



PHYSIOLOGICAL AND PSYCHOLOGICAL EFFECTS OF VETHATHIRI MAHARISHI'S KAYAKALPA YOGA ON POLYCYSTIC OVARIAN SYNDROME AND INFERTILITY

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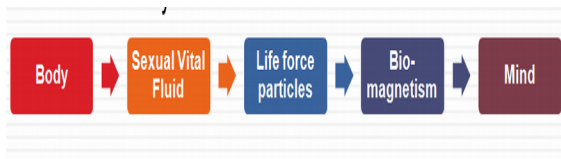
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INTRODUCTION:

Depression and anxiety are common in women with PCOS and Infertility. Vethathiri Maharishi's Kayakalpa Philosophy includes Body, Life-force, Bio-magnetism, Mind, and Sexual vital fluid. Kayakalpa yoga is a complete Science which integrates physics, biology, physiology, philosophy, genetics and yoga. PCOS means Poly cystic ovarian syndrome also known as hyper androgenic chronic anovulation is a benign disorder is one of the leading causes of Female Infertility. PCOS is an endocrine disorder where hormones are thrown out of balance. Kayakalpa yoga will flush blood to the brains signaling it to restore hormonal balance, reduces stress and anxiety by modulating sympathetic nerve activity. This research study is aimed to control the Physiological and Psychological changes in PCOS women and to cure Infertility by Practicing SKY Kayakalpa Yogic technique regularly.

VETHATHIRI MAHARISHI'S KAYAKALPA – THE BODY IMMORTAL:

There are five factors which design the functioning of the human body:

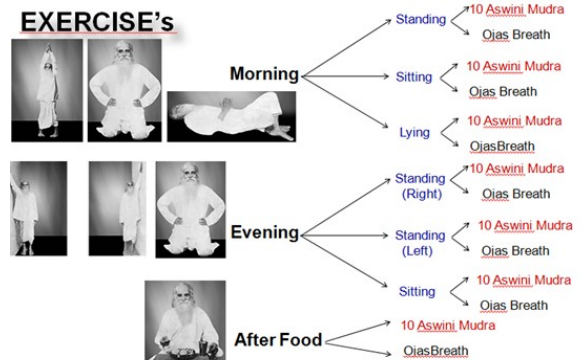


STEPS IN KAYAKALPA YOGA:

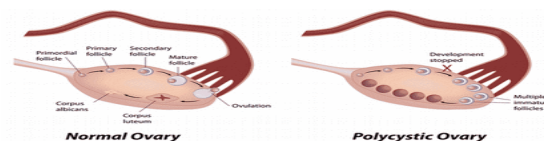
- **Aswini Mudra:-** Toning up of nerves (Exercise to anal sphincter muscle)
- **Muscles Involved:-** Sphincter muscle, Anal muscle, Pelvic diaphragmatic muscles, levator ani muscles.
- **Mechanism:** - Ensures healthy sexual glands, Nervous system is attuned, Contraction and relaxation, Centrifugal spinning action occurs.
- **Moolabandam:-** Holding the anal muscle contracted
- **Muscles Involved:-** Perineum muscles
- **Mechanism:-** Locking of the muscles to the perineum, Apana to flow upwards and downwards,

stimulates 72000 Naadis and affect Manomayakosha.

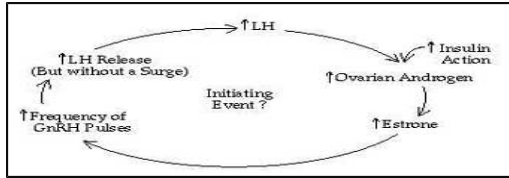
- **Ojus Breathe:-** Respiratory exercise to raise and spread the vital force.
- **Mechanism:-** Raising vital force from the seed center to the brain center
- **Muscles Involved:-** Anal sphincter



MODERN MEDICINE VIEW OF POLYCYSTIC OVARIAN SYNDROME (PCOS):



PHYSIOLOGY OF MENSTRUAL CYCLE IN PCOS:



CAUSES FOR PCOS: 1. Stress 2. Sedentary life style 3. Diet

TRAINING SCHEDULE:

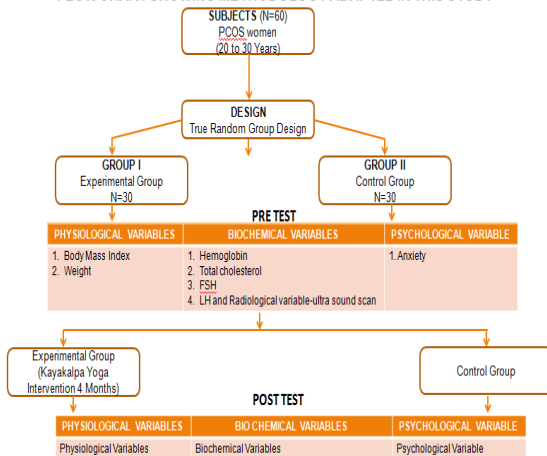
Daily the patients were advised to do the above Kayakalpa practices, for the period of four months continuously. Daily diary chart was given to the patients, and they have to mark the tick whether they do the practices or not. Maximum subjects were doing the practices regularly. If the subjects have any doubt they call the yoga instructor through phone or with direct communication. Subjects should attend the sessions twice per week near the sky centers.

STATISTICAL ANALYSIS AND DESIGN:

In this study Paired sample t-test (one way analysis of anova) is a statistical technique that is used. In all cases 0.05 level of significance was fixed to test hypothesis. For Psychological Findings Hamilton Anxiety rating scale was used.

METHODOLOGY:

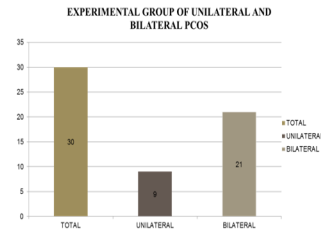
FLOW CHART SHOWING METHODOLOGY ADAPTED IN THIS STUDY



DATA ANALYSIS AND INTERPRETATION OF THE STUDY:

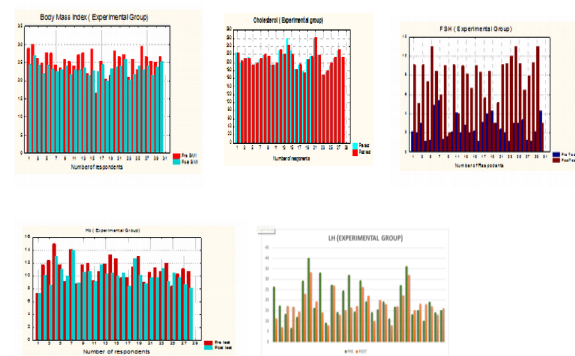
STATISTICAL ANALYSIS FOR TRANSVAGINAL SCAN

Among 30 patients had PCOS in transvaginal scan in pre test report and after the experimental period of four months all the patients was observed in scan that no one had PCOS.



SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF SKY KAYKALPA YOGA GROUP

Sl. No	Variables	Pre Test Mean	Post Test Mean	Mean Difference	95% CI Lower	95% CI Upper	95% confidence interval of the difference -LOWER	95% confidence interval of the difference -UPPER	P Value	
1	HEMOGLOBIN	12.3063	12.5267	-1.6863	1.59419	1.46544	1.59631	-2.33779	-0.007	4.426
2	BODY MASS INDEX	25.3730	23.2400	2.13300	2.59319	1.52874	1.52874	1.26765	27.592	4.714
3	BLOOD CHOLESTEROL	209.37	209.57	-200	21.460	19.631	4.329	-4.051	1.451	-2.02
4	FOLLICLE STIMULATING HORMONE	2.9513	7.8553	-5.09400	1.20130	2.44512	3.13467	-6.26451	-3.92346	-0.001
5	LEUTINIZING HORMONE	15.0620	5.05730	5.00400	6.70705	2.14764	3.13467	6.26451	-3.92346	-0.991



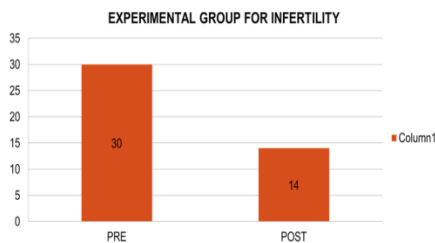
PSYCHOLOGICAL SCALE: HAMILTON ANXIETY RATING SCALE - INITIAL CLUSTER CENTERS-CLUSTER ANALYSIS: EXPERIMENTAL PRE TEST SCORES

Iteration History

Iteration	Change in Cluster Centers		
	1	2	3
1	2.154	2.595	2.396
2	.000	.139	.305
3	.000	.152	.262
4	.000	.174	.241
5	.000	.173	.217
6	.000	.000	.000

NUMBER OF CASES IN EACH CLUSTER		
Cluster	1	5.000
	2	14.000
	3	11.000
Valid		30.000
Missing		.000

STATISTICAL ANALYSIS FOR INFERTILITY



RESULTS AND CONCLUSIONS:

During the toning up of the nerves we focus our mind in Mooladhara chakra. This is an exercise where we give massage to the ovaries by contracting and relaxing the muscles in that region. Uterus get strengthened, regular menstruation occurs. This initiates the insulin receptor cells in the ovaries to work properly. Ojus breath is a technique in which the energy collected in the Mooladhara chakra is taken to the pituitary. An imbalance of ovarian axis can lead to PCOS and Kayakalpa yoga can prevent this. Higher level of LH is fed to the pituitary gland. Now this helps in generation of FSH which helps in regular menstruation of women. PCOS as a mind body disease according to yogic scripture ie an imbalance at several levels. So there is a need to focus on mind and body. PCOS abnormalities arises ie imbalances begin in the MANOMAYA KOSHA. Kayakalpa

yoga helps to control the Manomaya kosha. Before starting the study, the blood was collected from the PCOS patients in clinical laboratory aliyar ashram, and the bio chemical analysis were estimated. After 4 months of Kayakalpa yoga therapy, blood samples were collected from the PCOS patients and the bio chemical estimation were analyzed. Finally the result was, while doing Kayakalpa yoga FSH and LH hormones are in normal level, Total cholesterol and hemoglobin was in normal level. Radiological findings like USG reports revealed, that reduce of polycystic appearance of ovaries and improvement of follicular maturity. LH/ FSH hormone reports revealed that the ratio came to the normal level. Physiological variable like weight and BMI come to normal level. Through Kayakalpa yoga the vital force is channeled up, stimulating all the functions of the nerve plexus as well as the endocrine glands that are responsible for Secreting hormones. Autonomous and central nervous system get strong. Hence while doing Kayakalpa yoga – which is the recycling of seminal back mechanism is similar to the feedback mechanism of the pituitary gland in synchronizing the hormone balance. Kaya Kalpa yoga is an intrinsic exercise done to regulate the endocrine metabolism of our body, since PCOS is one of the endocrinal disorders this Yogasana is applicable to patients suffering from PCOS. Hence Kayakalpa yoga is considered as Preventive and curative. Doing Vethathirimaharish's Kayakalpa yoga PCOS get cured and the patients get conceived.

ACKNOWLEDGEMENT:

I gratefully acknowledge and sincerely appreciate my guide **Dr. K.Perumal, M.Sc., MA, Ph.D., (YHE), Professor and Director, of WCSC-VISION for Wisdom,** , My Organisation, and dedicated to inculcate the ideals of Yogiraj Vethathiri Maharishi, for giving me this opportunity to explore the Vethathirian Perspective of Universe and the Human Phenomenon.

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2. Thathuvagnani Vethathiri Maharishi , first edition (1992) , 2009 , Journey of consciousness, Erode: Vethathiri Publications , The world community service center , P No -151, 152.

PUBLICATIONS:

1. IJOART journal - Psycho Physiological effect of Vethathiri Maharishi Kayakalpa Yoga on PCOS-Clinical trial

2. Research Directions journal- Effects of Vethathiri Maharishi's Kayakalpa Yoga on Polycystic Ovarian Syndrome and Secondary Infertility .

3. STM journal- Kayakalpa Yoga A treasure Hunt for Women with PCOS and Infertility A pilot Trial

4. REVIEW OF RESEARCH journal- Scientific approach of Vethathiri Maharishi's Kaykalpa Yoga on Poly Cystic Ovarian Syndrome

5. Aayvagam journal - Utilization of Swamiji Vethathiri Maharishi's Kayakalpa Yoga Praticce for Women with Poly Cystic Ovarian a Case study