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A Clinical Study to Evaluate the Effect of *Vyanghara Lepa*, *Haritaki Churna* and *Jatamansi Churna* on *Vyanga* (Chloasma)

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ABSTRACT

Vyanga (chloasma) is one of the conditions which affects the beauty as well as psychological makeup of the person, now days *Vyanga* becomes a biggest problem in the field of cosmetology. Many people are suffering from *Vyanga* today. In *Ayurvedic* texts so many remedies are described for the treatment of *vyanga* such as *Pancha Karma* therapy, internal medicine and external application. Local application is more useful in skin disorders as it directly acts on lesion. Internal medicine is also necessary to balance the *Dosha-Dooshya* and relieve stress of the patient. Considering all these points, in present study *vyanghara lepa* was given for local application, *Haritaki churna* for pacification of *vata dosha* and internal purification and *Jatamansi churna* was selected due to its antistress property.

For this study 45 patients were selected and were divided into three groups. In group I *Vyanghara lepa* was given for local application, in group II, *Vyanghara lepa* was given for local application and *Haritaki churna* was given orally in the dose of 5gm H.S. In group III *Vyanghara lepa* for local application, *Haritaki churna* 5gm HS and *Jatamansi churna* 3gm BD orally were advised. Duration of the trial was 45 days. The improvement provided by the therapy was assessed on the basis of signs and symptoms of diseases and level of anxiety which was assessed by Sinha Anxiety Scale. Inter group comparative study showed that there was no significant difference regarding reduction in color of lesion, area of lesion and size of lesion between Group-I and Group-II, and Group-II and Group-III, but there was significant difference regarding reduction in color of lesion, area of lesion, size of lesion and anxiety level between Group-I and Group-III.

KEYWORDS

Vyanga, *Chloasma*, *Haritaki*, *Jatamansi*, *Vyangharlepa*.



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INTRODUCTION

Vyanga is one of the conditions which affect the beauty as well as psychological makeup of the person, now days *Vyanga* becomes a biggest problem in the field of cosmetology. Many people are suffering from *Vyanga* today. It is a *Kashudraroga*¹ and *raktapradoshaja vikar*². *Krodha*(anger), *shoka*(sadness) and *ayasa*(fatigue)³etc. are the causative factors mentioned in *Ayurvedic* text. Stress is also a factor behind it which causes and aggravates *vyanga* because, the face is the index of the mind and the mirror of the body or *Vyanga* harms beauty of the face. So the person may suffer from inferiority complex, anxiety, stress and isolation etc. Thus *Vyanga* is a painless condition for body but it is painful for mind. Hence, it requires a plannedtherapeutic regimen with antistress management as its key element. In *Ayurvedic* texts so many remedies are described for the treatment of *vyanga* such as *Pancha Karma* therapy, internal medicine and local application. Local application is more useful in skin disorders as it directly acts on the lesion⁴. Internal medicine is also necessary to balance the *Dosha-Dooshya* and to relieve the stress of the patient. After considering all these point in mind in present study the *vyangahara lepa* was selected for local application,

Haritaki churna for pacification of *vata*dosha and internal purification and *Jatamansi churna* was selected due to its antistress property.

AIMS AND OBJECTIVES

Following were the aims and objectives of the study:

1. To study the aetiopathogenesis and management of *Vyanga* as described in *Ayurvedic* classics as well as in modern dermatology.
2. To assess the level of anxiety in the patient of *Vyanga*.
3. To evaluate the effect of *Vyangahara lepa* externally on the patient of *Vyanga*.
4. To evaluate the effect of *Haritaki churna* internally along with *Vyangahara lepa* for local application.
5. To evaluate the effect of *jatamansi churna* on the disease.

MATERIALS AND METHODS

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For present study patients fulfilling the criteria for diagnosis were selected randomly from Skin Care OPD of R.G.G.P.G. Ayurvedic Hospital PaprolaDistt. Kangra, H.P..Detailed history was taken according to Case Report Form prepared for the study, incorporating all the relevant points from both *Ayurvedic* and Modern views.

INCLUSION CRITERIA



1. Patients willing to participate in trial.
2. Patients having the age between 15-50 years irrespective of sex.
3. Patients having classical symptoms of *Vyanga i.e. Shyava, Mandal, Niruj, Tanu.*

EXCLUSION CRITERIA

1. Patients not willing to participate in trial.
2. Patients having any other systemic disease.
3. Failure of the patient to followup successive visit.

LABORATORY INVESTIGATIONS

The following hematological investigations were done to rule out any other systemic illness in the patients:

Haemoglobin, TLC, DLC, ESR, FBS, Lipid profile, RFT.

GROUPING OF PATIENTS

All the patients(45) selected for clinical trial were allocated into three groups

G-I -*Vyangahara lepa* for local application

G-II -*Vyanghara lepa* for local application and *Haritaki churna* orally in a dose 5gm H.S.

G-III -*Vyanghara lepa* for local application, *Haritaki churna* 5gm HS and *jatamansi churna* 3gm BD orally.

Duration of trial - 45 days

Follow up - After 15 days

ASSESSMENT CRITERIA

The improvement provided by the therapy was assessed on the basis of signs and symptoms of disease (table no 1) and level of anxiety which was assessed by Sinha Anxiety Scale (table no 2). All the signs and symptoms were assigned score depending upon their severity to assess the effect of drug objectively.

Table 1 Assessment criteria for *vyangaroga*

Symptoms	Before Trial	After Trial
1. Varn (Colour of the lesion)		
Normal skin colour (0)	0	0
Light brown (1)	1	1
Dark brown (2)	2	2
Black (3)	3	3
2. Sthan (Distribution of lesion)		
No lesion (0)	0	0
Only cheeks (1)	1	1
Cheeks, Nose and forehead (2)	2	2
Cheeks, nose, forehead, malar, mandibular area and upper neck (3)	3	3
3. Ruja (pain)		
No pain (0)	0	0
Mild pain (1)	1	1
Moderate pain (2)	2	2
Severe pain(3)	3	3
4. Aakar(Size of the lesion)		
No lesion (0)	0	0
Very small (<1cm) (1)	1	1
Small (1 -2 cm) (2)	2	2



Medium (2-3cm) (3)	3	3
Large (>3cm) (4)	4	4

Table 2 Assessment criteria of anxiety level based on Sinha's anxiety level scale

Percentile Ranges	Level of Anxiety	B.T.	A.T.
80-100	Very high anxiety		
70-80	High anxiety		
40-70	Normal anxiety		
25-40	Low anxiety		
1-25	Very low anxiety		

Assessment criteria for overall effect of therapy

The overall effect of therapy was assessed considering the following criteria.

1. Cured - More than 75% and upto 100% relief in the signs and symptoms was considered as cured.

2. Moderate improvement- More than 50% and less than 75% relief in the signs and symptoms was considered as moderately improved.

3. Mild improvement - More than 25% and less than 50% relief in the signs and symptoms was considered as mild improved.

4. Unchanged -

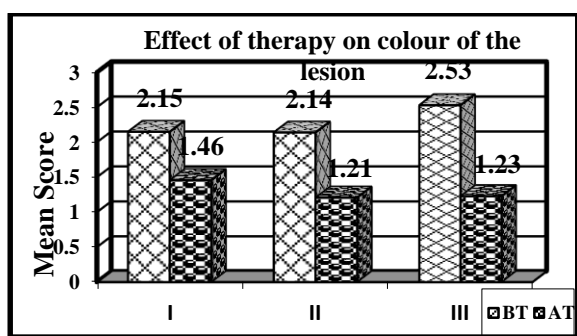
Below up to 25% in the sign and symptoms was considered as unchanged.

OBSERVATIONS AND RESULTS

1. Effect of therapy on colour of the lesion

Table 3 Effect of therapy on colour of the lesion

Group	N	Mean		% relief	S.D.	S.E.	't'	P
		BT	AT					
I	13	2.15	1.46	32.14	0.480	0.133	5.196	<0.001
II	14	2.14	1.21	43.33	0.616	0.165	5.643	<0.001
III	13	2.53	1.23	51.51	0.630	0.175	7.479	<0.001



Graph no.1 Effect of therapy on colour of the lesion

The Colour of the lesion was reduced up to 32.14% in Group-I, 43.33% in Group-II and 51.51% in group-III. This is shown in table no.3 and depicted in graph no 1. All the values were statistically highly significant

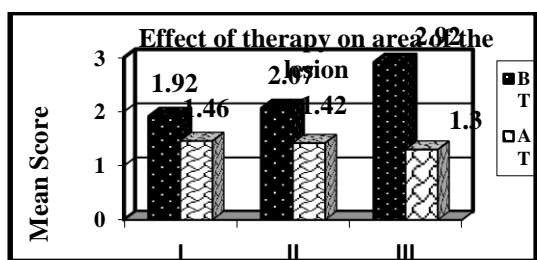
2. Effect of therapy on area of the lesion

Table 4 Effect of therapy on area of the lesion

Group	N	Mean		% relief	S.D.	S.E.	't'	P
		BT	AT					
I	13	1.92	1.46	24	0.519	0.144	3.207	<0.01



II	14	2.07	1.42	31.03	0.633	0.169	3.798	<0.01
III	13	2.92	1.30	36.84	0.641	0.178	6.062	<0.001



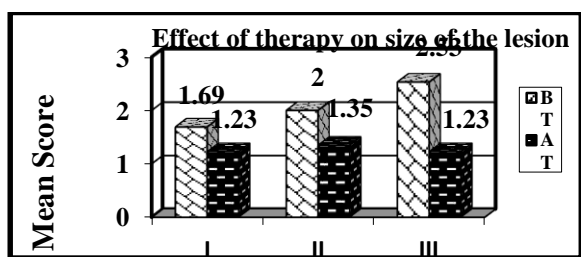
Graph no. 2 Effect of therapy on area of the lesion

Effect of therapy on area of the lesion as shown in table no. 4 and depicted in graph no 2 was 24% in Group-I 31.03% in Group-II and 36.84% in group-III. All the values are statistically highly significant.

3. Effect of therapy on size of the lesion

Table 5 Effect of therapy on size of the lesion

Group	N	Mean		% relief	S.D.	S.E.	t'	P
		BT	AT					
I	13	1.69	1.23	27.27	0.519	0.144	3.207	<0.01
II	14	2	1.35	32.14	0.633	0.169	3.798	<0.01
III	13	2.53	1.23	40.54	0.801	0.222	5.196	<0.001



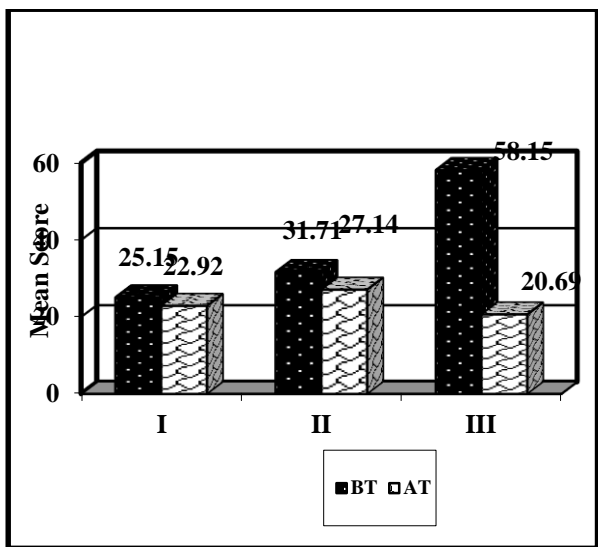
Graph No.3 Effect of therapy on size of the lesion

Effect of therapy on size of the lesion was 27.27% in Group-I, 32.14% in Group-II and 40.54% in Group-III as shown in table no 5 and graph no 3. All the values were statistically highly significant.

4. Effect of therapy on anxiety level

Table 6 Effect of therapy on Anxiety level

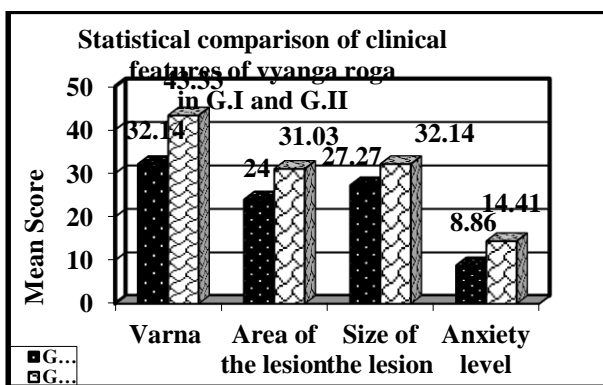
Group	N	Mean Score		% relief	S.D.	S.E.	t'	P
		BT	AT					
I	13	25.15	22.92	8.86	3.72	1.03	2.16	>0.05
II	14	31.71	27.14	14.41	7.15	1.91	2.39	<0.05
III	13	58.15	20.69	38.58	5.02	1.39	26.87	<0.001



Graph No. 4 Effect of therapy on Anxiety level

Table 7 Statistical comparison of clinical features of *vyangarogain* G.I and G.II

Parameters	Mean Score		%Relief diff.	S.D.	S.E.	't'	P	Result
	G.I	G.II						
Varna	32.14	43.33	11.19	0.535	0.206	1.145	>0.05	N.S.
Area of the lesion	24	31.03	7.03	0.581	0.224	0.810	>0.05	N.S.
Size of the lesion	27.27	32.14	4.87	0.581	0.224	0.810	>0.05	N.S.
Anxiety level	8.86	14.41	5.55	5.77	2.22	1.053	>0.05	N.S.



Graph No.5: Statistical comparison of clinical features of *vyangarogain* G.I and G.II

Table no.7 and graph no.5 reveal following comparative results in individual criteria: -

1. **Varna:** Group- II shows 11.19 % more relief than Group- I, which is statistically not significant.

As depicted in table no.6 and graph no. 4, the effect of therapy on Anxiety level was 8.86% in Group-I, which was non significant, 14.41% in Group-II which was significant and 38.58% in Group-III which was statistically highly significant.

5. Statistical comparison of clinical features of *vyangaroga* in g.i and g.ii

2. **Area of the lesion:** Group- II shows 7.03 % more relief than Group- I; which is statistically not significant.

3. **Size of the lesion:** Group- II shows 4.87 % more relief than Group- I; which is statistically not significant.

4. **Anxiety level:** Group- II shows 5.55 % more relief than Group- I; which is statistically not significant.

6. Statistical comparison of clinical features of *vyangaroga* in g.ii and g.iii

Table 8 Statistical comparison of clinical features of *vyangaroga* in G.II and G.III

Parameters	Mean Score	%Relief	S.D.	S.E.	't'	P	Result
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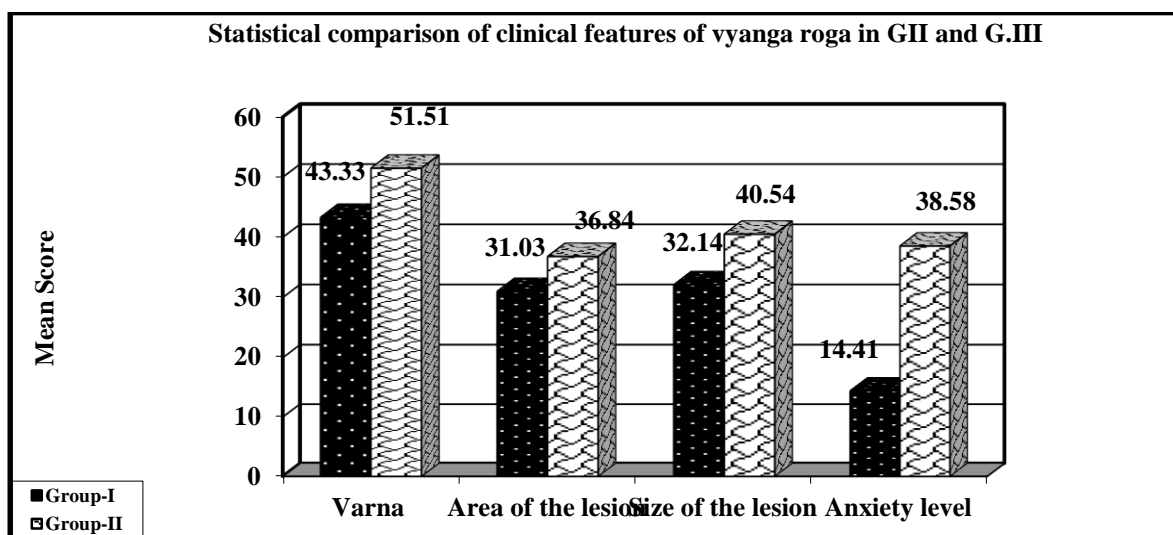
	G.II	G.III	Diff.					
Varna	43.33	51.51	8.18	.623	.239	1.58	>0.05	N.S.
Area of the lesion	31.03	36.84	5.81	.636	.245	1.57	>0.05	N.S.
Size of the lesion	32.14	40.54	8.4	0.72	0.28	0.51	>0.05	N.S.
Anxiety level	14.41	38.58	24.17	8.02	3.09	5.096	>0.05	N.S.

1. **Varna:** Group- II shows 8.18 % more relief than Group- I, which is statistically not significant.

2. **Area of the lesion:** Group- II shows 5.81 % more relief than Group- I; which is statistically not significant.

3. **Size of the lesion:** Group- II shows 8.4 % more relief than Group- I; which is statistically not significant.

4. **Anxiety level:** Group- II shows 24.17 % more relief than Group- I; which is statistically not significant.

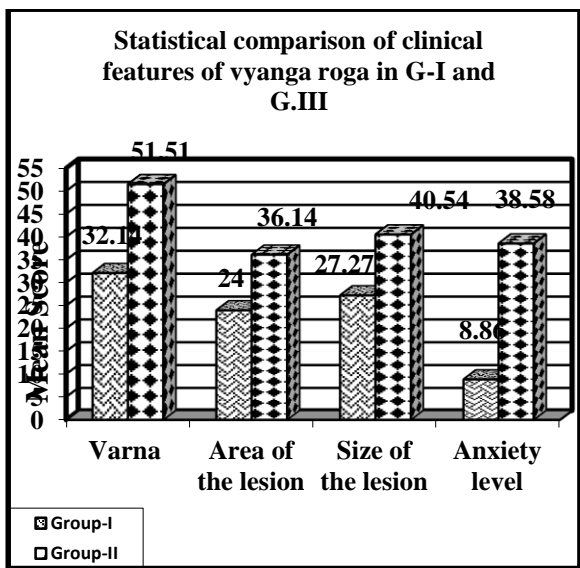


Graph No.6 Statistical comparison of clinical features of *vyangaroga* in GII and G.III

Statistical comparison of clinical features of *vyangaroga* in g-i and g.iii

Table 9 Statistical comparison of clinical features of *vyangaroga* in G-I and G.III

Parameters	Mean Score		%Relief diff.	S.D.	S.E.	't'	P	Result
	G.I	G.III						
Varna	32.14	51.51	19.37	0.56	.219	2.80	<0.01	H.S.
Area of the lesion	24	36.14	12.84	.583	.228	2.69	<0.01	H.S.
Size of the lesion	27.27	40.54	13.27	.674	.264	2.61	<0.01	H.S.
Anxiety level	8.86	38.58	29.72	.679	.266	6.78	<0.01	H.S.

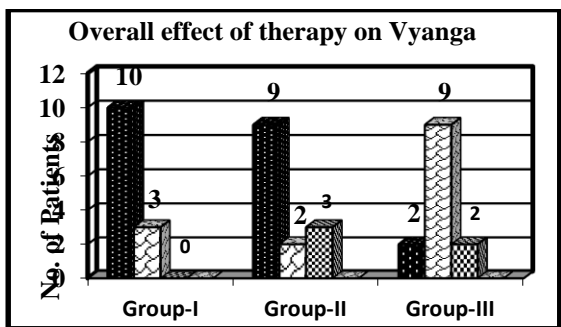


Graph No.7 Statistical comparison of clinical features of *vyangaroga* in G-I and G.III

Statistical comparison of clinical features of *vyangaroga* in G-I and G.III is described

Table 10 Overall effect of therapy on *Vyangaroga*

Group	Unchanged (0 – 24%)	Mild improved (25- 49%)	Moderate improved (50 – 74%)	Cured (75 – 100%)	Total
Group-I	10	3	0	0	13
Group-II	9	2	3	0	14
Group-III	2	9	2	0	13



Graph No. 8 Overall effect of therapy on *Vyangaroga*

Table no 10 and graph no.8 show that among 13 patients, 2 patients were moderately improved, 9 patients were mildly improved and 2 patients remained unchanged in Group-III. While among 14

below as shown in table no.9 and graph no. 7

1. **Varna:** Group- III shows 19.37 % more relief than Group- I, which was statistically highly significant.
2. **Area of the lesion:** Group- III shows 12.84 % more relief than Group- I; which was statistically highly significant.
3. **Size of the lesion:** Group- III shows 13.27 % more relief than Group- I; which was statistically highly significant.
4. **Anxiety level:** Group- III shows 29.72 % more relief than Group- I; which was statistically highly significant.

8. Overall effect of therapy on *vyangaroga*

patients of Group-II, 3 patients were moderately improved, 2 patients were mildly improved and 9 patients remained unchanged. In Group-I, 3 patients were mildly improved and 10 patients remained unchanged.

DISCUSSION

DRUG DISCUSSION

While selecting the drug for the management of *vyangaroga*, *Ayurvedic* as well modern both the aspects were taken into consideration.



Three drugs were selected:

1. *Vyangahara lepa*
2. *Haritaki churna*
3. *Jatamansi churna*

Vyangaharalepa

Lepa consisted of three drugs i.e. *Manjishtha*, *Arjuna* and *Madhu*. *Manjishtha* has *Varnya*, *Kushthghna* and *shothghana* properties. *Manjishtha* paste was used along with honey in *vyanga*⁵. According to modern pharmacology it has anti-inflammatory property, emollient and is helpful in improving discoloration of skin, allergic conditions of skin diseases and pruritis. *Arjuna*⁶ has *vyangahara* property. According to modern parameter it has anti inflammatory, antioxidant properties and useful in skin diseases. *Madhu* has property of *lekhana*, *chedana karma* and *vraha shodana*⁷. According to modern parameter it has Antibacterial, anti inflammatory and antioxidant properties.

Haritaki Churna

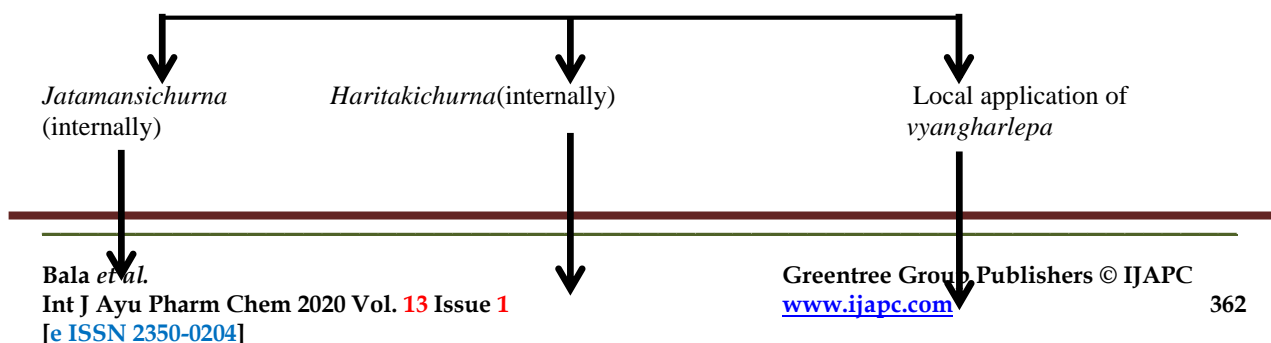
Haritaki has *tridosha shamaka* effect but it mainly pacifies the *vata dosha* which is the root cause of the disease. *Haritaki* pacifies the *vata dosha*⁸ as well as regulates the normal movement of *vata dosha* due to

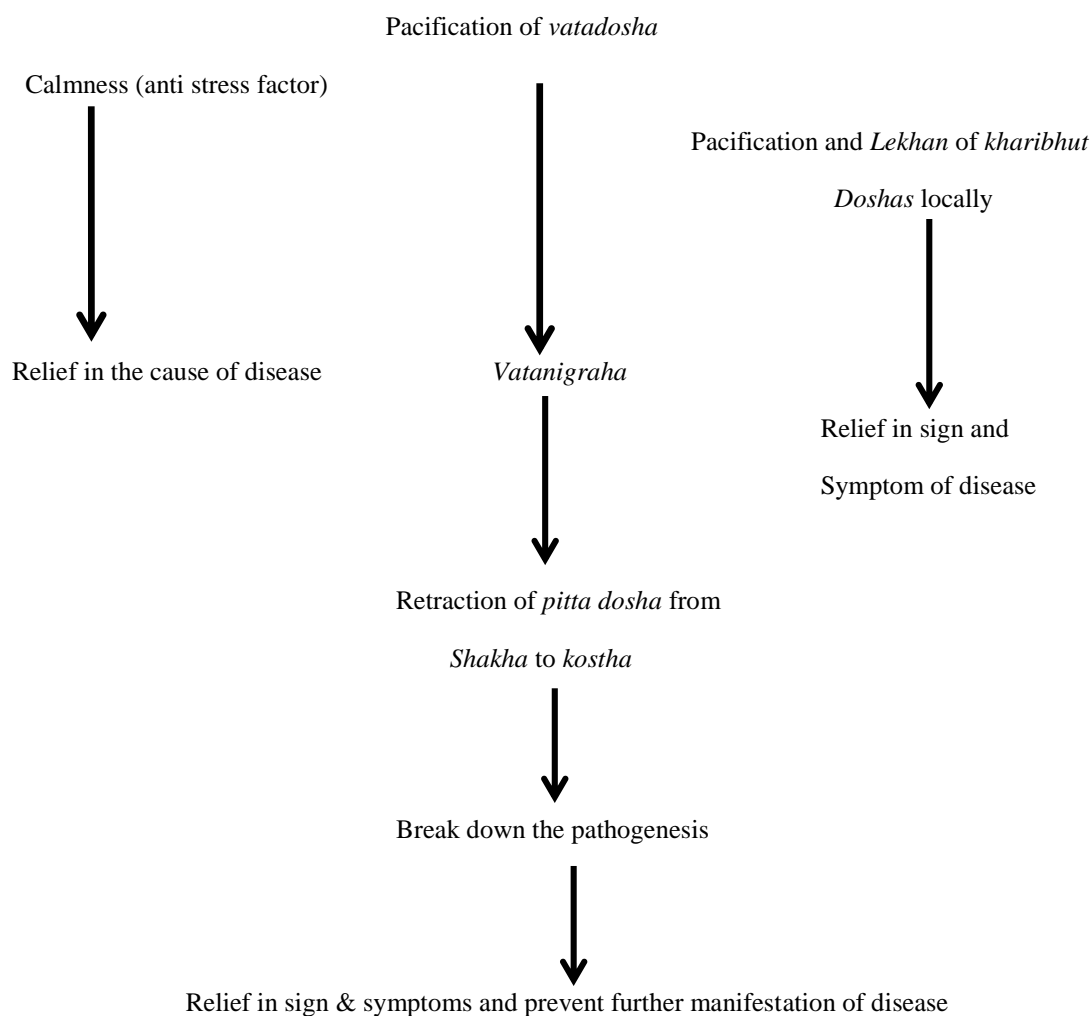
anulomana property. *Vyanghara lepa* pacifies the *dosha* locally and *Haritaki churna* pacify the *dosha* mainly *vata* internally. *Haritaki* has also property of *rechana*. Hence it eliminates the aggravated *dosha* and purifies the body. Thus *samsodhan* therapy i.e. *Haritaki churna* along with local therapy i.e. *lepa* application can provide better and quicker relief from the disease⁹.

Jatamansi Churna

Jatamansi has the property of *tridoshashamana*. *Vata dosha* is responsible for all mental functioning and emotions. *Jatamansi* is the most effective herb which regulates *vata dosha*. It is a well-known plant in the Indian traditional medicine system and has historically been used in *Ayurveda* as *Medhya*, *Rasayana*, *Nidrajanan* and *Manasrogaghna*¹⁰. On modern parameter it is a known brain tonic, and antispasmodic. It negates the effect of ACTH. *Jatamansi* reduce aggressiveness, restlessness, insomnia. It is a calmative and it imparts a sense of calmness, peace and relaxation. Therefore it is also used in managing the *manasroga* (*psychological disorders*).

Flowchart of probable mechanism of action of trial drugs:





CLINICAL DISCUSSION

Regarding colour of the lesion

The colour of the lesion was reduced upto 32.14% in G-I, 43.33% in G- II and 51.51% in group-III. More percentage of relief was found in group-III, which may be due to combined effect of external application of *lepa*, internal administration of *haritaki churna* along with *Jatamansi churna*.

Regarding the area of the lesion

Effect of therapy on the area of the lesion was 24% in G-I, 31.03% in G-II and 36.84 in G-III. Again more percentage of relief was found in G-III, which may be attributed

to combined therapy including external application of *lepa*, internal administration of *haritaki churna* along with *jatamansi churna*.

Regarding the size of lesion

Effect of therapy on the size of the lesion was 27.27% in G-I, 31.14% in G-II and 40.54 in G-III. Again more percentage relief was found in G-III which may be due to the combined effect of the external application of *lepa*, internal administration of *haritaki churna* along with *jatamansi churna*.

Regarding the anxiety level



Effect of therapy on anxiety level was only 8.86% in G-I, which is non-significant, 14.41% in G-II, which may have occurred secondary to relief in symptoms of disease. The relief was 38.58% in G-III due to the use of *Jatamansi churna*, a proven anxiolytic drug. Also more percentage of relief in disease symptoms was found in group G-III.

Overall effect of therapy

In this study Inter group comparisons showed that there was no significant difference regarding reduction in color of lesion, area of lesion and size of lesion between Group-I and Group-II, and Group-II and Group-III, but there was significant difference regarding reduction in color of lesion, area of lesion, size of lesion and anxiety level between Group-I and Group-III. In Group I, where only local application of medicine was advised was less improved, in Group II where local therapy and purification therapy was advised was improved a bit better, whereas group III where local use of medicine, purification of body and ant stress management was done was very much improved. This signifies that as *krodha* (anger) has been designated as causative factor of the disease, hence anti-stress therapy has its potential role in managing this illness.

CONCLUSION

The following conclusions can be drawn from this study:

1. The disease *vyanga* has predominance of *Vata* and *pitta dosha*.
2. The combined therapy consisting of *Vyangahara lepa*, *Haritaki churna* and *Jatamansi churna* is more effective in relieving the symptoms of *Vyanga*.
3. Best improvement in colour of lesion, size of the lesion, involvement of area and anxiety level was found in the group in which ant stress management was also done along with local therapy and purification therapy. Hence applicability of psychological causes in aetiopathogenesis and management of *vyanga* can be proved to some extent.





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