

A CLINICAL STUDY TO EVALUATE THE EFFICACY OF YOGAAMRUTO RASA IN KITIBHA KUSTHA W.S.R. TO PSORIASIS.

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ABSTRACT :

Rasa Shastra is a partially independent branch of *Ayurvedic medicine*, which deals with preparation of the drugs with metals and minerals to produce the drugs with higher efficacy in lower dose with good palatability. Skin is the most common organ to get afflicted with diseases in human. Almost 12.4% among the total patients that approach for treatment to general practitioners complain of skin related ailments. Ayurveda classified all the skin diseases under a single heading called 'Twagamaya'. This ailment was added amongst the eight grave diseases in virtue of their painful influence on human body and psychology. *Kitibha Kustha* is one among them categorized as *Kshudra Kustha* and *Sadhyu Kustha* in *Ayurveda*. *Kitibha Kustha* can be correlated to Psoriasis with many similarities. *Yogaamruto Rasa* (YMR) is *Rasaushadhi* mentioned in *Rasa Kamdhenu* indicated for all types of *Kustha*. *Parada* (Mercury), *Gandhaka* (Sulphur), *Tamra churna* (Copper), *Vatsanabha* (*Aconitum ferox*), *Vacha* (*Acorus calamus*), *Trikatu* (homogenous mixture of *Zingiber Officinale*, *Piper nigrum*, *Piper longum*), *Musta* (*Cyperus rotundus*), and *Vidanga* (*Embelia ribes*) are the main ingredients of YMR. Its clinical efficacy was evaluated in 30 patients of *Kitibha kustha* by preparing a special case proforma based on the signs and symptoms mentioned in classics. Therapy was found to be statistically extremely significant ($P<0.0001$) in *Syava*, *Kinakharasparsa*, *Parusam*, *Rookshatvam*, *Kandu*, *Utsannata*, Disturbance in sleep, Redness and Scaling. Significant relief was observed in Auspitz phenomenon ($p=0.0223$). Whereas insignificant for Pitting of nails ($p=0.0828$) and Koebner's phenomenon ($p=0.0816$)

Key words: *Twagamaya, Kitibha kustha, Yogaamruto rasa.*

INTRODUCTION: *Kustha* (obstinate skin diseases including leprosy) is the disease which causes discontinuation and discoloration of skin. In India the rate varies from 0.44 to 2.8%, it is twice more common in males compared to females, and most of the patients are in their third or fourth decade at the time of presentation¹. All skin diseases and almost all diseases that afflict skin are classified under the single heading 'Twagamaya'. *Kustha* occurs due to vitiation of three

doshas (humors) and four *dhatus* (*Twak, mamsa, Rakta, ambu*). Though all types of *Kusthas* are due to vitiation of above seven factors, predominance of specific *doshas* results in difference of signs and symptoms. *Kitibha kustha* is *Vata-Kaphaja* in origin² according to Acharya Charaka. It is correlated with Psoriasis of contemporary science elucidated as chronic and non-infectious skin disease characterized by well defined slightly raised, dry erythematous macules with

silvery and typical extensor distribution³. A special case proforma was prepared taking the signs and symptoms both from ayurveda and contemporary science. 30 patients were evaluated for these parameters and given scoring. Follow up was carried out at on 10th, 20th, 30th day. Based on the scoring obtained paired 't' test was applied by using Graph pad prism software between the scoring of first day and 30th day to evaluate the efficacy of *Yogaamruto rasa*.

MATERIAL AND METHODS: It's an open, non-group, non-randomised clinical trial. Total 30 patients were selected from OPD of Department of *Panchakarma* and Department of *Rasa Shastra and Bhaishjya Kalpana*, S.V. Ayurvedic Hospital, Tirupati. Study was approved by Institutional Ethics Committee with approval no. IEC SVAYC/15/RS/22 dated 26/03/15.

Inclusion criteria:

- Patients aged between 16-70 years were selected irrespective to Sex, Religion, and Occupation.
- Patients with typical features narrated in the classics under the heading of *Kitibha Kustha* with signs and symptoms from contemporary science.

Exclusion criteria:

- Diabetes mellitus
- Tuberculosis
- Leprosy
- Coronary heart disease
- Any other types of *Kustha*

Investigations: Laboratory investigations were carried out before and after treatment to rule out any other pathological conditions as well as to record any specific change by the treatment

Routine haematological examinations like,

- Hb%, TLC, DLC, E.S.R.
- L.F.T, R.F.T.

Assessment criteria: The assessment criteria were developed on the basis of symptoms and signs quoted in ayurvedic classics. The following are the *lakshan*s incorporated for scoring.

- *Syava*
- *Kinakharasparsa*
- *Parusham*
- *Rookshatvam*
- *Kandu*
- *Utsannata*
- Disturbance in Sleep
- Pitting of nails
- Redness
- Scaling
- Auspitz phenomenon
- Kobner's phenomenon

The assessment is done on the first day of reporting and on the last day of treatment that is 30th day.

Dose⁴:

- **Internal Therapy:** *Yogaamruto rasa* orally
- **Dose :** 250 mg
- **Frequency :** twice a day after meals
- **Anupana** (vehicle of transport): Jaggery
- **Duration of study :** 30 days
- **Follow up:** 0, 10th, 20th, 30th day.

Statistical analysis:

Statistical test for comparison was done by Paired 't' test by using Graph pad prism software.

Diet⁵:

- **Pathya-** *Laghu anna* (easily digestible food), *Purana anna* (food older than one year), *Mudga* pulse (green gram)
- **Apopathy-** *Guru anna* (heavy digesting foods) *Amla rasa* (sour food items) dominating food, Curd, Fish, *Tila* (excess sesame oil containing food), *lavana rasa* (salty food items).

OBSERVATION AND RESULTS: The demographic data of 30 patients obtained by questionnaire showed that maximum

26.6% were between 51-60 years age group, 66.66% of the patients were male, 93.33% of patients were Hindus, 86.6% were married, 56.66% belonged to rural area, 46.66% were belonged to middle class, 90% of patients were educated, 36.6% belonged to labour group, 73.33% were consuming mixed diet, 30% patients were having *Samaagni*., disturbed sleep

was reported by 60% of patients, 46.66% were having *Vata- Pitta prakruti*, 80% had normal bowel habit, 60% of patients reported that they face some kind of emotional stress in their life, Onset of *Kitibha Kustha* was reported as insidious in 70% of patients, 43.33% had cold climate as aggravating factor, 50% had chronicity less than one year.

Table No. 1: Showing effect of *Yogaamruto rasa* on parameters in 30 patients:

Parameters	-n-	Mean		Mean difference	Relief %	S.D.	S.E.	't'	P
		B.T.	A.T.						
Syava	28	2.17	.78	1.39	64.0	0.91	.017	8.04	<0.0001
Kinakharasparsa	30	2.56	0.83	1.7	66.4	0.94	0.17	10.05	<0.0001
Parusham	30	2.26	1.43	0.83	36.7	0.64	0.11	7.04	<0.0001
Rookshatvam	29	2.72	1.51	1.20	44.1	0.49	0.09	13.23	<0.0001
Kandu	27	3.22	122	2.0	62.11	0.83	0.16	12.49	<0.0001
Utsannata	29	2.48	1.24	1.24	50.0	0.91	0.16	7.32	<0.0001
Disturbance in sleep	26	1.92	.61	1.30	67.7	0.78	0.15	8.45	<0.0001
Pitting of nails	19	2.42	2.26	0.15	6.1	0.37	0.08	1.83	0.0828
Redness	23	2.17	.78	1.39	64.0	0.72	0.15	9.23	<0.0001
Scaling	30	2.26	.63	1.6	70.7	1.15	0.21	7.71	<0.0001
Auspitz phenomenon	27	2.0	1.63	.37	18.5	.79	0.15	2.43	0.0223
Koebner's phenomenon	11	2.0	1.45	0.55	2.7	.93	0.28	1.93	0.0816

Note: -n- No. of patients suffering with symptom, B.T.: Arithmetic mean of scoring Before Treatment, A.T.: Arithmetic mean of scoring After Treatment, S.D.: Standard Deviation, S.E.: Standard Error, P-value: Indicates significance of treatment on specific symptom.

S.D, S.E, t and p-value are calculated substituting 'n' value as actual number of

patients suffering from that specific symptom (But not the total number of patients).

Inference of statistical reports:

Statistically Extremely significant relief (P<0.0001) was seen in *Syava*, *Kinakharasparsa*, *Parusam*, *Rookshatvam*, *Kandu*, *Utsannata*, Disturbance in sleep, Redness and Scaling. Significant relief was observed in *Auspitz* phenomenon

(p=0.0223). It was found to be statistically insignificant for Pitting of nails (p=0.0828)

and Koebner's phenomenon (p=0.0816).

Table no. 2: Showing overall assessment of Clinical trial:

Result	No. of Patients	% Patients
Complete remission	00	00
Marked Improvement	15	50.00
Improvement	14	46.66
No improvement	01	3.33

The therapy had shown marked improvement in 50.00% of patients, improvement in 46.66% of patients whereas no improvement was noticed in 3.33% of patients.

DISCUSSION: *Kitibha Kustha* is classified as *Kshudra kushta* and *Vata-kaphaja* in origin. According to Susruta all *kusthas* have involvement of *Krimi*. Chief ingredients of YMR are *Parada* (Mercury), *Gandhaka* (Sulphur), *Tamra churna* (Copper), *Vatsanabha* (Aconitum ferox), *Vacha* (Acorus calamus), *Trikatu* (homogenous mixture of *Zingiber Officinale*, *Piper nigrum*, *Piper longum*), *Musta* (*Cyperus rotundus*), and *Vidanga* (*Embelia ribes*). *Parada* is *yogavahi*, *kusthaghna* (anti-leprotic), *sodhana* (purifies body), *ropana* (healing action) and *tridoshaghna* (pacifies all three dosha)⁶. *Gandhaka* has *Vata-kaphahara* effect, *deepana* (increase digestive power), *amapachana* (helps digestion), *kandughna* (anti-pruritic), *krimighna* (anti-helminthic), *vishahara* (anti-poisonous), *rasayana* (rejuvenating)⁷. *Tamra* is having *kusthaghna*, *krimighna*, *vishaghna* properties⁸. *Vatsanabha* is said to be *yogavahi*, *rasayana* and *kusthghna*⁹, it acts as *vata-kaphasamaka*¹⁰. *Vacha* is *medhya*, *krimihara* and *sulahghna*, *bhutahghna* it pacifies *Vata-kapha*¹¹. *Trikatu* is having *twaka dosha hara* (cures skin ailments), *deepana*, *agnideepana* properties¹², and *Vata-Kaphahara* effect. *Musta* is *krimihara*, *kandughna*, *vata-kaphahara*¹³.

Charaka delineated *Vidanga* best among all *krimihara dravyas*¹⁴ (anti-helminthic drugs). It is mentioned in *krimighna* and *kusthara gana*, also *Susruta*¹⁵ has mentioned it in *Pippalyadi varga* which also has *Krimighna* properties. After looking the individual properties of ingredients present in YMR it can be understood that YMR have *Vata-Kaphahara*, *Kusthghna* and *Krimighna gunas* that provided significant result for most of the complaints.

CONCLUSION: *Kitibha Kustha* is categorized as *Kshudra Kustha* and *Sadhyu Kustha* in Ayurveda texts. The person suffering from *Kitibha Kustha* looks terrific because of ugly look. This condition can be embracing and socially disabling. Despite of great advancement in dermatology and the advent of powerful steroids *Kitibha Kustha* continues to challenge the best efforts of dermatologists. *Yogaamruto rasa* is mentioned in *Rasa Kamdhenu* for all types of *Kustha*. Its efficacy was evaluated in 30 patients of *kitibha kustha*. After thoroughly analysing the analytical data derived out of clinical study, it is presumed that the *Yogaamruto rasa* has significant effect on *Kitibha Kustha* by relieving the major symptoms of the disease. It is also observed that there are no side effects observed during the entire process of study.

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Declared