"A CLINICAL STUDY ON EFFICACY & SAFTY OF *HARITAKI CHURUNA* WITH *MADHU* AND *HARITAKI CHURUNA* WITH *PURANA GUDA* IN THE MANAGEMENTOF SANTARPANANIMITTAJA VIKARA WSR TO POLYCYSTICOVARY SYNDROME (PCOS)"

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ABSTRACT:-BACK GROUD-In Ayurveda *Santarpananimitta Rogas* are over nutritional diseases like *Pramehapiddka, Kotha, Kandu, Pandu, Javara, Kustha, Aampradosha, Mutrakrichha* etc. Polycystic ovary syndrome (PCOS) is a syndrome manifested by amenorrhea, hirsutism and obesity associated with enlarged polycystic ovaries. Depression, stress, laziness are other common symptoms. The symptoms of PCOS closely relate to the manifestation of *Santarpananimitta roga*. **AIM & OBJECTIVES-**To evaluate the effect of *HaritakiChurna* with *Madhu* and *Puran Guda* on BMI, symptoms of PCOS, size and number of ovarian cysts etc. **METERIAL AND METHODS: -** Randomly selected 30 patients in 2 groups for 60 day. In Group-A, given *Haritaki Churna* (4gm) with *Madhu* (3gm) and in group-B, given *Haritaki Churna* (4gm) with *PuranGuda* (3gm). **RESULT**-% relief in both group **MENSTRUATION FEATURES** (Interval G-A -88.26%,G-B-81.82%, Duration G-A- 61.85%, G-B -78.57%, Amount G-A -72.73%, G-B -70.38%, Dysmenorrhea G-A-79.97% G-B-82.35%, Character of bleeding G-A -86.36%, G-B-70.38%, Color of menstruation G-A-70.97% &G-B-71.39%), *Medorog*& others- (*Ch Sphik* Udara *Darstana*-G-A-63.64%, G-B 22.21%, *Gatra Daurgandhya* G-A-57.14%G-B- 66.66%, *Kshudhatimatrama* G-A 82.37% G-B 66.66% *Pipasatiyoga* G-A-73.66% G-B-69.22%, *Daurbalya* G-A-63.61%, G-B 75%, *Javaparodha* G-A-65.01%, G-B-68.40%, *KrichchaVyavayata* , G-A -81.22%,G-B-64.28% , *Gurugatrata* G-A-86.36 % G-B-68.16%, *Alasya*-G-A -89.42%, G-B-66.66%, *Tandra* G-A-72.22%, G-B-87.46%). Both group also

showed significance in Lab. Investigations. **DISCUSSION-**_Aharya Caraka_ has mentioned various diets and drinks for treatment of _Santarpananimittavikar as_ that all eviate_Vata_ and _Kapha_ and reduce fat. He has mentioned use of _Haritaki_ with _Madhu_ and _Guda_ for these types of disease. **CONCLUSION-**Both group showed significance in both group

Key Words: -_Santarpananimitta Roga,_ PCOS, _Haritaki Churna, Madhu &Puran Guda_

INTRODUCTION:

Ayurveda has classified diseases from various points of view; _Santarpananimitta_ and _Aptarpannimittavikara_ are one of the types of diseases based on over nutrition and malnutrition.[i]The term _Santarpana_ means nutrition of the _Saptadhatu_ of body. When this is in excess or not balanced then it leads to causation of diseases which are now days known as lifestyle disorders. _Acharya Carak_ has mentioned _Nidana_ of _Santarpanothavyadhi_ as _Snigdha, Guru, Madhura, Pichhiladravya, Navanna, Navmadya, Anupamansa_ (non -vegetarian diet)_, Gorasa, Gudavikara, Pihstaanna_ as dietary one and laziness, habit of day sleep, use of luxurious life devoid of physical activities as behavioral one[ii].

The diseases which are caused due to over nutrition are _Pramehapiddka, Kotha, Kandu, Pandu, Javara,Kustha,Aampradosha,Mutrakrichha,Arochaka,Tandra,Klaivya,Atistholya,Alasya,Gurugatrata,Indriya&Srotaslepa,Buddhimoha, Pramillaka, Shotha_ etc[iii]. This can occur as single manifestation or as a cluster of symptoms or diseases. One of such manifestation is PCOS (poly cystic ovarian syndrome).It is not directly mentioned in _Samhitas_ but the symptoms of PCOS can be seen in examples of _Santarpananimittavikar as_. Polycystic ovary syndrome is very common condition affecting women. Due to changes in life style, bad food habits, work load etc. women face a lots of health issues. PCOS is a syndrome manifested by amenorrhea; hirsutism and obesity associated with enlarged polycystic ovaries. Depression, stress[iv], laziness are other common symptoms. The symptoms of PCOS closely relate to the manifestation of _Santarpananimitta roga_.

The prevalence of polycystic ovarian syndrome among infertile women ranges from 0.6% to 4.3% and among women of reproductive age group estimates made on the basis of morphological and hormonal criteria ranges from 3.5 to7.5%.[v] Polycystic ovary syndrome(PCOS) is a hyper-androgenic condition characterised by prolonged oligo-anovulation and polycystic ovarian morphology[vi] It's frequently linked to psychological issues like depression and other mood disorders, as well as metabolic issues like insulin resistance and compensatory hyperinsulinemia, which are known to play role in androgen production and metabolism.[vii]

Acharya Caraka has mentioned various diets and drinks for treatment of _Santarpananimittavikar as_ that alleviate _Vata_ and _Kapha_ and reduce fat. He has mentioned use of _Haritaki_ with _Madhu_ for these types of diseases[viii].

AIM AND OBJECTIVES: -

1. **Primary Outcome-**To evaluate the effect of _Haritaki Churna_ with _Madhu_ and with _Puran Guda_ on BMI, symptoms of PCOS, size and number of ovarian cysts etc.

2. **Secondary outcomes**-Effect on LH, FSH.

METERIAL ANDMETHODS:-

- ➢ **Selection of patients-** The study was conducted on clinically diagnosed patients of PCOS from OPD & IPD of NIA JAIPUR. A written information and consent form had been given to the selected patients. The patients were divided into two groups randomly name A and B. Total 30 patients' were completed the study.

Criteria for the selection of the patient:

A. INCLUSION CRITERIA

- ➢ PCOS patients with age between16-35years suffering from any of the two features in the following–

- ➢ Patients having mid body obesity(BMI26-40)

- ➢ Patient suffering from oligomenorrhea. (Duration of flow less than 2 days, interval between 2 cycles exceeding morethan35days).

- ➢ At least one ovary showing PCOD(diagnosed by USG) {ESHRE/ASRM-Rotter dam revised criteria for PCOD,2003}

B. EXCLUSIONCRITERIA:

- ➢ Pregnant women, lactating mother & taking OCPs.

- ➢ Patients with BMI less than 26.

- ➢ Patient having congenital and structural abnormalities of uterus and adnexa, physiological in frequent menstruation, drug induced amenorrhea/oligomenorrhea.

- ➢ Suffering from pelvic pathology including fibroid uterus, cervical polyp etc.

- ➢ Suffering from any systemic diseases. HB levels less than7gm% and other etiologies (CAH, thyroid dysfunction, hyper prolactinemia, Cushing syndrome, HIV, VDRL, HBsAg positive etc.)

STUDY DESIGN:-

- · **CTRI Registration number :-**(CTRI/2021/12/038533)
- · **Ethics committee approval:-**IEC/ACA/2020/3-12
- · **Study type:** Randomized Clinical Study, Open label
- · **SampleSize:**30, **Duration of trial:** Two consecutive cycles(60 days)
- · **Follow up** -During trial and monthly up-to two months after the completion of trail.
- · **Trial Drug and Dose**

Group	Drug	Botanical name	Usable Part	Dose and *Anupana*
Group-A	*Haritaki*	*Terminalia chebula*	*Phala*(powder)	4gmwith *Madhu*(3gm)
Group-B	*Haritaki*	*Terminaliachebula*	*Phala*(powder)	4gmwith *Guda* (3gm)

ASSESSMENTCRITERIA –Effect on menstrual flow and regularity and Ssymptoms of *Medo roga, Daurbalya, Gurugatrata, Alasya,Tandra, Pramilaka.*

OBERSERVATION-DEMOGRAPHIC AND SYMPTOMATIC

DEMOGRAPHIC

Age-in the study maximum 60% was in 20-25 yrs, Religion-Maximum 96.6% was *Hindu*, 63.33% patients were unmarried. In education maximum 70%were graduate, Occupation: maximum 80% patients were students, Socioeconomic: 53.33%were lower middle class, Family history: 26.66% were founded with family history, Contraceptive History: Data of this present study shows 37.5% were on oral pills and 37.5% also patients were in condom contraception group, Rasa Dominance- maximum 23.33% were taken in *Katu*, Diet-86.66% patients were vegetarian, Data showing present study is that maximum no. of patients 25(83.33%), Sleep- maximum 56.66% patients were with disturbed sleep, Data shows in this present study is maximum no. of patients 11 (36.66%) were with present tiredness. *Vishmagni* -maximum 76.66% were with *Vishmagni*,

OBERSERVATION ON DIETARYHABITS

Data showed in the present study are *Paishtikanna* (80%)*, Navanna* (100%)*, Snigdha, Guru, Madhura* (80%) *Diwaswap* (60%)*, Avyayam* (73.33%)*, 53.33% RatriJagaran* and *Chestadveshi.*

OBERSERVATIONONMENSTRUATION FEATURES

Duration of menstruation -Maximum 36.66% patients have menstrual period within 1-2 days, 30% of patients have menstrual period within 3-5 days. **Menstrual interval -** Maximum 56% of patients have Interval of menstruation is 36-45 days, 30.0% of patients have Interval of menstruation is21-35 Days. **Amount of blood loss-**Maximum 66.0% of patients have scanty blood loss during menstruation, 30% of patients have excessive blood loss during menstruation. **Dysmenorria -**Maximum 50.0% of patients have severe pain during menses, 46.66% of patients have moderate pain during menses. **Character of bleeding-**Maximum 43.33% patients have sometime big clots, 40% patients have every menstrual period small clot. **Color of menstrual blood-**Maximum 46.66% patient have brown color during menstruation, 33.33 % patient has blackish color during menstruation.

OBERSERVATION ON OTHER SYMPTOMS:-

Pramilak-Maximum 50.0% of patient have stressed some times, 36.66% of patient have generally stressed. *Alasya-* Maxmium76.66% patients were with satisfactory work with, 23.33% patients were not. **Drowsiness (***Tandra***)**-Maximum 60% patients have sometime drowsiness, 26.66% patients have mostly drowsiness. *Gurugatrata* **(heaviness)** - 60% patients feel heaviness in body but it does not hamper routine work, 33.33% patients feel heaviness in body which hampers daily routine work.

RESULT

All the results are calculated by using Software: In StatGraphpad3. **STATISTICAL ANALYSIS:** P value=<0.0001, Extremely Significant, P valve =0.0001 to 0.001, Highly Significant, P=0.001 to 0.01Very

Significant, P=0.01 to 0.05   Significant & ≥0.05   Not Significant

Table N- 1. Effect of therapy in subjective parameters (menstrual history) (Wilcoxon matched paired signed rank test)

Variable	Gr.	BT Avg.	AT Avg.	Mean Diff	% Relief	SD	SE	P value	S
Interval	G-A	1.133	0.1333	1	88.26%	0.6547	0.1309	0.0039	V.S
	G-B	0.7333	0.1333	0.6	81.82%	0.507	0.169	0.0005	V.S
Duration	G-A	1.4000	0.5333	0.8667	61.85%	0.6399	0.1652	0.001	E.S
	G-B	0.9333	0.2	0.7333	78.57%	1.163	0.3003	0.0488	S
Amount	G-A	1.467	0.4	1.067	72.73%	0.2582	0.06667	<.0001	E.S
	G-B	1.8	0.5333	1.267	70.38%	0.7037	0.1817	<.0001	E.S
Dysmenorrhea	G-A	2.667	0.5333	2.133	79.97%	0.6399	0.1652	<.0001	E.S
	G-B	2.267	0.4	1.867	82.35%	0.1333	1	<.0001	E.S
Characterofbleeding	G-A	1.467	0.2	1.267	86.36%	0.5936	0.1533	<.0001	E.S
	G-B	1.8	0.5333	1.267	70.38%	0.4577	0.1182	<.0001	E.S
Color of menstruation	G-A	2.067	0.6	1.467	70.97%	0.7432	0.1919	<.0002	H.S
	G-B	1.867	0.5333	1.333	71.39%	1.113	0.2873	<00.10	H.S
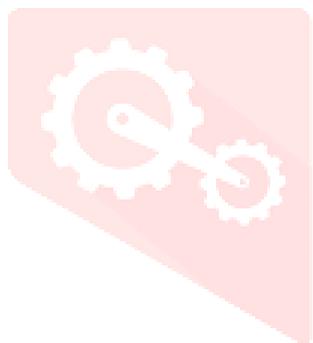
Table-2:- Effect of therapy in *Medorog* & others (Wilcoxon matched paired signed rank test)

Variable	Group	BT Avg.	AT Avg.	Mean Diff	%Relief	SD	SE	P value	S
Sphik UdaraDarstana	G-A	0.7333	0.2667	0.4667	63.643%	0.5164	0.1333	0.0156	S
	G-B	0.6	0.4667	0.1333	22.21%	0.6399	0.1652	0.5625	S
GatraDaurgandhya	G-A	0.9333	0.4	0.5333	57.14%	0.6399	0.1652	0.0156	S
	G-B	0.6	0.2	0.4	66.66%	0.5071	0.1309	0.0313	S
Kshudhatimatrama	G-A	1.133	0.2	0.9333	82.37%	0.2582	0.06667	0.0001	E.S

	G-B	0.6	0.2	0.4	66.66%	0.5071	0.1309	0.0313	S
Pipasatiyoga	G-A	1.267	0.3333	0.9333	73.66%	0.2582	0.06667	0.0001	H.S
	G-B	0.8667	0.2667	0.6	69.22%	0.5071	0.1309	0.0039	VS
Daurbalya	G-A	1.467	0.5333	0.9333	63.61%	0.2582	0.06667	0.0001	H.S
	G-B	0.8	0.2	0.6	75%	0.5071	0.1309	0.0039	VS
Javaparodha	G-A	1.333	0.4667	0.8667	65.01%	0.3519	0.09085	0.0002	H.S
	G-B	1.267	0.4	0.8667	68.40%	0.5164	0.1333	0.0005	H.S
KrichchaVyavayata	G-A	1.067	0.2	0.8667	81.22%	0.6399	0.1652	0.001	H.S
	G-B	0.9333	0.3333	0.6	64.28%	0.5071	0.1309	0.0039	VS
Gurugatrata	G-A	1.467	0.2	1.267	86.36%	0.4577	0.1182	0.0001	H.S
	G-B	1.467	0.4667	1	68.16%	0.378	0.09759	0.0001	H.S
Alasya	G-A	1.267	0.1333	1.133	89.42%	0.3519	0.09085	0.0001	H.S
	G-B	1.2	0.4	0.8	66.66%	0.414	0.1069	0.0005	E.S
Tandra	G-A	1.2	0.3333	0.8667	72.22%	0.6399	0.1652	0.001	E.S
	G-B	1.067	0.1333	0.9333	87.46%	0.7037	0.1817	0.001	E.S
Pramilaka	G-A	1.667	0.4	1.267	76.00%	0.4577	0.1182	0.0001	E.S

Table-3:-Intergroup comparison of Group-A& Group-B for subjective parameters (Mann-Whitney test)

Variable	Group-A (difference)	Group-B (difference)	P-value	Significant
Interval	1.000	0.6000	0.0906	NS
Duration	1.467	1.000	0.2040	NS
Amount	1.067	1.267	0.5239	NS
Dysmenorrhea	2.133	1.867	0.2230	NS
Character of bleeding	1.267	1.267	0.9397	NS
Colour of menstruation	1.467	1.267	0.4804	NS
Chal Sphik Udara Stana	0.4667	0.4000	0.7353	NS

Gatra Daurgandhya	0.5333	0.4000	0.6331	NS
Kshudhatimatrama	0.9333	0.7333	0.1578	NS
Pipasatiyog	0.9333	0.6000	0.0363	S
Daurbalya	0.9333	0.6000	0.0363	S
Javaparodha	0.8667	0.8667	0.9762	NS
Krichchavyavayata	0.8667	0.6667	0.4058	NS
Gurugatrata	1.267	1.000	0.1011	NS
Alasya	1.067	0.8000	0.1149	NS
Tandra	0.8667	0.8667	0.9811	NS
Pramilaka	1.267	1.000	0.1011	NS

Table-4:- Showing effect of therapy on Lab Investigation (ObjectiveParameters):-(paired 't' test).

Variable	Group	BT Avg.	AT Avg.	Mean Diff	%Relief	SD	SE	T value	P value	Result
Hb%	G-A	12.567	12.7	0.133	1.06%	0.839	0.2168	0.6149	0.5485	NS
	G-B	11.847	12.151	0.304	2.57%	0.590	0.1526	1.997	0.0657	NS
ESR	G-A	18.2	14.22	4.00	21.98%	1.195	0.3086	12.961	<0.0001	ES
	G-B	18.533	15.33	3.20	17.27%	1.935	0.4995	6.406	<0.0001	ES
S.FSH	G-A	8.875	4.22	4.653	52.42%	2.069	0.5343	8.708	<0.0001	ES
	G-B	6.587	5.037	1.55	23.53%	1.859	0.48	3.229	0.0061	VS
S.LH	G-A	11.461	4.73	6.731	58.60%	3.452	0.8912	7.552	<0.0001	ES
	G-B	10.308	4.143	6.165	59.80%	4.4	1.136	5.426	<0.0001	ES
S. insulin	G-A	22.513	14.76	7.751	34.42%	7.531	1.945	3.986	0.0014	VS
	G-B	15.987	13.12	2.858	17.87%	3.668	0.947	3.018	0.0092	VS
S. testosterone	G-A	41.165	34.56	6.599	16.03%	9.811	2.533	2.605	0.0208	S
	G-B	67.313	62.47	4.843	7.19%	2.527	0.6524	7.423	<0.0001	ES

Progestrone	G-A	4.507	1.29	3.213	71.28%	2.455	0.634	5.067	0.0002	ES
	G-B	4.161	1.41	2.75	66.08%	2.343	0.605	4.545	0.0005	ES
Estrogen	G-A	10.873	15.76	-4.887	44.94%	1.165	0.3008	16.247	<0.0001	ES
	G-B	10.793	14.72	-3.927	36.38%	1.905	0.492	7.981	<0.0001	ES
S.HGB	G-A	25.465	28.38	-2.922	11.47%	2.801	0.7231	4.041	0.0012	VS
	G-B	26.265	27.74	-1.482	5.64%	0.712	0.184	8.054	<0.0001	ES
Androstenedion	G-A	3.063	1.987	1.076	35.12%	1.014	0.2617	4.111	0.0011	VS
	G-B	67.313	62.471	4.843	7.19%	2.527	0.6524	7.423	<0.0001	ES
No. of follicle(LT)	G-A	13.429	11.067	2.286	17.02%	1.383	0.3696	6.185	<0.0001	ES
	G-B	11.714	10.2	1.5	12.80%	0.883	0.7596	0.203	<0.0001	ES
No. of follicle (RT)	G-A	13.143	10.214	3.077	23.41%	1.977	0.5484	5.61	<0.0001	ES
	G-B	12.4	10.667	1.733	13.97%	0.883	0.2282	7.597	<0.0001	ES
Ovarian volume(LT)	G-A	12.714	9.143	3.571	28.08%	1.828	0.4885	7.311	<0.0001	ES
	G-B	10.667	10	0.6667	6.25%	0.587	0.1517	4.394	0.0006	ES
Ovarian volume(RT)	G-A	13	9.733	3.267	25.13%	1.71	0.4415	7.399	<0.0001	ES
	G-B	11.133	9.533	1.6	14.37%	0.828	0.2138	7.483	<0.0001	ES
Endometrial thickness(RT)	G-A	6.2	5.18	1.02	16.45%	1.588	0.4099	2.488	0.026	S
	G-B	5.387	5.0	0.3867	7.17%	0.456	0.1179	3.281	0.0055	VS
Endometrial thickness(LT)	G-A	6.1	5.18	0.92	15.08%	1.511	0.3903	2.357	0.0335	S
	G-B	5.453	5.067	0.3867	7.09%	0.494	0.1276	3.031	0.009	VS
BMI	G-A	26.8	24.267	2.533	9.45%	0.516	0.1333	19	<0.0001	ES
	G-B	27.527	26.06	1.467	5.32%	0.516	0.1333	11	<0.0001	ES

Table-5:-Inter Group Comparison of Group-A & Group-B in Lab Investigations (Unpaired t test)

Variable	Group-A (Difference)	Group-B (Difference)	T –value	P	S
Hb%	0.5180	0.2000	1.458	0.1561	NS
ESR	3.600	3.333	0.5311	0.5995	NS
S.FSH	4.653	1.548	4.317	0.0002	HS
S.LH	12.624	6.165	1.031	0.3113	NS
S. insulin	7.699	3.618	1.783	0.0854	NS
S. testosterone	6.599	4.843	0.6715	0.5074	NS
Progesterone	3.213	2.750	0.5279	0.6017	NS
Estrogen	4.887	3.927	1.665	0.1071	NS
S.HBG	2.922	1.482	1.930	0.0638	NS
Androstenedion	1.083	0.932	0.4142	0.6819	NS
No. of follicle(Rt.)	2.400	1.26	2.518	0.0178	S

No. of follicle(Lt.)	2.533	1.46	1.828	0.0782	NS
Ovarian volume(Rt.)	3.73	0.66	5.951	<0.0001	HS
Ovarian volume(Lt.)	3.067	1.60	2.646	0.0132	S
Endometrial thickness(Rt.)	1.127	0.386	1.819	0.0797	NS
Endometrial thickness(Lt.)	0.973	0.386	1.460	0.1553	NS
BMI	2.467	1.467	5.303	<0.0001	HS

DISCUSSION

Effect of therapy on:-Symptomatic improvement

- **INTERMENSTRUAL PERIOD:** - After treatment, in Group- A the % of relief was observed 88.26% and in Group-B the % of relief was observed 81.82%. So Group-A showed better result comparatively Group-B (TableN-1).This was due to *Haritaki* with *Madhu* for continued 60 days of menstrual cycle. *Haritaki* has also been mentioned as *Sarvarogasamni, Doshanulomni, Deepani-Pachani, Srotovibandhanashaka, Ayushya, Paustiki, Vayasthapni[ix]* and best among *Pathya[x]*. Thus, *Haritaki* helps in *Klaivyanasa, Angavsadnasa, Amapachana,Vatatanulomana[xi]* and has *Tridoshamak* property. *Madhu* is *Kaphashamka* because of its *Tikshan, Ruksha, Kashaya[xii]* properties.

- **DURATION OF MENSTRUAL BLEEDING:** - In Group-A relief was observed 61.85% and in group-B % of relief was observed 78.57%, So both the groups showed significant result but comparatively Group-A showed better result (TableN-1).

- **AMOUNT OF BLEEDING: -** In Group-A % of relief was observed 70.38%, and in Group-B relief was observed 72.73% So Group-B showed better result comparatively Group-A. Group-B Significant obtained discussion in menstrual complaints (duration of menses & amount of bleeding) may be due to the *Srotoshodhana, Kapha Smana. Agnideepana* and *Vatanulomana* properties of the trial drugs. (TableN-1)

- **PAIN ASSOCIATED WITH MENSTRUATION: -** In Group-B relief was observed 79.97% and in Group-A observed 82.35%. *Haritaki* and *Madhu* have *Vata Shamak* properties thus relived pain during menses. (TableN-1)

- **CHARACTER OF BLEEDING: -** In Group-A % of relief was observed 86.36%. In Group-B the relief was observed 70.38%. (TableN-1)

- **COLOUR OF MENSTRUATION: -** InGroup-A % of relief was observed 70.97%. In Group-B % of relief was observed 71.39%. (TableN-1)

- ***CHALASPHIK UDARA STANA: -*** In group-A relief was observed 63.64%, and in group-B relief was 22.21%. Comparatively result of group-A was better probably due to *Lekhan, Laghu, Rukshya, Grahi, Sukshma, Vishada Guna* of *Madhu.* (TableN-2)

- **GATRA DAURGANDH:** Improvement in *Daurgandhya* was seen in Group-B, 66.66%, and in

group-A % relief was 57.14%. Comparatively result of group-B was better. (TableN-2)

- **KSHUDHATIMATRAMA**: - Improvement in *Kshudhatimatrama* was seen Group-A, was 82.37%. In group-B % relief was 66.66%. Comparatively result of group-A was better than group-B. (TableN-2)

- **PIPASATIYOGA**: - Improvement in *Pipasatiyoga* was seen in Group-A, was 73.66%,and in group-B % relief was 69.22% Comparatively result of group-A was better than group-B. (TableN-2)

- **DAURBALYA**: - Improvement in *Daurbalya* was seen in Group-A, was 63.61% and in group-B was 75%.Comparatively result of group-B was better than group-A. (TableN-2)

- **JAVAPARODHA**: - Improvement in *Javaparodha* was seen in Group-A, was 65.01% and in group-B %relief was 68.40% .Comparatively result of group-B was better than group-A. (TableN-2

- **KRICHCHAVYAVAYATA: -** Improvement in *Krichchavyavayata* was seen Group-A, was 81.22% and in group-B was 64.28%.Comparatively result of group-A was better than group-B. (TableN-2)

- **GURUGATRATA**: - Improvement in *Gurugatrata* was seen in Group-A, was 86.36% in group-B % relief was 68.16%. Comparatively result of group-A was better than group-B. (TableN-2)

- **ALASYA**: -Improvement in *Alasya* was seen in Group-A, was 89.42% and in group-B % relief was 66.66%. Comparativelyresult of group-A was better than group-B. (TableN-2)

- **TANDRA**: Improvement in *Tandra* was seen in Group-A, was 72.22% and in group-B % relief was 87.46%.Comparatively result of group-B was better than group-A. (TableN-2)

- **PRAMILAKA**: - Improvement in *Pramilaka* was seen in Group-A, was 76.00% and in group-B % relief was 16.66%. Comparatively result of group-A was better than group-B. (TableN-2)

DISCUSSION ON LABORATORY PARAMETER :-(Table N-4)

- **HB%:-** In group-A, improvement was 1.06% which was 2.57% in group-B. Hb% was found to be increased in both group-But comparatively group-B was better reason behind this may be correction in *Rasvaha Srotorodh* and *Dhatvagni*.

- **ESR:-**In group-A, improvement was 21.98% which was 17.27% in group-B. ESR was found to be decreased in both groups. Results were statically significant in both the groups but comparatively group-A was better.

- **S.FSH:-** In group-A, improvement was 52.42% extremely significant which was 23.53% very significant in group-B. The drug was found effective in both groups but comparatively group-A was better.

- **S.LH:-** In group-A, improvement was 58.60% extremely significant which was 59.80% extremely significant in group-B. The drug was found effective in both group-But comparatively group-B was better.

➢ **INSULIN: -** In group-A-Improvement was 34.42% very significant which was 17.87% very significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **S.TESTOSTERONE:-** In group-A, improvement was 16.03% statistically significant which was 7.19% extremely significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **PROGESTERONE:-** In group-A, improvement was 71.28% E. significant which was 66.08% E. significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **ESTROGEN**:-I In group-A, improvement was 44.94% E. significant which was 36.38% E. significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **SHBG: -** In group-A, improvement was 11.47% very significant which was 5.64% E. significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **ANDROSTENEDIONE: -** In group-A, improvement was 35.12% very significant which was 7.19% E. significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **NO. OF FOLLICLE (RT):-** In group-A, improvement was 23.41% extremely significant which was 13.97% E. significant in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **NO. OF FOLLICLE (LT):-** In group-A, improvement was 17.02% (extremely significant) which was 12.80% (E. significant) in group-B. The drug was found effective in both group-B, but comparatively group-A was better.

➢ **OVARIAN VOLUE (RT):-** In group-A, improvement was 25.13% (extremely significant) which was 14.37% (E. significant) in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **OVARIAN VOLUME (LT):-** In group-A, improvement was 28.08% (extremely significant) which was 6.25% (E. significant) in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **ENDOMETRIAL THICKNESS (RT):-** In group-A, improvement was 16.45% (significant) which was 7.17% (significant) in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **ENDOMETRIAL THICKNESS (LT):-** In group-A, improvement was 15.08% (significant), which was 7 (significant) in group-B. The drug was found effective in both group-But comparatively group-A was better.

➢ **BMI:-**Improvement in BMI was seen in Group-A was 9.45%, which was statistically highly significant. In group-B % relief was 5.32% which was statistically highly significant. Comparatively result of group-A was better than group-B.

CONCLUSION: - *Nidan* and Symptoms of PCOS are similar to *Santarpananimitta rogas,* so line of treatment of *Santarpananimitta rogas* should be apply in the management of PCOS. *Haritki* with *Madhu* or with Purana *Guda* are effective and safe in the treatment of PCOS.

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