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A Clinico-Pathological Study On *Mukhadushika* And Its Management By *Lodhradi Lepa* And *Arogyavardhani Vati* With Special Reference To Acne Vulgaris

Dr. Bishnupriya Lenka¹, Prof. (Dr.) Pradip Kumar Panda², Dr. Manoranjan sahu³

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- 1. PG Scholar, P.G. Department of Roga Nidana Evum Vikriti Vgyana, Govt. Ayurvedic College & Hospital, Balangir
- 2. Guide P.G. Department of Roga Nidana Evum Vikriti Vgyana, Govt. Ayurvedic College & Hospital, Balangir
- 3. Co guide P.G. Department of Roga Nidana Evum Vikriti Vgyana, Govt. Ayurvedic College & Hospital, Balangir

Corresponding Author:- Dr. Bishnupriya Lenka P.G Deptt. of Roga Nidan Evum Vikriti Vigyana Govt. Ayurvedic College and Hospital, Balangir E-mail- <u>bishnupriyalenka2264@gmail.com</u> Mob No- 9938938964

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ABSTRACT: -

Introduction:-Today's lifestyle changes like irregular diet, pollution, Stress, hormonal changes are directly affect the skin. It may cause many skin diseases and most common among them is Acne vulgaris which can be correlated with *Mukhadushika* in Ayurved, which is about 80% of population in the age of of 12-30 years. In *Shusruta samhita* it is described in *Kshudra Rogadhikar*.

Materials and methods:-A total no. of 30 patients fulfilling the diagnostic criteria of *Mukhadushika* (*Acne vulgaris*) were divided into two groups A and B (N=15). Group Ap atient were treated with *Lodhradi Lepa* (as required) *applied externally* for 30 days and Group B with *Lodhradi lepa* (as required) applied externally along with *Arogyavardhani Vati* 250mg twice daily for 30 days both respectively.

Observation and results:-There were 53% and 62.2% of improvement in signs and symptoms in the patients of Group-A and Group-B were observed in this study respectively. The Statistically significant (P<0.05) result was revealed in both Group-A and Group-B but improvement was noticed more in Group-B. Regarding Hormonal (Testosterone and Estrogen) findings, significant(P<0.05) result was noticed in Group B and insignificant result in Group A (P>0.05).

Conclusion:-The study revealed that out of 30 cases taken for study, group B showed better result as compared to group A in overall effect. No side effect was noticed during clinical study.

Key words:-Mukhadushika, Acne vulgaris, Lodhradi Lepa, Arogyavardhani Vati



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INTRODUCTION

The face is one of the most important part of the body which is called as Organ of the emotion, that plays a critical role in physical attractiveness and distinguish from one person to others, allows us to communicate with the world around us. Today's life style and pollution are directly affecting the skin causing many skin diseases and most common in them is acne vulgaris. Acne manifests because of physiological disturbances during puberty and is found commonest in the youths. Acne develops earlier in females than in the males. Acne vulgaris or Acne is found to have parity with the disease '*Mukhadushika*' mentioned in Avurvedic texts.

Acharya Sushruta² has explained about Mukhadushika in the Kshudra Rogadhikar. Sushruta Samhita is the first Ayurveda text which explains Mukhadushika caused by vitiation of Vata, Kapha and Rakta dosha. Acharya Vagbhata , Madhav kara³, Bhaba prakash, Yogaratnakara also described it in Kshudra rogaadhikar. Acharya Vagbhatt⁴ has mentioned it as *medogarbha*. The vitiation of meda (fats) should be involved in it. It resembles the modern theory of sebum involvement in the pathogenesis of acne. In Bhavaprakas⁵. Swabhaba (nature) is mentioned as the cause of Mukhadushika. Acharya Sharangadhar⁶ has quoted that *vaktra* snigdhata (unctuousness of mouth) and yuvan pidaka (acne) are mala (waste) of Shukra dhatu(semen).

This disease affects the face like Shamali thorn

on face of youth so the disease can be correlated with acne vulgaris explained in modern medical science.

So for a better and a safe treatment, *Ayurvedic* formulation *Lodhradi Lepa* and *Arogyavardhani Vati* are selected for present comparative study in *Mukhadushika* (Acne vulgaris).

As chikitsa (treatment)⁷ has two ways Shamana (Pacification) and Sodhana (Purification), Lodhradi Lepa⁸ is included in Shamana Chiktsa (Pacification) and Arogyavardhani vati⁹ is included in Sodhana chikitsa (Purification) as it contains 50% of Kutaki (Picrorhiza kurroa) which act as purgative. In this disease there is vitiation of Rakta dosha, so purgation is the best choice of treatment.

AIMS AND OBJECTIVES

- 1. Detail study on *Mukhadushika*(Acne vulgaris).
- 2. To evaluate the effect of *Lodhradi Lepa* as external application and *Arogyavardhani vati* as internally in *Mukhadushika*.

MATERIALS AND METHODS

CTRI Number- Pending

IEC Number- 1246/G.A.C & H of dated 14/05/2019

Selection of Patients- Total 30 patients (Group A- 15 and Group B- 15) were selected from OPD and IPD of Govt. Ayurvedic College, Balangir and Sardeswari Govt. Ayurvedic Hospital, Balangir and they have been assessed and developed a scoring pattern after including all the subjective parameters like *sotha* (Inflammation), *Vedana* (pain), *Srava* (Discharge) along with objective criteria's like *No. pidaka*, *Size of pidaka*, *Paka in the pidaka*, *Vivarnata in the pidaka*. They were randomly selected and divided into two groups without considering their age, sex, caste and religion who fulfilled the inclusion criteria.

INCLUSION CRITERIA:-

- 1. Patients having classical sign and symptoms of *Mukhadushika* i.e *Shalmali Kantaka Sadrusa Pidaka*, *Saruja*, *Medogarbha*, *Ghana Sotha*, polymorphic eruption of papules, pustules, nodules and cysts.
- 2. Patients of both sexes.
- 3. Age group between 12-30 years.

EXCLUSION CRITERIA:-

- 1. Bellow 12 yrs and above 30 yrs.
- 2. Pregnant woman.
- 3. Chronic diseases like Diabetes, Hypertension, Asthma

4. Other skin diseases like Vitiligo, Psoriasis, Urticaria.

CRITERIA FOR INVESTIGATION

DC, TLC, Hbgm% and Hormonal test(Testosterone and Estrogen) were investigated initially and for the follow up periods.

SELECTION OF DRUGS

Two medicines Lodhradi lepa and Arogyavardhani Vatihad been taken for clinical trial. The drugs of both medicines were identified by the experts of Dept. of Dravyaguna and Rasashastra and Bhisajya Kalpana which were approved by DRC and **IEC** of College and Sambalpur University. Medicines were prepared as per GMP certified method in Mini Pharmacy of College under the supervision of expert of Rasashastra and Bhisajya Kalpana. The sample of research medicines were sent to Quality control Laboratories of ALN Rao Memorial Ayurvedic Medical College and PG centre Koppa, Distt. Chikmagalur, Karnatka for Analytical study.

Table No.-1; Showing the pharmacodynamics of drugs of Lodhradi Lepa and Arogyavardhani Vati

Name	Rasa	Guna	Veerya	Vipaka	Doshakarmat	Quantity			
				1.30	a	Taken			
LODHRADI LEPA									
Lodhra	Kashaya	Laghu, Rukshya	Sheeta	Katu	Kaphapita shamak	lpart			
Dhanyak	Kashaya,Tik ta, Madhura,	Laghu, Snigdha	Ushna	Madhura	Tridosha Shamak	1part			
Vacha	Katu, Tikta	Laghu, Tikshna	Ushna	Katu	Kapha-vata Shamak	1part			

Su.	Sadrasa	Yogabahi			Tridosah	1part
Parada		Sara			shamak	
		Guru				
Su. Gandhaka	Katu	Sara	Ushna	Katu	Vatakapha shamak	1part
Louha	Tikta	Snigdha	Sheeta		Tridosah	1part
Bhasma	Madhura	Guru			shamak	
	Kashaya	Rukshya				
Abhraka Bhasma	Madhura	Snigdha	Sheeta	Madhura	Tridosah shamak	1part
Tamra Bhasma	Tikta Kashaya	Laghu	Ushna	Madhura	Pitakapha shamak	1part
Haritaki	Lavana barjita Pancha rasa	Laghu Rukshya	Ushna	Madhura	Tridosah shamak	2part
Vibhitaki	Kashaya	Laghu Rukshya	Ushna	Madhura	Tridosah shamak	2part
Amalaki	Lavana barjita Pancha rasa	Laghu Rukshya	Sheeta	Madhura	Tridosah shamak	2part
Suddha Shilajit	Tikta ,Lavana Kashaya,Katu	Guru Shita Mrudu	Sheeta	Katu	Tridosah shamak	3part
Suddha Guggula	Tikta ,Kashaya Katu ,Madhura	<mark>Vishad</mark> Sukshma Pichhila	Ushna	Katu	Tridosah shamak	4part
Chitrakamu la churna	Katu	Laghu,Ruk shya,Tiksh na	Ushna	Katu	Vatakapha shamak	4part
Kutaki churna	Madhura	Laghu, Rukshya	Sheeta	Katu	Kaphapita shamaka	18part

Dose – In group A *Lodhradi Lepa* (as required) applied externally once in the day time and in

group B *Lodhardi lepa* for external application with *Arogyavardhani Vati*1Vati (250mg) twice daily after food with *Ushna Jala* (hot water) was given.

ASSESSMENT CRITERIA

The Subjective parameters and Objective parameters as per Inclusion Criteria were assessed by the grading score from 0 to 3 according to the severity of diseases and favorable shift to back. Both parameter follow-up was taken on 10th, 20th and 30th day of medication. The overall assessments were done considering the percentage relief of both parameters and statistical evaluation

OBSERVATION AND RESULT

The clinical study period of 30 patients were from 11-05-2020 to 06-03-2021. Within the aforesaid period the demography (Table No.-02) based on Age-Sex-Religion etc. along with incidence of *Dasvidha Pariksha* (Table No.-03) were observed and assessed.

Criteria	Maximum%	Category	
Age	50%	16-20	
Sex	63.33%	Female	
Religion	90%	Hindu	
Occupation	73.33%	Student	
Dietary habits	83.33%	Both	
Addiction Control Addiction	83.33%	Tea	
Marital Status	90%	Unmarr ied	
Educational status	100%	Literate	
Socioeconomic sta <mark>tus</mark>	93.33%	Middle class	

Table no.	02: Demo	graphy In	cidence of	Registered	Patients.	(n=30)
	- ,	0 ° F V				()

Table no. 03; Incidence of *Dashavidha- Pariksha Prakriti* of Registered Patients. (n=30)

Criteria	Maximum %	Category
Prakruti	63.33%	Vataslaismika
Vikriti	60%	Madhyam Vikriti
Sara	100%	Madhyam Sara
Samhanana	96.66%	Madhyam Samhanan
Pramana	96.66%	Madhyam Pramana
Satwa	46.66%	Madhyam Satwa
Satmya	80%	Prabara Satmya
Ahara shakti	76.66%	Madhyam Ahara shakti
Vyayama shakti	70%	MadhyamVyayama shakti
Desha	90%	Jangala Desha

The Subjective and Objective Parameters of both Group-A and Group-B were observed during clinical study. (Table No.-04 and 05) The effect of *Lodhradi Lepa*was assessed on subjective parameters by before and after treatment study protocol and was calculated as per Statistical method(Table No.4 and Chart no 1)

Subjective Parameter		Mean	Median	SD	Wilcoxon W	P-Value	% Effect	Result
Farameter					vv		Effect	
Sotha	BT	1.60	2.00	0.51	-3.464 ^a	0.0005	50.00	< 0.05
	AT	0.80	1.00	0.41	-3.404			Sig
Vedana	BT	1.60	2.00	0.74	-3.357 ^a	0.0008	54.17	< 0.05
	AT	0.73	1.00	0.59	-3.337	0.0008	54.17	Sig
Srava	BT	0.73	0.00	0.88	-2.449 ^a	0.0142	54.55	< 0.05
	AT	0.33	0.00	0.49	-2.449	0.0143	54.55	Sig

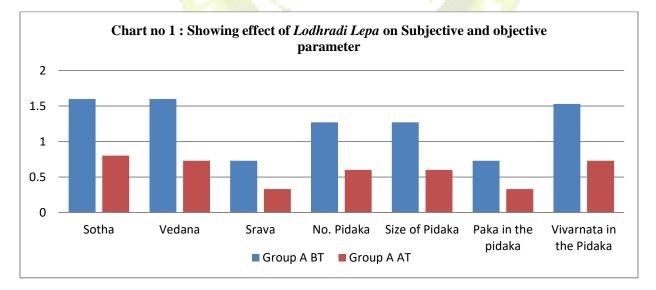
 Table No-4
 :Showing effect of Lodhradi Lepa(Group A) on Subjective Parameter(n=15)

The effect of *Lodhradi Lepa* was assessed on Objective parameters by before and after treatment study protocol and was

calculated as per Statistical method (Table No.5 Chart no 1)

 Table No-5
 :Showing effect of Lodhradi Lepa
 Group A) on Objective Parameter(n=15)

Objective Parameter		Mean	Median	SD	Wilcoxon W	P-Value	% Effect	Result
No. of	BT	1.27	1.00	0.46	-3.162 ^a	0.0016	52.63	< 0.05
pidaka	AT	0.60	1.00	0.51	-3.102	0.0010	52.05	Sig
Size of	BT	1.27	1.00	0.46	-3.162 ^a	0.0016	52.63	< 0.05
Pidaka	AT	0.60	1.00	0.63	-3.102	0.0010	52.05	Sig
Paka in	BT	0.73	1.00	0.46	-2.449 ^a	0.0143	54.55	< 0.05
the pidaka	AT	0.33	0.00	0.49	-2.449	0.0143	54.55	Sig
Vivarnata	BT	1.53	1.00	1.13				< 0.05
In the Pidaka	AT	0.73	1.00	0.70	-2.972ª	0.0030	<mark>5</mark> 2.17	Sig



The effect of *Lodhradi Lepa* and *Arogyavardhani Vati*was assessed on Subjective parameters by before and after

treatment study protocol and was calculated as per Statistical method(Table No.6 and Chart no 2)

Table No- 6 :Showing effect of *Lodhradi Lepa* and *Arogyavardhani Vati*(Group B) on Subjective Parameter (n=15)

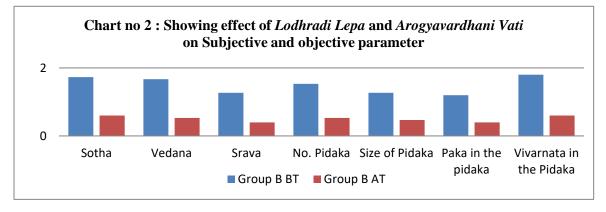
Subjective Parameter		Mean	Median	SD	Wilcoxon W	P-Value	% Effect	Result
Sotha	BT	1.73	2.00	0.46	2 40 48	0.0005	65.38	< 0.05
	AT	0.60	1.00	0.51	-3.494 ^a	0.0005		Sig
Vedana	BT	1.67	1.00	0.82	2 21 48	0.0000	68.00	< 0.05
	AT	0.53	1.00	0.52	-3.314 ^a	0.0009		Sig
Srava	BT	1.27	1.00	1.39	2 5008	0.0004	CO 10	< 0.05
	AT	0.40	0.00	0.51	-2.598 ^a	0.0094	68.42	Sig

The effect of *Lodhradi Lepa* and *Arogyavardhani Vati*was assessed on Objective parameters by before and after treatment study

protocol and was calculated as per Statistical method(Table No.7 and Chart no 2)

 Table No- 07: Effect of Lodhradi Lepa and Arogyavardhani Vati(Group B) on Objective parameters (n-15)

Objective parameter			Mean	Median	SD	Wilcoxon W	P-Value	% Effect	Result
No. of	Gr A	BT	1.27	1.00	0.46	-3.162 ^a	0.0016	52.63	< 0.05
Pidaka		AT	0.60	1.00	0.51	0.102	0.0010	02.00	Sig
	Gr B	BT	1.53	2.00	0.52	-3.419 ^a	0.0006	65.22	< 0.05
		AT	0.53	1.00	0.52	-3.417	0.0000	03.22	Sig
Size of	Gr A	BT	1.27	1.00	0.46	-3.162 ^a	0.0016	52.63	< 0.05
Pidaka		AT	0.60	1.00	0.63	-5.102	0.0010	52.05	Sig
	Gr B	BT	1.27	1.00	0.46	-3.464 ^a	0.0005	63.16	< 0.05
		AT	0.47	0.00	0.52	-3.404	0.0005	05.10	Sig
Paka in	Gr A	BT	0.73	1.00	0.46	-2.449 ^a	0.0143	54.55	< 0.05
the		AT	0.33	0.00	0.49	-2.449	0.0143	54.55	Sig
Pidaka	Gr B	BT	1.20	1.00	1.01	-2.972ª	0.0030	66.67	< 0.05
		AT	0.40	0.00	0.51	-2.912	0.0030	00.07	Sig
Vivarnata	Gr A	BT	1.53	1.00	1. <mark>13</mark>	-2.972 ^a	0.0030	52.17	< 0.05
in the		AT	0.73	1.00	0.70	-2.)12	0.0050	52.17	Sig
Pidaka	Gr B	BT	1.80	1.00	1.08	2 20068	0.0010	<i></i>	< 0.05
		AT	0.60	0.00	0.74	-3.286 ^a	0.0010	66.67	Sig



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The assessment of Subjective parameters of Group-A and Group-B were assessed in order to find out the significant or non-significant of result. The calculated value is placed here with as per Table No.08

Subjective Parameters	Group	Ν	Mean Rank	Sum of Ranks	Mann- Whitney U	P-Value	
	Group A	15	13.30	199.50		<0.05	
Sotha	Group B	15	17.70	265.50	79.500	<0.05 Sig	
	Total	30					
	Group A	15	13.83	207.50		<0.05 Sig	
Vedana	Group B	15	17.17	257.50	87.500		
	Total	30				Sig	
	Group A	15	13.50	202.50			
Srava	Group B	15	17.50	262.50	82.500	<0.05	
	Total	30				Sig	

Table No- 08: Showing the a	assessment of Subjective	parameters before and	l after treatment
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The assessment of Objective parameters of Group-A and Group-B were assessed in order to find out the significant or non-significant of result. The calculated value is placed here with as per Table No.09.

Table No- 09: Showin	- 41		1 f	1 - f4 · A - · - · A - · · · A
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	is the appenditute of	Objective parameters	berore an	a arter treatment

Subjective Parameters	Group	N	Mean Rank	Sum of Ranks	Mann-Whitney U	P-Value	
	Gr <mark>oup</mark> A	15	13.33	200.00	10	<0.05	
No. of Pidaka	Group B	15	17.67	265.00	80.000	Sig	
	Total	30					
	Group A	15	14.50	217.50		<0.05	
Size of Pidaka	Group B	15	16.50	247.50	97.500	Sig	
	Total	30					
	Group A	15	13.10	196.50		<0.05	
Paka in Pidaka	Group B	15	17.90	268.50	76.500	Sig	
	Total	30					
Vivarnata in	Group A	15	13.20	198.00		<0.05	
Pidaka	Group B	15	17.80	267.00	78.000	Sig	
	Total	30					

It is observed that, mean rank for Group B is greater than Group A. Hence it can concluded

that, effect observed in Group B is more than Group A.

Table No- 10: Showing the effect of Lodhradi Lepa(Group A) and LodhradiLepawithArogyavardhani Vati(Group B) on Dc

DC							t-	P-	%	
			Mean	Ν	SD	SE	Valu	Valu	Chang	Result
							e	e	e	
	Gr	BT	67.73	15	5.56	1.44				< 0.05
NEUTROPH	Α	AT	65.07	15	4.88	1.26	8.00	00	3.94	Sig
IL							0			
	Gr	BT	70.47	15	2.39	0.62				< 0.05
	В	AT	66.93	15	3.24	0.84	8.56	00	5.01	Sig
							6			
	Gr	BT	4.40	15	1.30	0.34				< 0.05
EOSINOPHI	Α	AT	4.93	15	0.46	0.12	1.46	0.16		NS
L							8	4	12.12	
	Gr	BT	4.40	15	1.06	0.27				< 0.05
	В	AT	4.67	15	1.18	0.30	0.84	0.41		NS
							5	3	6.06	
	Gr	BT	0.07	15	0.26	0.07	1.00	0.33	NA	>0.05
	Α	AT	0.00	15	0.00	0.00	0	4		NS
BASOPHIL	Gr	BT	0.00	15	0.00	0.00	0.00	1	NA	>0.05
	В	AT	0.00	15	0.00	0.00	0		1111	NS
	Gr	BT	28.33	15	5.67	1.46	-	0.01	5.88	< 0.05
LYMPHOC	А	AT	<u>30.00</u>	15	5.03	1.30	2.71	7	5.00	sig
YTE	Gr	BT	24.60	15	1.84	0.48		00	15.45	< 0.05
	В	AT	28.40	15	3.33	0.86	5.38	00	15.15	Sig
	Gr	BT	0.07	15	0 <mark>.2</mark> 6	0.07	1	0.33	NA	>0.05
MONOCYT	А	AT	0.00	15	0.00	0.00	1	4	1111	NS
Е	Gr	BT	0.27	15	0.46	0.12	0.85	0.40	NA	>0.05
	В	AT	0.00	15	0.00	0.00	7	6	1111	NS

Table no -11: Showing the effect of Lodhradi Lepa(Group A) and LodhradiLepawithArogyavardhani Vati(Group B) on TLC

TLC		Mean	N	SD	SE	t- Value	P- Value	% Change	Result
Group	BT	9153.33	15	1006.31	259.83	5.996	0.000	0.84	< 0.05
А	AT	9076.67	15	1012.93	261.54	5.990	0.000	0.04	Sig
Group	BT	9380.00	15	747.57	193.02	9.320	0.000	1.67	< 0.05
В	AT	9223.33	15	751.16	193.95	9.520	0.000	1.07	Sig

Table no- 12: Showing	the effect of Lodhradi Lepa	(in Group A) and Lodhradi Lepawith
Arogyavardhani Vati(in G	roup B) on Hbgm%	

Hbgm%		Mean	N	SD	SE	t-Value	P- Value	% Change	Result
	BT	11.50	15	0.87	0.22	-2.446	0.028	1.74	< 0.05
Group A	AT	11.70	15	0.92	0.24				Sig
Crown D	BT	11.15	15	0.80	0.21	14.26	0.000	7.35	< 0.05
Group B	AT	11.97	15	0.93	0.24	-14.36			Sig

Table no-13:Showing the effect of *Lodhradi Lepa*(Group A) and *Lodhradi Lepa* with *Arogyavardhani Vati*(Group B) on Teststerone

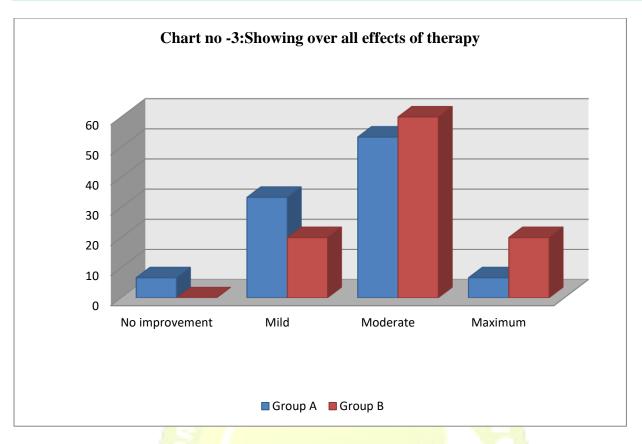
Testoste	erone	Mean	N	SD	SE	t-Value	P- Value	% Change	Result
Group	BT	515.14	7	8.45	3.20	2 121	0.078	0.08	>0.05
А	AT	514.71	7	8.79	3.32	2.121	0.078	0.08	NS
Group	BT	52 <mark>6.06</mark>	4	10.75	5.37	10.264	0.002	0.53	< 0.05
В	AT	52 <mark>3.25</mark>	4	10.90	5.45	10.264	0.002	0.55	Sig

Table no-14:Showing the effect of Lodhradi Lepa(Group A) and Lodhradi LepawithArogyavardhani Vati(Group B) on Estrogen

Estroger	n	Mean	N	SD	SE	t-Value	P- Value	% Change	Result
Group	BT	231.88	8	8.10	2.86	1 667	0.140	0.27	>0.05
А	AT	231.25	8	8.33	2.94	1.667	0.140	0.27	NS
Group	BT	230.03	9	5.97	1.99	3.796	0.005	0.59	< 0.05
В	AT	228.67	9	5.87	1.96	5.790	0.005	0.39	Sig

TABLE NO -15 : SHOWING OVERALL EFFECTS OF THERAPY :-

Percentage of	Improvement	Group A			Group B		
relief (%)		No.	of	%age	No. of	%age	
		patients			patients		
≤20	No	1		6.66	0	00	
21-40	Mild	5		33.33	3	20	
41-60	Moderate	8		53.33	9	60	
61-80	Maximum	1		6.66	3	20	
≥81	Cured	0		00	0	00	



This Image showing the effect of Lodhradi Lepa and Arogyavardhani Vati



BEFORE TREATMENT

AFTER TREATMENT

ISSN NO. 2581-785X

This image showing effect of Lodhradi Lepa





BEFORE TREATMENT

AFTER TRETMENT

DISCUSSION

Day by day, people are becoming more conscious of their beauty. *Mukhadushika* (Acne vulgaris) is a disease in which *Vata, Kapha* and *Rakta doshas* get vitiated and takes *Sthanasansraya* in *mukha pradesha* (face) causes *Shalmali kantak*

sadrusa pidaka ((thorns of Bombax tree) over face. As Shalmali kantaka suggests a pidaka (pustules) with semisolid/solid consistency which correlates it with acne lesion-papule or nodule. As Ayurveda advocates the use of yukti in undescribed conditions, all these symptoms are obvious due to the involvement of Vata. Pitta and Kapha in the disease. Due to vitiation of Vata pain (Vedana) is possible while due to involvement can cause paka. Vitiation of kapha can lead to formation of puya (pus), sotha (inflammation) and kandu (itching). In this study Mukhadushika (Acne vulgaris)were taken into consideration. If the clinical features of Mukhadushika (Acne vulgaris) are minimized by the local treatment like Lodhradi lepa and administration of drugs ArogyavardhaniVati which are easy adoptability, cost effective and curative results, the disease may not be aggravated and patient will not be suffer a lot.

The literary reviews were discussed with *Nidana* (aetiology), Samprapti (Pathogenesis), Classifications and its probable modern corelated diseases narrated in modern classics. The samprapti of mukhadushika (Pathogenesis) can be understood as because of various etiological factors vitiation of *Vata* and *Kapha dosha* takes place. These vitiated doshas further vitiates rakta *dhatu*, which in turns to vitiate *meda dhatu* (fatty tissue). Because of Medo Dhatu Dusti excessive sweda is formed, which gets deposited in romakupa (hair loop) and produces swedabaha srotadusti (lack of sweating) and produces Mukhadushika (Acne vulgaris).

Regarding demographic incidence it has been observed that (Table No.-02) female of adolescence age group(16-20), literate, middle class, unmarried, mixed diet and addiction of taking tea were more prone to *Mukhadushika*(Acne vulgaris).

Individual *Dashavidha- Pariksha* (10 fold examination) was covered and observed that (Table No.-03) *the Vata-slaismika prakriti*

patients having Madhyama – Sara- Samhanan-Pramana- Satwa- Ahara Shakti - Vyayam Shakti and pravara satmya were manifested in this study.

Patients treated with *Lodhradi Lepa* and *Arogyavardhani Vati* (Group-B), was observed more statically significant(P<0.05) and improvement in subjective parameters like *Sotha* 65.4%, *Vedana* 68%,*Srava* 68.4% and objective parameters like *No. of pidaka* 65.2%, *Size of pidaka* 63.2%, *Paka in the pidaka* 66.7%, and *Vivarnata in the pidaka* 66.7% than Group A treated with only *Lodhradi Lepa*(P<0.05).

Regarding Hematological findings, more Percentage of improvement was revealed in Group B than Group A.

Regarding Hormonal(Testosterone and Estrogen) findings, significant(P<0.05) result was noticed in Group B and insignificant result in Group A (P>0.05).

In *Mukhadushika* (Acne vulgaris) prominently vitiated dosha is Kapha, Vata and Rakta. In Lodhradi Lepa, Dhanyak (Coriandrum Sativum) and vacha (Acorus calamus) have Shoolahara (analgesic) property which immediately relieve the local pain (Vedana). Lodhra (Symplocos racemosa) has varnya property which clears the scars and *Raktapitta* shamak property which acts against Daha and Paka. Raktasodhak (blood purifier) property of Lodhra increases superficial blood circulation and regeneration of cells locally. Dhanyak has Tridoshashamak and Ushna veerya (hot) properties. This relieves the symptom like Sotha (inflammation). It has Srotovishodhan (clearing of channels) property which clears the Swedabahasrota. Therefore it helps in removal of dead cell debris and excessive collected sebum. Vacha has Tikshna (sharp) and Lekhana (scrapping) properties by which it helps in reducing Medogarbhata. It has antibacterial, analgesic and antisecretory property by which it reduce Srava (discharge).

Arogyavardhani vati contains ingredients having Tikta(bitter), Kashaya (astringent), Madhura rasa (sweet) with dominancy of Laghu(light), Rukshya guna (rough) and combination of Sita and Ushna guna (hot . It has the ability of balancing tridosha, destroying all types of skin disorders, analgesic, wound healing and antipruritic properties, which helps in reducing symptoms of Mukhadushika. Pungent drugs are beneficial for reducing burning sensation and itching. Bitter taste is believed to be useful in destroying all skin disorders. Its Laghu(light) and Rukshya guna (rough) help to exude secretions formed in large quantity and pus in Mukhadushika. Dominance of *ushna guna* of drugs helps to pacify aggravated *Vata* and relieves symptoms such as pain and improves digestive power. Kashaya rasa promotes wound healing and reduces secretions. Thus helps in reducing symptoms of Mukhadushika.

CONCLUSION

The over all assessment was revealed boththe group (A &B)were provided significant result in improving the subjective and objective criteria in patients. **But Group B** (*Lodhradi Lepa* and *Arogyavardhani Vati*) showed better response than Group A. Both the drugs were effective in controlling the sign and symptoms of *Mukhadushika*. Hence, these drugs were proved to be efficient in the treatment of Acne. Present study was carried out with certain limitations like fewer samples. Forth coming researchers may pursue further study in a large sample size over a period of longer duration. No side effect was noticed during clinical trial.

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