous electrical acupoint stimulation has significant effect on sperm concentration and mobility. [9] Walnut and its leaf extract, fig, moringa leaves helps in increasing the level of testis and testosterone level. [10] It contains variety of nutrients essential for the development of spermatozoa and also sperm concentration and motility. [10]

ISWARYA FERTILITY CENTER		Semen Analysis - Semen Analysis Report	
Date	: 04-Jul-2022	Location	: Pondicherry
Name	: SATHISH	A/S	: 31 / MALE
Wife Name	: SATHIYA	I Number	: 61569
Ref. By (unit)	: Dr. Ramya Arun	Old MRD No.	: Z-60839
		New MRD No.	: Z-60839
MACROSCOPICAL EXAMINATION		Normal	
Colour	: Grey	Whitish, Gray, Opalescent	
Odour	: Normal		
PH	: > 7.2	≥ 7.2	
Volume	: 1.0 ml	1.5 mL (1.4 - 2.5 mL)	
Viscosity	: Normal	Normal	
Liquefaction	: < 60 min	Complete in 30 minutes	
MICROSCOPICAL EXAMINATION			
Conc:(Millions/ml)	: 7 Million /ml	15 million/mL (12 - 16 million/mL)	
Total Conc:(Millions/ml)	: 7 Million		
Total Motility (PR + NP,%)	: 15 %	40% (38% - 42%)	
Progressive Motility (PR,%)	: 5 %	32% (31% - 34%)	
Non-Progressive Motility (NP,%)	: 10 %		
Immotile Spermatozoa (IM,%)	: 85 %		
MORPHOLOGY			
Normal	: 1 %	≥ 4% Normal	
Abnormal	: 99 %		
Head Defects	: 55 %		
Mid Piece Defects	: 44 %		
		Andrologist	

Fig-1: Pre Semen Analysis Report on July 2022

ISWARYA FERTILITY CENTER		Semen Analysis - Semen Analysis Report	
Date	: 10-Aug-2022	Location	: Pondicherry
Name	: SATHISH	A/S	: 31 / MALE
Wife Name	: SATHIYA	I Number	: 61569
Ref. By (unit)	: Dr. Ramya Arun	Old MRD No.	: Z-60839
		New MRD No.	: Z-60839
MACROSCOPICAL EXAMINATION		Normal	
Colour	: Grey	Whitish, Gray, Opalescent	
Odour	: Normal		
PH	: > 7.2	≥ 7.2	
Volume	: 1.0 ml	1.5 mL (1.4 - 2.5 mL)	
Viscosity	: Normal	Normal	
Liquefaction	: < 60 min	Complete in 30 minutes	
MICROSCOPICAL EXAMINATION			
Conc:(Millions/ml)	: 8 Million /ml	15 million/mL (12 - 16 million/mL)	
Total Conc:(Millions/ml)	: 8 Million		
Total Motility (PR + NP,%)	: 15 %	40% (38% - 42%)	
Progressive Motility (PR,%)	: 10 %	32% (31% - 34%)	
Non-Progressive Motility (NP,%)	: 5 %		
Immotile Spermatozoa (IM,%)	: 85 %		
MORPHOLOGY			
Normal	: 1 %	≥ 4% Normal	
Abnormal	: 99 %		
Head Defects	: 52 %		
Mid Piece Defects	: 47 %		
Tail Defects	: 0 %		
		Andrologist	

Fig-2: Post Semen Analysis Report on August 2022

CONCLUSION:

This study found that yoga and naturopathy interventions have shown the greatest result in the reduction of back pain and improvement of sperm count and motility and the patient's quality of life was also improved. Yoga and naturopathy treatment

will give better result if it is given in longer duration.

Patient consent:

The written informed consent has been taken from the patient for treatment and publication without disclose the identity of patient.

REFERENCES:

1. Liu HJ, Deng MY, Zhu YY, WW DL, Tong XH, Li L, Wang L et al. Establishment of an oligoasthenospermia mouse model based on Tap73 gene suppression. 2021;4(4):351-358.
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7491230/> [last accessed on 13.06.2023]
3. Jo J, Kang MJ, Successful Treatment of Oligoasthenozoospermia Using Traditional Korean Medicine Resulting in Spontaneous Pregnancy: Two Case Reports- 2016 Mar- April; 12(2): 136-8.
4. <https://www.ncbi.nlm.nih.gov/books/NBK562258/> [last accessed on 10.06.2023]
5. Cong Niu et al. ZhongguoZhong Yao ZaZhi.Clinical characteristics of traditional Chinese medicine and 40 cases of infertility patients. 2016; 41(5):960-964.
6. YOGA AND NATUROPATHY| AYUSH- <http://ayushmanipur.gov.in/yoga-naturopathy/> [last accessed on 03.06.2023]
7. Y Rosy Ayda, N Manavalan-2019 Efficacy of short-term naturopathy and yoga interventions on palmoplantar psoriasis. Int J Health Allied Sci 2019;8 202-5.
8. Telles S, Gandharva K, Sharma SK, Gupta RK, Balkrishna A. Body temperature and energy expenditure during and after yoga breathing practices traditionally described as cooling. MedSci Monit Basic Res. 2020; 26:e920107.
9. Gong Y, Li J, Wu XK. Transcutaneous electrical acupoint stimulation for the treatment of idiopathic oligoasthenospermia: A meta – analysis, 2021;27(10):917-926.
10. Akomolafe SF, Oboh G Walnut leaf extract acts as a fertility agent- A search for herbal male fertility enhancer. J complement Integr Med. 2017 Nov 17;15(2);j/jcim. 2018. 15. issue- 2/jcim- 2017-0076.

Conflict of interest: Author declares that there is no conflict of interest.

Guarantor: Corresponding author is guarantor of this article and its contents.

Source of support: None

How to cite this article:

Dhanushya Devi G, Indiradevi S, Mangaiarkarasi N. Effect of Yoga and Naturopathy in the management of Oligoasthenospermia- A Single Case Report. Int. J. AYUSH CaRe. 2023;7(3):283-288.