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# STUDY THE INCIDENCE OF VYANGA ACCORDING TO PRAKRUTI AND EFFECT OF VATAPATRADI LEPA ON IT.

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### ABSTRACT

Beauty of a person is assessed by the complexion and texture of the skin. Face is the most exposed part of the body and a prime organ of individual personality. There are many facial disorders of which vyanga is a disorder which badly affects the beauty of the face result in inferiority complex, anxiety, isolation etc. In consideration of Avurvedic vyanga we can include melasma of modern science. It affects the females more. Prakruti is physical and psychological constitution of the individuals which is determined on the basis of three *doshas*. One's basic constitution is fixed throughout his life time and *doshas* show its own characters in that particular human being. In that *vyanga* is the such one normal characteristic of *pitta prakruti*. Allopathic drugs are effective in skin diseases but have side effects like contact dermatitis, leucoderma. Therefore it is necessary to find potent treatment that act as hypopigmentation agents without compromising cytotoxicity. Herbal cosmetics are therefore in greater demand to enhance natural beauty. In Ayurveda lepa advised as more effective as local application which acts directly on the lesion. Hence present study was planned to assess efficacy of vatpatradi lepa on vyanga. Prevalence rate of vyanga according to WHO is 2.125%. So according to prevalence we took 35 diagnosed patient of *vyanga* for study. The type of study is Open labelled explolatory prospective design. The study was carried out with the help of parameter like prakrutiparikshan chart, MASI score, Garnier fairness meter scale. Incidence of vyanga in pitta prakruti studied. Considering dosha-dushti in vyanga, the vatapatradi lepa acts on vyanga with their action of rasa, guna, veerya & vipaka.

KEYWORDS: vyanga, doshas, vatpatradi lepa, rasa, guna, veerya, vipaka.

## INTRODUCTION

Skin is the natural jacket of the body. In the modern society the beauty of a person is assessed by the complexion and texture of the skin to a great extent. There are many facial disorders like seborrheic eczema, acne vulgaris, allergic dermatitis, etc. In *Ayurveda*, *vyanga* is a disorder of the facial skin which badly affects the beauty of the face. Characteristic of *vyanga* is painless macular circumscribed blackish discoloration of the skin. Which result in inferiority complex, anxiety, isolation etc. Melasma is very common cutaneous disorder, accounting for 0.25 to 4% of the patients seen in dermatology clinics. Very common pigment disorder among the Indians. The female to male ratio is 4:1.

So to cure the disease and avoide the risk factor *Ayurveda* explain several treatments for *vyanga* like *siramokshan, nasya*, oral medications, *lepa* etc. *Lepa* is more effective as local application acts directly on the lesion. Different diseases can occur in different dehaprakrutis in different extent due to various causative

factors. Taking into consideration of *doshadushti* the above *lepa* of *panduvatpatra*, *maltipatra*, *raktchandan*, *kushth*, *kaliyakam*, *lodhra* acts on *vyanga* with their action of *guna*, *rasa*, *veerya* & *vipaka*. And also to identify the co-relative incidence of *pitta prakruti* in different patients of *vyanga*, examination of co- relation in between them is done so that we can prevent its occurrence easily.

### AIM

To study the incidence of *vyanga* (Melasma) as per *Doshaj Prakruti* and effect of *vatpatradi lepa* on it.

#### **OBJECTIVES**

#### Primary

1. To study the literature of *prakruti parikshan* and *vyanga* (Melasma).

2. To find out probable incidence of the *vyanga* (Melasma) as per *doshaj prakruti*.

#### Secondary

Sampada et al.

1. To evaluate the effect of vatpatradi lepa on vyanga

#### **Study Design**

**Study type**: Open labelled exploratory prospective design study conducted on 35 diagnosed patients of *Vyanga* (melasma).

### MATERIAL AND METHODS

**Subject**: 35 volunteers having symptoms of *Vyanga* were selected randomly. Each patient of *vyanga* was selected and examined by the standard chart of "*Prakruti parikshan*" and *prakruti vinishchaya* was done.

**Selection of Volunteers**: Volunteers were selected from O.P.D of the *Ayurvedic* college and Hospital having symptoms of *vyanga*.

#### **Inclusive Criteria**

- 1. Patients were selected irrespective of sex & religion between the age group of 14 to 54 years.
- 2. All patients showing signs & symptoms of *vyanga* i.e. tan to brown patches, symmetrical blotchy, brownish pigmentation on the face at forehead, cheeks, temples, upper lip etc. were selected.
- 3. Patients who have not taken any treatment for *vyanga* from one month before the trial.
- 4. Patients willingly participating in study trial.

#### **Exclusive Criteria**

- 1. Patients of age group below 14 years & above 54 years.
- 2. Patients taking oral contraceptive pills & injected depot contraceptive preparations.

### **OBSERVATIONS AND RESULT**

Table No.1: Showing Prakruti wise distribution.

Sr.No	Prakruti	No. of volunteers	Percentage
1	VP	8	22.85%
2	VK	6	17.14%
3	KP	4	11.42%
4	KV	1	2.85%
5	PK	5	14.28%
6	PV	11	31.42%
	Total	35	100%

Table no. 2: Showing comparison of area occupied by *vyanga* (melasma) before and after application of *vatpatradi lepa* at 4 different sites of the face.

Sr.	foreh	ead	Right Malar		Left Malar		Chin	
no	Before	After	Before	After	Before	After	Before	After
1			3.27	0.6	1.94	0.728		
2	0.05	0.015	0.82	0.15	1.5	0.6		
3			1.91	0.46	2.76	1.22		
4			7.39	5.2	5.075	2.75		
5			1.34	0.41	1.66	0.71		
6	3.49	2	3.94	3.19	6.54	5.87	0.59	0.52
7	0.41	0.16	4.34	2.67	2.34	1.17	1.67	1.08

- 3. Patients suffering from skin diseases like freckles, nevi, nutritional hyperpigmentation, drug induced Pigmentation changes etc.
- 4. Patients having *vyanga* along with itching & swelling.
- 5. Patients exposed to consistent sun exposure
- 6. Pregnancy & lactating mother.
- 7. Patients with other systemic diseases and secondary infection.

#### Steps in study:

- 1. 35 volunteers having signs & symptoms of *vyanga* i.e., tan to brown patches, symmetrical blotchy, brownish pigmentation on the face at forehead, cheeks, temples, upper lip etc. were selected randomly.
- Baseline screening and assessment as per inclusion & exclusion criteria. Informed written consent of patient was taken.
- 3. *Prakruti vinishchaya* was done as per standard chart of *prakruti parikshan*
- 4. Each patient of *vyanga* (Melasma) in detailed examined by *vyanga* (Melasma) assessment format.
- 5. *Tiktagrutapana* given upto *samyak snigdha lakshan* & then *virechna* was given.
- 6. Patients got *vatpatradi lepa* for application after *sansarjankram* to assess the effect of *vatpatradi lepa* on *vyanga*

#### Parameter

- 1) Prakruti parikshan chart
- 2) MASI Score
- 3) Garnier fairness meter scale
- 4) Digital camera of 5.0 mega pixel

8	1.22	0.99	13.72	3.91	11.96	4.83	0.76	0.53
9	3.75	2.03	4.6	2.76	2.56	1.05	1.9	1.18
10			5.59	2.22	2.53	0.84		
11	1.67	0.418	2.25	0.83	2.34	0.33		
12			3.1	2.2	3.75	2.6		
13			1.73	1.23	1.237	0.7425		
14			1.35	0.74	0.63	0.15		
15			0.35	0	1.01	0.15		
16	0.42	0.28	7.11	4.08	8.52	3.66		
17			11.6	8.81	9.49	4.49		
18	2.53	1.44	4.71	3.62	3.55	2.89		
19	1.62	0.84	4.74	1.94	3.31	1.36		
20	0.13	0.06	6.99	5.97	6.65	3.94		
21			2.67	2.06	2.129	1.37		
22			1.44	0.16	0.76	0.084		
23			6.8	2.97	10.2	6.37		
24			9.15	9.14	7.33	7.33		
25			0.64	0	0.27	0		
26			3.73	2.07	3.97	1.73		
27	3.82	2.33	1.94	0.58	1.48	1.28	2.72	1.48
28	10.04	6.22	5.06	2.99	5.73	3.4		
29			0.95	0				
30			1.39	0.52	2.35	1.74	0.226	0.087
31			1.14	0.26	1.49	0.08		
32	3.44	1.76	8.74	6.18	10.77	5.91		
33			4.94	1.92	5.26	2.5		
34			3.13	1.45	1.6	0.68		
35	1.35	0.423	3.47	1.1	3.64	1.1	0.84	0.235

Table no. 3: Showing comparison of homoginity occupied by *vyanga* (melasma) before and after application of *vatpatradi lepa* at 4 different sites of the face.

<b>S</b>	Foreh	ead	Right N	Malar	Left N	Ialar	Chin	
Sr. no	Before	After	Before	After	Before	After	Before	After
1			2.75	1.73	2.375	1.5		
2	1	0.3	3.8	0.75	4.25	1.6		
3			2.36	0.9	1.9	1.66		
4			6.125	4.25	5.75	3.25		
5			2.2	1.48	1.96	1.16		
6	6.2	3.7	5.7	3.6	7	4.5	1.56	1.03
7	4	4	6.5	2.16	5	2	3.1	2.25
8	4.75	2.16	6.25	2.66	5.5	3.16	3.8	3.8
9	6.25	3	6.65	5.4	5	1.35	8.25	2.83
10			4.5	1.26	3.2	0.84		
11	6	2.5	3.5	1.5	3	0.75		
12			3.75	2.75	3.75	3.37		
13			3.75	3.75	3.1	3.1		
14			1.72	1.075	2.25	1.25		
15			0.9	0.2	1.65	5		
16	2	1	5.35	4.53	5.4	2.8		
17			8	4.5	7	4		
18	4.75	0.83	5.5	4.5	4.5	4.5		
19	4.25	2.5	11.5	2.33	10.5	5		
20	1.5	0.5	7.5	6.5	7.5	6		
21			5.5	4.2	4.7	2.7		
22			2.56	1.1	2.65	0.85		
23			4.5	2	3.16	2.6		

24			4.5	4.5	3.5	3.5		
25			1.2	0	2.7	0		3
26			6.5	2.25	5.5	1.875		
27	13	3.5	2.4	0.64	2.42	1.6	5.95	1.8
28	12	10.5	6.5	2.5	7	3		
29			2.75	0				
30			2.25	0.91	2.25	1.875	1.5	1
31			3	1.5	2.5	1.5		
32	12.5	5	7	6.5	7.5	4		
33			6	3.75	7	3.75		
34			5.7	2.4	4.5	2.7		
35	3.5	2.6	3.8	2	1.75	1.5	1.5	0.8

Table no. 4: Showing comparison of darkness occupied by *vyanga* (melasma) before and after application of *vatpatradi lepa* at 4 different sites of the face.

Sr. no	Foreh	ead	Right N	Malar	Left N	lalar	Chi	n
Sr. 110	Before	After	Before After		Before	After	Before	After
1			5	1	5	1		
2	11.5	2.5	11	2	11	1		
3			6	1	6.5	1.5		
4			2.5	0.5	2.5	0.5		
5			4	1	4	1.33		
6	7	4	15	8	15	8	12	6
7	12	4	12	3	12	3	9.5	2.5
8	4	2	3	2	5	3.5	5	3
9	10.5	3.5	14	5	14	5	9	4
10			7	3	5.5	2.5		
11	6	3	6	2	6	3		
12			10.5	4.5	10.5	4.5		
13			9	4	11	4		
14			9	1.33	11	4		
15			5	0	4	1.5		
16	4.5	2	12	5	11	5.5		
17			2	1	2	1		
18	12	4	10	4	9	3		
19	4	1	7	4	7	4		
20	5	1	15	7	15	7		
21			7	3	7	3		
22			7	5	5.5	2		
23			4	2	4	2		
24			12	9	12	9		
25			3	0	3	0		
26			5	2	5	2		
27	16	12	16	12	16	11	16	8
28	7	1	11	3	11	3		~
29	•		2	0				
30		1	5.5	3.5	3	1	3	1
31			8	1	8	3	5	1
31	5	1	5	1	5	1		
32	5	1	7	2	7	2		
33			6	4	6	3		
	0	-					5	1
35	8	5	6	2	6.5	3.5	5	1

No.of patches	Grade	No.of volunteers B.T.	No. of volunteers A.T.
0	0	0	2
1-2	1	9	6
3-4	2	15	9
5-6	3	7	9
>6	4	4	9

Table no. 5: Showing comparison of number of patches of *vyanga* on face before and after application of *vatpatradi lepa*.

Table no.6: Fairness meter scale gradation before and after application of vatpatradi lepa on face.

Skin colour	No. of Before	volunteers After
Normal	0	2
Fair	7	25
Medium	15	6
Dark	11	2
Very dark	2	0

### DISCUSSION

The concept of *prakruti* is unique to *Ayurveda, prakruti pariksha* is done by the physician by observing physical characteristics, traits and interrogation of the patient. Understanding *prakruti* helps to prevent certain diseases in future in healthy persons.

In *Charaka samhita vimansthana* 8th *adhyaya, Acharya Charaka* explained the *doshaja prakruti lakshanas,* according to *guna* of *dosha*. In that he clearly stated that the person with *pitta prakruti* is more susceptible to have *vyanga* due to its *ushna guna*.

To see the effect of *vatpatradi lepa* on *vyanga* irrespective of *prakruti* 35 patients selected randomly as experimental group. The demographic details were analyzed from all the 35 Patients. The entire patient was strictly examined according to criteria of diagnosis and they were included in the study randomly. Before starting the treatment, patient were observed for each parameter i.e., *nirujam, tanukam, shyavam,* number of patches on face. The status of these parameters was recorded at the start of treatment. *Vatpatradi lepa* was given for a period of 21 days after *snehapana* with *tikta ghruta* followed by *virechana* and follow up of study was recorded. All the patients were observed at the end of the treatment.

### Mode of Action of Lepa

*Bhrajaka pitta* absorbs the *dravyas*, applied externally over the skin. And also illumines various shades of complexion. In human body there are innumerable pores spread throughout the skin like a mesh. Their openings are attached to the *Roma Koopa* (hair follicles), which carries the sweat and *rasa dhatu* inside and outside, to nourish them. Through them the active principle of medicaments, to the skin in the form of *Abhyanga, Parisheka, Avagaha, Lepa*, etc. are absorbed after undergoing *paka* by *Bhrajaka Pitta* situated in the skin.

The vatpatradi Lepa comprises of Vata, Malati, Raktachandana, Kushtha, Daruharidra and Lodhra. The vyanga occurs mainly due to vitiation of pitta, vata and rakta doshas, it is understood that the drugs should possess the pitta Vatahara and Pitta (Rakt) effect.

Specific mode of action of Vatpatradi lepa on vyanga. The shita veeryatva of lodhra and raktachandana subside the aggravation of rakta and pitta. Kushtha and Daruharidra are having ushna veerya property to counteract the aggravation of Vata and Kapha. Kushtha has tikta and madhur rasa because of that it acts vataghna and due to snigdha and ushna gunas it acts as vataghna. Moreover Lodhra have kapha pittahara, shothahara, kushthaghna, rakta stambhaka, and vrana ropana properties. Thus all this combined action of the drugs ceases the production of vyanga and subsides the production of further vyanga at the site.

In this study, highest prevalence of *vyanga* is seen in patients with *Pitta-vatta prakruti* (31.42%) followed by *vata-Pitta* (22.85%) *prakruti*. *Vyanga* is a disorder predominant of *pitta* and *vata Dosha*. It may be contended that persons belonging to *Pitta vatta Prakruti* are more prone to get *Vyanga*.

Positive response of *vatpatradi lepa* was observed for its efficacy on *vyanga*. There was significant improvement (P<0.001) in MASI Score after application of *vatpatradi lepa* for 21 days. Treatment showed improvement in MASI Score. Total mean MASI Score was 3.962 which reduced upto 2.457 after treatment.

### CONCLUSION

i. According to *prakruti parikshana* chart *pittavataj prakruti* were more prone to *vyanga*.

ii. According to affected area measures in square centimetres *vatpatradi lepa* with *virechana* was effective (P<0.001) in management of *vyanga* (Melasma).

iii. Globally approved MASI Score also showed improvement (P<0.001) in *vyanga* (Melasma) after application of *vatpatradi lepa* with *virechana*.

iv. Photographic criteria reveal noticeable difference in *vyanga* (Melasma) after application of *vatpatradi lepa* with *virechana*.

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