

**A COMPARATIVE STUDY ON YAUVANPIDIKA (ACNE VULGARIS)
WITH MANAGEMENT BY SHALMALIKANTAKA LEPA AND
RAKTACHANDANADI LEPA ALONG WITH KAISHOR GUGGULU**

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Article Received on
07 April 2022,

Revised on 28 April 2022,
Accepted on 18 May 2022

DOI: 10.20959/wjpr20227-24253

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ABSTRACT

Acne vulgaris, a chronic inflammatory disorder in adolescents consists of the pilosebaceous follicles, characterized by comedones, papules, pustules, cysts, nodules and often scars, chiefly on face, neck etc. It is a skin condition that occurs due to the clogging of oil glands of the skin. The oil that normally lubricates the skin gets trapped in blocked oil ducts and results in what we know as Pimples, Blackheads and Whiteheads. Sometimes it also includes deeper skin lesions that are called Cysts. Acne vulgaris mostly affects the areas of skin with the densest population of sebaceous follicles. These areas include the face, the upper part of the chest, and the back. Considering clinical features, *Kapha, Vata Dosha* and *Rakta, Dhātu* are involved in pathology, it was

necessary to carry out treatment having *Vata-Kapha Shamaka* and *Rakta Shodhka* property. In current study efforts have been made to evaluate and compare the efficacy of *Shalmalikantaka Lepa* and *Raktachandanadi Lepa* along with *Kaishor Guggulu*. In present study 30 patients having the sign and symptoms of *Yauvanpidika* was selected. In Group A 15 patients were treated with *Shalmalikantaka Lepa* with *Kaishor Guggulu*. In Group B 15 patients were treated with *Raktachandanadi Lepa* with *Kaishor Guggulu*. In **Group-A**, 66.66% of patients had marked improvement and 33.33% of the patients had Moderate improvement. In **Group-B**, 40% of the patients were noted marked improvement where 53.33% of the patients were noted in moderate improvement and 6.66% of the patients were noted in mild improvement. Comparing both Group A and B, In Group A total improvement was 79.42% and In Group B total improvement was 71.11%.

KEYWORDS: *Yauvanpidika*, Acne Vulgaris, *Kaishor Guggulu*, *Raktachandanadi Lepa*, *Shalmalikantaka Lepa*.

INTRODUCTION

In the present era, people are very much conscious about their health as well as beauty and look. Thus health and beauty are the two faces of a single coin. Beauty is a matter of socio-medical importance. From the ancient Indian and Egyptian to present through all cultures and through the span of centuries, mankind has been pre occupied with youth and physical appearance. The importance of beauty and personality is increasing now a day. It is a competitive era therefore everyone wants to stand at height and they require a distinct personality which differ them from a crowd.

Along with increased demand of beautification, the problems are also increasing which cause damage to the beauty. Random use of cosmetics products may produce adverse effect and spoil the natural beauty too. As an outcome of industrial development, environment and professional hazards, different types of anxieties, worries, anger, fever and depression etc. so many diseases are emerging out in modern life style. Due to all these factors, now a day various types of skin diseases occur. It would not be incorrect to say that in most cases face is the index of the mind and mirror of the body. Acne Vulgaris is one of the most common dermatitis which develops at puberty and young age. Therefore they may suffer with inferiority complex, anxiety, isolation etc.

Globally, acne affects approximately 650 million people or about 9.4% of the population, as of 2010. It affects nearly 90% of people in western societies during their teenage years, but can offer adolescence and may persist into adulthood. While acne that first develops between the ages of 21 and 25 is uncommon, it affects 54% of women and 40% of men older than 25 years of age and has lifetime prevalence of 85%. About 20% of those affected have or severe case. It is slightly more common in females than males.

The modern measures regarding the treatment of acne are more or less failure. Although for prevention of the further infection, dislodging of the black heads and to moisturize the skin, various preparations are in practice like anti biotic and cosmetic lotions for external application. Sometimes internal use of vitamin A, hormonal treatment, ultraviolet radiation therapy are also prescribed. Corticosteroid has revolutionized the treatment but its manifold

side effects and temporary relief has limited the therapy. Therefore whole world is looking toward *Ayurveda* for sure, easy and effective line of treatment of this disease.

Among the *Ayurvedic* amenities, *Acharya Sushruta* was the first to mention a whole group of such diseases of the skin which have an adverse effect on the appearance and personality of an individual under the heading of '*Kshudra Roga*'. *Yauvanpidika* is one of them. The features of *Yauvanpidika* are similar to those of *Acne Vulgaris*. Vitiating of *Vata* and *Kapha Doshas* along with *Rakta dhatu* are seen in *Yauvanpidika*. In *Ayurvedic* texts various internal medicines and external applications are prescribed. Internal medicine is necessary to bring balance status of affected *Dosha* and *Dushyas*. External application is also helpful as it directly act on lesion. The drugs which have *Vata Kapha Shamaka* and *Raktashodhaka* property are used to treat the disease. In this study *Kaishor Guggulu* is taken from *Sharangdhara Samhita*, *Shalmalikantaka Lepa*, *Raktachandanadi Lepa* are taken from *Yogaratanakara*.

MATERIALS AND METHODOLOGY

Total 30 patients selected and randomly divided in two groups as per Inclusive criteria and analyzed the data from the results obtained clinically.

AIM AND OBJECTIVE

- To evaluate and compare the effect of *Shalmali Kantaka Lepa* and *Raktachandanadi Lepa* along with *Kaishor Guggulu*.

INCLUSION CRITERIA

- The person having age ≥ 18 & ≤ 32 years males & females.
- Place of *pidika*: Over face, upper chest, upper back.
- Having classical signs & symptoms of *Yauvanpidika* like *Paka*, *Strava*, *Kandu*, *Vedana*, *Daha* and also associated symptoms of *Acne Vulgaris* like Comedone, Papules, Pustules, Nodules, Cysts.
- Patient having minimum 3 sign and/or symptoms.

EXCLUSION CRITERIA

- The persons having age ≤ 18 & ≥ 32 years males & females.
- *Pidika* due to systemic disease without acne lesion like *Pramehapidika*, *Masurika*.
- Cancer, AIDS, STD, T.B. and other disorder which leads to fatal condition for patients.

- Female patients with high possibility of pathological involvement of sex hormones like cases with primary infertility, hormone replacement therapy, taking oral contraceptive pills.

INVESTIGATIONS

- **BLOOD:-**HB%, TLC, DLC, ESR(if required)
- **URINE:-**Routine & Microscopic examination(if required)

All above & other necessary investigations conducted to exclude other pathological conditions as per the need and availability.

GROUPING AND SAMPLING

GROUP-A:- *Shalmali Kantaka Lepa & Kaishor Guggulu*

GROUP B:- *Raktachandanadi Lepa & Kaishor Guggulu*

(1) *Kaishor Guggulu*^[1]

Kwatha Dravya:- 12 parts

Table 1: Contents of Kaishor Guggulu.

Drug Name	LatinName/ScientificName	Part Used	Proportion	Parts
<i>Haritaki</i>	<i>Terminalia chebula</i>	<i>Phala</i>	<i>1 prastha</i>	12parts
<i>Bibhitaki</i>	<i>Terminalia bellirica</i>	<i>Phala</i>	<i>1 prastha</i>	
<i>Amalaki</i>	<i>Emblica officinalis</i>	<i>Phala</i>	<i>1 prastha</i>	
<i>Guduchi</i>	<i>Tinospora cordifolia</i>	<i>Kanda</i>	<i>1 prastha</i>	
<i>Water</i>	<i>Aqua</i>	<i>Itself</i>	<i>1.5 drona</i>	

Kwatha Dravya

<i>Suddha Guggulu</i>	<i>Commiphora mukul</i>	<i>Niryasa</i>	<i>1 prastha</i>	1part
Prakshepa Dravya` 1/3 part				
Drug Name	LatinName/ScientificName	Part Used	Proportion	Parts
<i>Haritaki</i>	<i>Terminalia chebula</i>	<i>Phala</i>	} 2 Pala	1/3 part
<i>Bibhitaki</i>	<i>Terminalia bellirica</i>	<i>Phala</i>		
<i>Amalaki</i>	<i>Emblica officinalis</i>	<i>Phala</i>		
<i>Guduchi</i>	<i>Tinospora cordifolia</i>	<i>Kanda</i>	<i>1 Pala</i>	
<i>Sunthi</i>	<i>Zingiber officinale</i>	<i>Rhizome</i>	<i>2 Aksha</i>	
<i>Maricha</i>	<i>Piper nigrum</i>	<i>Phala</i>	<i>2 Aksha</i>	
<i>Pippali</i>	<i>Piper longum</i>	<i>Phala</i>	<i>2 Aksha</i>	
<i>Vidanga</i>	<i>Embelia ribes</i>	<i>Beeja</i>	<i>½ Pala</i>	
<i>Danti</i>	<i>Baliospermum montanum</i>	<i>Moola</i>	<i>1 Karsha</i>	
<i>Trivrita</i>	<i>Operculina turpethum</i>	<i>Moola</i>	<i>1 Karsha</i>	

Posology

Dose:- 3 tab thrice a day (each tablet will be of 500 mg)

Aaushadha Sevana kala:- Bhojana Purve

Anupana:- Khadir Sidhha Jala^[2]

Duration:- 4 weeks

(2) Shalmalikantaka Lepa^[3]

Table 2: Contents of Shalmalikantaka Lepa.

Drug Name	LatinName/Scientific Name	Part Used	Proportion
Shalmali	Bombax ceiba Linn.	Kantaka	1 part

Posology

Method of use:- External application on affected area

Thickness of Lepa:- 1/4 Angula

Application Time:- 1 time/day

Applied With:- Water

Duration:- 4 Weeks

(3) Raktachandanadi Lepa^[4]

Table 3: Contents of Raktachandanadi Lepa.

Drug Name	LatinName/Scientific Name	Part Used	Proportion
Raktachandana	Pterocarpus sentalinus Linn.	Twaka	1 part
Jatiphala	Myristica fragrans Houtt.	Phala	1 part
Maricha	Piper nigrum Linn.	Phala	½ part

Posology

Method of use:- External application on affected area

Thickness of Lepa:- 1/4 Angula

Application Time:- 1 time/day

Applied With:- Milk

Duration:- 4 Weeks

FOLLOW UP

Patient was asked to visit hospital for 2 weeks after completion of treatment.

CRITERIA FOR ASSESSMENT

Observation of clinical improvement in signs and symptoms of Acne Vulgaris like Comedone, Papules, Pustules, Nodules, Cysts and also of Yauvanpidika like Paka, Srava, Kandu, Vedana, Daha.

OVER ALL ASSESSMENT

Overall assessments of therapies will be done on the basis of improvement in the symptoms as below.

- 1) **CURED**-100% improvement in symptoms and no recurrences during follow up period.
- 2) **MARKED IMPROVEMENT**- 75% to 99% improvement in symptoms.
- 3) **MODERATE IMPROVEMENT**- 50% to 74% improvement in symptoms.
- 4) **MILD IMPROVEMENT**- 25% to 49% improvement in symptoms.
- 5) **UNCHANGED**- 0% to 24% improvement in symptoms.

OBSERVATIONS

Table 4: Sex wise distribution of 30 patients.

Age (Yrs)	No. of patients		Total	Percentage %
	Group A	Group B		
Male	7	6	13	43.33
Female	8	9	17	56.66

Table 5: Distribution of 30 patients according to history of present illness.

Occupation	No. of patients		Total	%
	Group A	Group B		
Aggravation at				
Summer	6	4	10	33.33
Winter	1	1	2	6.66
Sunlight	2	2	4	13.33
Menstruation	2	7	9	30
No relation	4	1	5	16.66
Deaggravation at				
Summer	1	1	2	6.66
Winter	9	6	15	50
No relation	5	8	13	43.33

Table 6: *Rasa Pradhanyata* wise Distribution of 30 patients.

<i>Rasa</i>	No. of patients		Total	Percentage %
	Group A	Group B		
<i>Madhura</i>	6	6	12	40
<i>Amla</i>	3	2	5	16.66
<i>Lavana</i>	2	2	4	13.33
<i>Katu</i>	4	5	9	30

Table 7: Distribution of 17 patients according to menstrual history.

Menstrual history	No. of patients		Total	Percentage %
	Group A	Group B		
Regular	4	3	7	41.17
Irregular	4	6	10	58.82

Table 8: Distribution of 30 patients according to site of *Pidika*.

Site of <i>Pidika</i>	No. of patients		Total	Percentage %
	Group A	Group B		
Face	14	12	26	86.66
Back	3	2	5	16.66
Chest	5	3	8	26.66

Table 9: Distribution of 30 patients according to numbers of *Pidika*.

Numbers of <i>Pidika</i>	No. of patients		Total	Percentage %
	Group A	Group B		
1-5	1	1	2	6.66
6-10	6	5	11	36.66
11-15	3	4	7	23.33
15-20	4	4	8	26.66
>20	1	1	2	6.66

Table 10: Distribution of 30 patients according to Cardinal Symptoms.

Cardinal Symptoms	No. of patients		Total	Percentage %
	Group A	Group B		
Comedone	15	15	30	100
Papules	15	15	30	100
Pustules	11	11	22	73.33
Nodules	5	4	9	30
Cysts	0	0	0	0

Table 11: Distribution of 30 patients according to Associated Symptoms.

Associated Symptoms	No. of patients		Total	Percentage %
	Group A	Group B		
<i>Vedana</i>	12	10	22	73.33
<i>Kandu</i>	13	11	24	80
<i>Daha</i>	8	8	16	53.333
<i>Paka</i>	12	10	22	73.33
<i>Strava</i>	12	10	22	73.33

RESULTS

All the results have been calculated by using Graph pad software. For data in a single group **Wilcoxon rank sum test** is used and results are calculated in each group. For calculating the inter group comparison **Mann Whitney U test** has been used.

Table 12: Effect on Cardinal Symptoms in Group A.

Symptoms	N	Mean		Mean Diff.	S.D	% Relief	W	P	S
Comedone	15	2.33	0.26	2.06	0.79	88.89	120	<0.0001	HS
Papules	15	2.20	0.60	1.6	0.91	70	105	0.0001	HS
Pustules	11	2.364	0.81	1.54	0.52	65.15	66	0.001	HS
Nodules	5	2.60	1.20	1.40	1.14	50	10	0.12	IS

Table 13: Effect on Cardinal Symptoms in Group B.

Symptoms	N	Mean		Mean Diff.	S.D	% Relief	W	P	P
Comedone	15	2.13	0.40	1.73	0.59	82.22	120	<0.0001	HS
Papules	15	2.33	0.88	1.46	0.633	62.22	120	<0.0001	HS
Pustules	11	2.54	1.0	1.54	0.52	61.11	66	0.001	HS
Nodules	4	2.75	1.50	1.20	0.50	45.83	10	0.12	IS

Table 14: Comparative Effect of Both Therapies on Cardinal Symptoms.

Symptoms	Mean Diff		% Relief		U	P	S
	Group A	Group B	Group A	Group B			
Comedone	2.06	1.73	88.89	82.22	85	0.23	IS
Papules	1.6	1.46	70	62.22	104	0.71	IS
Pustules	1.54	1.54	65.15	61.11	49	>0.1	IS
Nodules	1.40	1.20	50	45.83	9.5	>0.1	IS

Table 15: Effect on Associated Symptoms in Group A.

Symptoms	N	Mean		Mean Diff.	S.D	% Relief	W	P	S
		BT	AT						
Vedana	12	1.25	0.08	1.16	0.57	91.67	66	0.001	HS
Kandu	13	1.15	0.07	1.07	0.27	96.15	91	0.002	HS
Daha	8	1.37	0.12	1.25	0.46	93.75	36	0.007	VS
Paka	12	1.25	0.16	1.08	0.28	91.67	78	0.0005	HS
Strava	12	1.25	0.16	1.08	0.28	91.67	78	0.0005	HS

Table 16: Effect on Associated Symptoms in Group B.

Symptoms	N	Mean		Mean Diff.	S.D	% Relief	W	P	S
		BT	AT						
Vedana	10	1.2	0.2	1.0	0.47	85	45	0.003	VS
Kandu	11	1.27	1.8	1.09	0.30	90	66	0.001	HS
Daha	8	1.37	0.25	1.12	0.35	87.5	36	0.007	VS
Paka	10	1.30	0.40	0.90	0.31	80	45	0.003	VS
Strava	10	1.30	0.40	0.90	0.3	80	45	0.003	VS

Table 17: Comparative Effect Of Both Therapies On Associate Symptoms.

Symptoms	Mean Diff		% Relief		U	P	S
	Group A	Group B	Group A	Group B			
<i>Vedana</i>	1.16	1.0	91.67	85	51	0.47	IS
<i>Kandu</i>	1.07	1.09	96.15	90	60	0.18	IS
<i>Daha</i>	1.25	1.12	93.75	87.50	28	0.58	IS
<i>Paka</i>	1.08	0.90	91.67	80	49	0.05	IS
<i>Strava</i>	1.08	0.90	91.67	80	40	0.05	IS

Table 18: Overall Effect of Therapies.

Results	Group A		Group B	
	No.	%	No.	%
Complete remission (100%)	0	0	0	0
Marked improvement (75% - 99%)	10	66.6	6	40
Moderate improvement (50% – 74%)	5	33.33	8	53.33
Mild improvement (25% – 49%)	0	0	1	6.66
Unchanged (0% - 24%)	0	0	0	0

PICTURE PLATE**Figure: 1.1****Figure: 1.2****FIGURE: 1.3****FIGURE : 1.4**

Patient of Group A

Figure 1.1 & 1.3: Before Treatment

Figure 1.2 & 1.4: After Treatment



FIGURE : 1.5



FIGURE : 1.6



FIGURE: 1.7



FIGURE: 1.8

Patient of Group B

Figure 1.5 & 1.7: Before Treatment

Figure 1.6 & 1.8: After Treatment

DISCUSSION

In **Group-A**, 66.66% of patients had marked improvement and 33.33% of the patients had Moderate improvement. 0% of the patient was in complete remission, mild improved and in

unchanged. Overall effect in group A was 79.42%. Application of *Lepa* in opposite direction of the hairs on the lesions helps the active principle in *Lepa* infused to milk base to enter *Romakupa* and get absorbed through *Siramukha* and *Swedavahini Srotasa*.^[5] *Romakupa* is connected to opening of *Dhmanis*. The essence of these anointments are absorbed and passed to the deeper layers. The epidermis contains Kerationocytes & Melanocytes types of cells. The outer most layer acts as a passive membrane for some substances to cross the skin by passive diffusion, depending on the concentration gradient. *Lepa* probably acts by this phenomenon. Then, the viable epidermis starts catabolic gradation of absorbed material with the help of essential enzymes which act in arresting pathological process and alleviation of symptoms.

Shalmali has *Vata Pitta Shamaka* property so it reduces burning sensation and pain. *Sheetal Guna* of *Shalmali* also helps to reduce burning sensation. *Acharya Bhavprakasha* mentioned *Shalmali* in *Raktaja Vikara*. It has also *Vedana Sthapana* property so it is helpful in the symptoms like *Vedana*. *Shothahara* property of *Shalmali* reduces the inflammatory lesions.

➤ In **Group-B**, 40% of the patients were noted marked improvement where 53.33% of the patients were noted in moderate improvement and 6.66% of the patients were noted in mild improvement. No patient was noted in unchanged and in complete remission. Overall effect in group B was 71.11%. *Rakta Chandana* has *Kapha Pitta Shamaka* and *Dahashamana* property so it reduces burning sensation. There is vitiation of *Kapha* and *Vata Doshas* in *Yauvanpidika*. *Jatiphala* is *Vata Kapha Shamaka* so it helps in breaking *Samprapti* of disease. *Maricha* is also *Kapha Vata Shamaka* which relieves *Shoola* & *Shotha*. *Chhedan* & *Shoshana Gunas* of *Maricha* is mentioned by *Acharya Charaka*. It ceases suppurative process and absorbs necrotic debris. In this manner it removes *Srotorodha*. It has *sweda janana* property, so it also works on *Swedavaha Srotasa*. *Maricha* is described as stimulant to skin when applied externally which enhances the blood circulation locally. It is *Deepana Pachan* drug, so it helps indigesting the *Ama* localised in *Srotasa*. Besides it all the ingredients of *Lepa* are easily available in the market. Considering all these matter this drug was selected for the present study.

CONCLUSION OF OVERALL STUDY

➤ At the end of study, it can be concluded that the null hypothesis(H_0) is rejected and alternative hypothesis(H_1) is accepted, i.e. *Shalmalikantaka Lepa* and *Raktachandanadi*

Lepa along with *Kaishor Guggulu* have different effect in *Yauvanpidika* (Acne Vulgaris).

- Any hazardous effects haven't been reported by the patients during the study or in follow up period, which is very important for acceptance of *Ayurveda*.

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