

# Process and Principles of *Varnotpatti* and Assessment of the *Varnaprasadana* in *Tvakvaivarnya*

SHILPA SAVALIA \* HITESH VYAS \*\* MAHESH VYAS \*\*\*

Institute for Post Graduate Teaching and Research in Ayurveda, Gujarat Ayurved University, Jamnagar.

**ABSTRACT :** The present study has been undertaken to unfold the hidden facts about the concept of *Varna*, to apply this concept in practical field and to assess the efficacy of *Kanakatailam* Cream (*Varnaprasadana* drug) and *Manjishthadi Ghanavati* in *Tvakvaivarnya*. Patients from OPD of Basic Principles, Dept. of IPGT & RA were selected and randomly divided into two groups. The patients in Group A were given *Kanakatailam* Cream for 60 days. Patients in Group B were managed with *Manjishthadi Ghanavati* for the same duration. The *Nidanas* (causative factors), *Lakshana* (signs & symptoms) etc. of the disease were observed carefully on the basis of specially prepared research proforma to get idea about the *Samprapti* of the disease. Assessment of *Varnaprasadana* was done on the basis of relief in the scores given to sign and symptoms of the *Tvakvaivarnya* according to their severity. In Group - A (*Kanakatailam* Cream Group) 32.73% improvement was found, which was statistically highly significant (<0.001) and in Group - B (*Manjishthadi Ghanavati* Group) 38.01% improvement was obtained which was also statistically highly significant (<0.001). Both the drugs *Manjishthadi Ghanavati* and *Kanakatailam* cream have shown better results in improving the colour and decreasing the intensity of the darkness of patches.

**Key words :** *Varna*, *Varnaprasadana*, *Tvakvaivarnya*.

## INTRODUCTION

The concept of *Varna* has been elaborately described in the classics. According to Acharya Kashyapa, the equilibrium of all the *Dhatus* is the root cause for *Vridhhi*, *Bala*, *Varna*, *Oja*, *Jatharagni*, *Medha*, *Ayu* and *Sukha* and disturbed state of the same results in ailments<sup>1</sup>. Thus, *Varna* stands as a sign of Health.

*Varna* is accepted as one of the parameters, which represents the equilibrium of the body elements, and thus it is also considered as one of criteria for examining the *Dhatu Samya*<sup>2</sup>. Moreover, in *Indriyasthanas* of Charaka Samhita, a whole chapter deals with the prognostic symptoms, in which *Varna* as it can be directly observed, given more importance in assuming the life span of the individual<sup>3</sup>. Thus, *Varna* becomes of vital importance.

According to Charaka, *Varna* meant not only for the colour and complexion, but for all these qualities which can be recognized by the eyes<sup>4</sup>.

For the implementation of the concept, the disease *Tvakvaivarnya* has been selected for the study. It is seen abundantly in the patients. Moreover,

in classical texts not so much description is available regarding this disease, therefore study has been undertaken to evaluate the aetio-pathogenesis of the disease.

Though modern medical treatments are cheaper and easily available, they are not useful for complete cure of the disease. While surgical treatment requires costly instrument, good infrastructure as well as high skill. A need was felt for exploring the Ayurvedic line of management for the disease. Hence, in the present study an attempt has been made to find out some potent and perfect remedy for the disease *Tvakvaivarnya*, which is useful to regain the original beauty of face and to add an aesthetic value to the personality. The *Varnaprasadana*<sup>5</sup>, which has been described as bringing out the clarity of *Varna*, is thus applicable in *Tvakvaivarnya*. The whole study was designed with the hypothesis to evaluate the concept of *Varna* and to find out the *Varnaprasadana* effect of *Kanakatailam* Cream in comparison to *Manjishthadi Ghanavati* in the disease *Tvakvaivarnya*.

## Aims and Objectives :

As every research work has its own speciality, the present study was undertaken with the following aims and objectives :

1. To study the Process and Principles of *Varnotpatti*.
2. To study the status of *Pitta* in relation to *Varna*.
3. To study the concept of *Tvakvaivarnya*.

\* Lecturer in Swasthavritta, Govt. Ayurveda College, Junagadh.

Email address : shil\_savalia@yahoo.co.in

\*\* Sr. Lecturer, Dept. of Basic Principles, I.P.G.T. & R.A., Jamnagar.

\*\*\* Reader, Dept. of Basic Principles.

4. To study the advantages of *Varnaprasadana* in *Tvakvaivarnya* and to assess the efficacy of *Kanakatailam*.

## MATERIAL AND METHODS

**Literary Material :** Various available Ayurvedic texts and books of modern medicine were referred for the specific materials related with the concern topic.

**Clinical Material :** Patients having signs and symptoms of *Tvakvaivarnya* attending the O.P.D. of Basic Principles department of I.P.G.T. & R.A., G.A.U., Jamnagar were selected irrespective of their age, sex religion, education, occupation etc.

Simple random sampling technique was followed for grouping the patients in 2 groups i.e. the trial group and the standard control group. All the patients were examined and assessed on the basis of specially prepared proforma which include all the signs and symptoms of *Tvakvaivarnya*. Hematological investigations have been done to rule out any other pathology as well as to evaluate the effect of therapy.

### Inclusion criteria :

1. Patients having age between 15 to 40 yrs.
2. Patients having dark colour pigmentation on face.

### Exclusion Criteria :

The following patients were excluded from the present study :

1. Patients having age less than 15 years and more than 40 years were excluded.
2. Patients having *Tvakvaivarnya* as the symptom of major systemic disease or as a result of side effect of any modern drug were not selected.
3. Patients having *Tvakvaivarnya* due to hormonal causes.
4. Patients having the chronicity of disease more than six years were excluded.
5. Patients having any allergic condition were not selected for the present study.
6. Patients having *Tvakvaivarnya* since birth like naevus of ota etc.

**Drugs :** *Kanakatailam* Cream and *Manjishthadi* Ghanavati were prepared at the Pharmacy of the Gujarat Ayurved University, Jamnagar. *Kanakatailam* Cream was based on classical preparation "Kanka Taila" described in Kshudra roga chikitsa of Chakradatta. It contains Priyangu, Manjishtha, Nilotpala, Kesara & Yastimadhu.

**Grouping :** All the patients were divided into two groups to compare the efficacy of the trial drug :

**Group A :** In this group 18 patients were treated with *Kanakatailam* Cream.

**Group B :** In this group 17 patients were treated with *Manjishthadi* Ghanavati.

### Drug administration :

#### Group A : *Kanakatailam* Cream

Dose : Quantity sufficient (As per area of the affected part)

Route of Administration : Local Application on face

#### Group B : *Manjishthadi* Ghanavati

Dose : Two Tablets of 500m.g. in three divided doses ( t.i.d)

Anupana : With Luke warm water

Route of Administration : Orally (After meal)

Duration : 60 days

## OBSERVATION AND RESULTS

Total 35 patients were registered in the present study divided in two groups. Out of which 30 completed the treatment, and 5 patients withdrawn the treatment against medical advice.

Age range varied among the 15 to 40 yrs. Among majority of the patients (71.43%) belonged between 21-30 years of age group followed by 17.14% 31-40 years of the age group. All the patients were Hindu, among them 97.14% patients were females. Maximum 31.43% of the patients were having post-graduation. Maximum numbers of patients (51.43%) were belonging to upper middle class. Maximum numbers of the patients (48.57%) were addicted to Tea. Majority of the patients (94.29%) were from the *Sadharana Desha*. Exposure to sun rays was observed in majority of the patients (42.86%) as an aggravating factor for *Tvakvaivarnya*. Tension as an aggravating factor was observed in approximately 55% of the patients.

Maximum number of patients were reported consuming *Katu* (97.14%), *Amla* (51.43%), *Lavana* (48.57%) *Rasa* and *Ushna* (68.57%) - *Tikshna* (60%) *Guna* dominant diet. The maximum of the patients (48.57%) were reported with the *Madhyama Abhyavaharana Shakti*, but maximum number of patients (54.29%) were having *Avara Jarana Shakti*. Maximum numbers of the patients (60%) were suffering from *Mandagni*. Maximum no. of patients (68.57%) were reported with irregular bowel habit i.e. either constipated or with efforts. *Krura Koshtha* was observed in (42.86%)

patients. Maximum numbers of patients i.e. 65.71 % were having stable type of disease. All the patients (100%) were having gradual onset. The 31.43% patients had chronicity of 4 - 6 years and 2 - 4 years in each followed by 25.71% patients of that of 6 months to 2 years.

Maximum numbers of patients (57.14%) were having *Pitta-Kapha Prakriti* and 22.86% patients were of *Vata -Pitta Prakriti*. The majority of the patients (65.71%) were having *Avara Tvak Sarata* followed by *Madhyama Tvak Sarata* in rest of the patients (34.29%). No patient was observed with *Pravara Tvak Sarata* in present study. *Avara Rakta Sarata* was observed in majority of the patients (60%) followed by 28.57% of patients of *Madhyama* and 11.43% of *Pravara Rakta Sarata*. The maximum no. of patients (51.43%) were seen having dark complexion. About 52% of patients had tensive status of *Manas*. Maximum numbers of the patients (68.57%) were of *Madhyama Sattva*.

Maximum numbers of the patients (91.43%) were having the vitiation of *Rasa Dhatu*, whereas all of the patients (100%) were observed having the vitiation of *Rakta Dhatu*.

Family history was positive in maximum numbers of the patients (45.71%). It was observed that among these patients mothers of the 56.25% of the patients also were having the same problem. In 43.75% of the patients sister of the patient was also having same problem. Past history is present in 48.57% patients. Among them, majority of the patients (76.47%) were having *Yuvana Pidika* as past illness.

The chief complaint *Vivarnamandala* was seen in all the patients in present study. As associated

symptoms, *Pidika* was observed in maximum patients i.e. 69.23% followed by *Rukshata* in 38.46% of the patients. Maximum numbers of the patients (65.71%) have abnormally dark brown colour of *Tvakvaivarnya* and maximum numbers of the patients (31.43%) had the patches more than 20 in numbers. Maximum no. of the patients (68.57%) were been observed with the affection between 1-25% of the area of face, and 17.14% of the patients had the affection between the 26-50%. The distance from where the patches are seen was observed more than 10 feet in 82.86% of patients, while 6 - 10 feet in rest 17.14% of patients.

The score for colour of patches was reduced by 53.19% in Group A, which was statistically highly significant ( $p < 0.001$ ), while it was reduced by 61.86% in Group B, which was also statistically highly significant ( $p < 0.001$ ).

The score of numbers of the patches was reduced 8.57% in Group A, which was statistically insignificant ( $P < 0.05$ ), while in Group B it was reduced 20.41%, which was statistically highly significant ( $p < 0.001$ ).

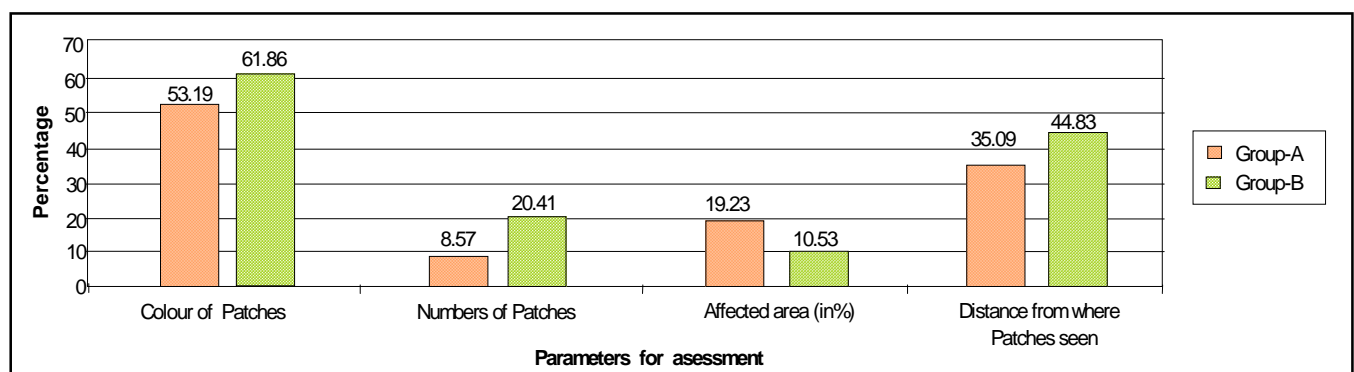
The affected area was reduced by 19.23% in Group A, which was statistically significant ( $p < 0.01$ ), while in Group B it was reduced by 10.53%, which was statistically insignificant ( $p > 0.10$ ).

The distance from where the patches are seen was reduced by 35.09% in Group A, which was statistically highly significant ( $p < 0.001$ ) while in Group B, it was reduced by 44.83% which was also statistically highly significant ( $p < 0.001$ ). The effect of therapy was statistically highly significant in both the groups- Group A and Group B. (Table No. 1).

TABLE NO. 1 : COMPARATIVE EFFECT OF THE THERAPY :

	Mean score		%	X	S.D.	S.E.	t	p
	B.T.	A.T.						
Group A	11	7.4	32.73	3.6	1.454	0.375	9.589	$p < 0.001$
Group B	11.4	7.06	38.01	4.33	1.543	0.398	10.88	$p < 0.001$

FIG. NO. 1 : TOTAL EFFECT OF THE THERAPY :



## DISCUSSION

Maximum no. of patients (97.14%) were females, as females have more changes in their hormonal level of concentrations due to monthly cycles and as a result they are more prone to have *Tvakvaivarnya* in certain age groups and at certain times than males. Maximum numbers of patients (51.43%) were belonging to upper middle class. The awareness of aesthetic problem initiates them to visit the Hospital for consultation.

Maximum 31.43 % of the patients were post-graduation students. Owing to the excessive strain of the study and also irregularity in the diet regimen, excessive indulgence in the bakery products, spicy food materials may induce *Tridosha Prakopa* leading to *Tvakvaivarnya*.

Among all the patients, 48.57% of patients were addicted to Tea. By its virtue, causing *Vidaha* of *Rakta*, it increases the *Ushna - Tikshna Guna* of *Agni Mahabhuta*. Thus, causes *Dushti* of *Dhatu* mainly *Rakta* and *Rasa* and causes *Agnimandya*, leading to *Tvakvaivarnya*. As *Yakrita* and *Pliha* are the root organs of *Raktavaha Srotasa*, they also have definite role in vitiation of *Rakta dhatu*, which is the prime cause of *Tvakvaivarnya*.

Majority of the patients (94.29%) were from the *Sadharana Jangala Desha*, because most of the patients attending the O.P.D. of I.P.G.T. & R.A. belonged to either from Jamnagar or from surrounding area. Due to the excessive *Ushnata* and *Rukshata*, especially due to the *Atapadhikya*, *Tvakvaivarnya* is predominantly seen in this area. Due to this reason, exposure to sun rays was observed in most of the patients (42.86%) as an aggravating factor. And that's why the maximum no. of patients (51.43%) were seen having dark complexion. Moreover, mainly site of patches was seen cheeks, forehead, perioral area, chin, nose in most of the patients, as they are exposed to sun light directly.

Maximum numbers of patients were reported consuming *Katu*, *Amla*, *Lavana Rasa* and *Ushna - Tikshna Guna* dominant diet. This type of diet aggravates the *Pitta Dosha* in the body which first vitiates the *Rakta Dhatu* and may result in *Varna Vikriti*.

Majority of the patients had the habit of *Vishamashana* (45.71%). It hampers the state of *Agni* which leads to the *Dosha Prakopa* giving rise to many diseases.

In the present study maximum of the patients (48.57%) were reported with the *Madhyama Abhyavaharana Shakti* (eating capacity), but maximum numbers of patients (54.29%) were having *Avara Jarana Shakti* (digestive capacity). As a result, maximum numbers of the patients (60%) were found having *Mandagni*. Acharya Charaka has stated that the wholesome food consumed in appropriate quantity by the respective *Agni* according to prescribed method certainly helps the individual in bringing out complexion without disturbing any elements<sup>6</sup>. Hence, excess intake by impairing the status of *Agni*, can be considered as cause of *Tvakvaivarnya* due to *Rasa* and *Rakta Dushti*<sup>7</sup>.

Maximum patients (51.43%) were having sun exposure of 1 - 2 hours per day for their routine work without covering of face, which results in the disturbance of *Varna* after long time. That was also observed in the patients. The 31.43% of the patients have reported with the chronicity of two to four years and the same no. with a chronicity of 4 to 6 yrs. Due to this nature of the disease was observed stable in most of the patients (65.71%). These patients had came for the treatment after taking the allopathic medicines like corticosteroids or vit. E preparations.

About 52% of patients had tensive status of mind. Tension, as an aggravating factor is observed in approximately 55% of the patients. Moreover maximum numbers of the patients (68.57%) were of *Madhyama Sattva*. All this highlights the role of mental factor in causing the disease, hence psychological factor is assigned as a cause of *Vaivarnya*.

Out of married 13 patients, most of the patients have abnormal obstetric history i.e. either abortion/miscarriage, or premature delivery, or cesarian. The main reason is increased blood level of melanocytes stimulating hormone and stimulation of melanocytes activity in pregnant woman. The increase in estrogen and progesterone may also play a role. Contraception history was present among 33.33% of those married patients. Oral Contraceptive pills contain sex hormones, among them progesterone affects a small increase in pigmentation, while estrogen and progesterone both together cause far greater increase in pigmentation than is produced by either agent alone.

Maximum numbers of patients (57.14%) were having *Pitta-Kapha Prakriti* and 22.86% patients were of *Vata-Pitta Prakriti*. It is in similarity with the *Dosha* involved in the disease; hence people with this *Prakriti* will be more prone to the disease.

As the Pitta has a special role in the manifestation of *Tvakvaivarnya* due to *Ashrayashrayi bhava* with *Rakta*, it has a tendency to vitiate *Rakta Dhatu*, which is also practically proved that all of the patients (100%) are observed having the vitiation of *Rakta Dhatu*.

The majority of the patients (65.71%) were having *Avara Tvak Sarata* followed by *Madhyama Tvak Sarata* in rest of the patients (34.29%). No patient was observed with *Pravara Tvak Sarata* in present study, which is suggestive of the vitiation of *Rasa Dhatu* due to *Ashrayashrayi bhava*. Moreover, *Rasa Dhatu* plays major role in formation the *Rakta Dhatu*. That's why *Avara Rakta Sarata* was observed in majority of the patients (60%). Among the patients, associated symptoms were present in most of the patients (74.29%), *Pidika* (69.23%) and *Rukshata* (38.46%) were observed in majority of the patients, which is probably due to the involvement of *Pitta* and *Vata Doshas* in the disease.

In this study, majority of the patients were using the cosmetics like bleaching cream, foundation cream, compact powder etc. All these are *Tikshna* and *Ruksha*, hence directly causes the *Dushti* of *Bhrajaka Pitta* and causes the disease. And also it aggravates the disease, which was observed in most of the patients (45.71%). Family history was positive in maximum numbers of the patients (45.71%). Among these patients, it is observed positive in most of the patients from maternal side (56.25%). *Tvaka* is mentioned as *Matrija Avayava*. Moreover *Varna* is the entity which comes from the *Satmya* of mother. It suggests the role of genetic factor and modern Science also consider the same thing.

Past history was also present in patients (48.57%). In majority of the patients were having *Yuvana Pidika* (76.47%) as past illness, which indicate about the leaving of scar after their cure. Hence, the maximum of the patients were having the *Yuvana Pidika* as specific cause.

*Krura Koshta* was observed in (42.86%) patients, and again maximum no. of patients (68.57 %) were reported with irregular bowel habit i.e. either constipated or with efforts. This may be due to the *Vata Dosh*, which further lead to the disturbance in *Agni*. Hence, actively participate in causing the disease.

Almost equal result was obtained in group A and B regarding colour of the patches. In reducing the numbers of the patches, Group B shows better result than Group A. The better result was obtained in reducing the affected area of the patches in Group A than Group B. The therapy shows almost equal results in decreasing the distance from where the patches seen.

## CONCLUSION

In nut-shell, from this study it can be concluded that :

- ◆ *Varnaprasadana* drugs like *Kanakatailam Cream & Manjishthadi Ghanavati* provide highly significant result in improving the colour of patches and diminishing the intensity of the darkness and numbers of the patches.
- ◆ By the virtue of the *Varnaprasadana* drug, *Bhrajaka Pitta* is increased, disease can be controlled and the normal colour of the skin can be regained.
- ◆ During the therapy, no untoward side effect was reported by any patient.
- ◆ *Varnaprasadana*, *Vata-Pittashamaka* and *Raktashodhaka* drugs should be used for the management of the disease.

## REFERENCES

1. Kashyapa, Kashyapa Samhita, Kashyapa Samhita with Hindi translation by Shri Satyapla Bhishagacharya (1998), Su. 27/17, Sixth edition, Chaukhamba Sanskrit Sansthan P. Box No. 1139 Varanasi (India).
2. Agnivesha, Charaka Samhita, Ayurveda Dipika Commentary of Chakrapanidatta. Edited by Vaidya Jadavaji Trikamji Acharya; 2008, Sutra Sthana 24/4 & Vimana Sthana 8/103, 106, 108, 109, Reprint edition, Chaukhamba Surbharati Prakashana, Po. Box 1129, Varanasi (India).
3. Ibidem Charaka Samhita, Indriya Sthana, 1.
4. Ibidem Charaka Samhita Indriya Sthana, 1/11.
5. Dalhana commentary on Sushruta Samhita, Nibandhasangraha Commentary of Shri Dalhanacharya, Edited by Jadavaji Trikamji Acharya; (2002.) Seventh Edition, Sutra Sthana. 38/25, Chaukhamba Orientalia Varanasi. & Arundatta on Ashtang Hridaya, with the commentaries Sarvangasundara of Arundatta and Ayurveda Rasayana of Hemadri, edited by Pandit Hari Sadasiva Sastri Paradakara Bhisagacharya; Sutra Sthana, 23/10., (2002.) 9<sup>th</sup> Edition, Chaukhamba Orientalia, Varanasi.
6. Ibidem Charaka Samhita, Sutra Sthana.5/8, 6/3, 28/3,
7. Ibidem Charaka Samhita, Sutra Sthana 28/10, 11, 12.

## हिन्दी सारांश

### वर्णोत्पत्ति सिद्धान्त एवं त्वक् वैवर्ण्य में वर्ण प्रसादन का आंकलन

शिल्पा सावलीया, हितेष व्यास एवं महेश व्यास

प्रस्तुत अध्ययन वर्ण के सिद्धांतों के ज्ञानार्थ, उनके व्यावहारिक क्षेत्र में प्रयोगार्थ, तथा कनकतैलम् क्रीम (वर्ण प्रसादन औषध) और मञ्जिष्ठादि घनवटी की त्वक् वैवर्ण्य नाशक क्षमता परीक्षण हेतु किया गया। इस परीक्षण के लिए रुग्णों का चयन कर यादृच्छिक रूप से दो वर्गों में विभाजित किया गया। वर्ग-अ के रुग्णों को ६० दिन के लिए कनकतैलम् क्रीम का और वर्ग-ब में मञ्जिष्ठादि घनवटी का प्रयोग किया गया। रोग की संप्राप्ति जानने के लिए रोग के निदान, लक्षण आदि का अध्ययन एक विशिष्ट संशोधन पत्रक द्वारा किया गया। वर्ण प्रसादन का परीक्षण त्वक् वैवर्ण्य के लक्षणों की गंभीरता के आधार पर निश्चित किये हुए अङ्क से किया गया। वर्ग-अ में (कनकतैलम् क्रीम) ३२.७३% (जो कि अङ्कगणित दृष्टि से उत्तम सार्थक,  $p < 0.001$ ) और वर्ग-ब में ३८.०९% (जो कि अङ्कगणित दृष्टि से उत्तम सार्थक,  $p < 0.001$ ) लाभ मिला। निष्कर्ष रूप में यह कहा जा सकता है कि मञ्जिष्ठादि घनवटी और कनकतैलम् क्रीम दोनों वर्ण को अच्छा बनाने और वैवर्ण्य की तीव्रता को कम करने में अच्छा परिणाम देते हैं।

