



A COMPREHENSIVE STUDY ON THE RASA PRADOSHHAJA VIKARA W.S.R TO HYPOTHYROIDISM & IT'S MANAGEMENT BY KALINGAKADI KWATHA

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ABSTRACT

Background: Rasapradoshaja Vikara is a group of diseases described in Charaka Samhita that arise due to the vitiation of Rasa Dhatu, the first and most important body tissue formed after digestion of food. Rasa Dhatu is responsible for nourishing all other dhatus, maintaining hydration, and supporting overall vitality. When the formation, circulation, or quality of Rasa becomes disturbed due to improper diet, lifestyle, or doshic imbalance, various disorders collectively called Rasapradoshaja Vikara occur. **Objective:** Correlating the symptoms of rasa pradoshaja vikara with the sign & symptoms of hypothyroidism. Study the efficacy of kalingakadi kwatha in rasa pradoshaja. **Methods:** An open label, randomized clinical trial was conducted on 30 Patients diagnosed with Rasa pradoshaja vikara (Hypothyroidism). Both groups received Kalingakadi Kwātha 50 ml twice daily on an empty stomach for 30 days. Subjective parameters and objective assessments were recorded. Severity was graded on a 0–3 scale and assessed on days 15 and 30.

Results: Significant improvement was observed in across major subjective and objective parameters. The high prevalence of key symptoms such as asradha (disinterest in food), gaurava (heaviness), angamarda (body aches), angasada (lassitude), and oligomenorrhea in diagnosed hypothyroid patients provides strong evidence for this correlation. This research substantiates the effectiveness Kalingakadi kwatha i.e it is a potent ayurvedic formulation that targets the root cause of rasa pradoshaja vikara. This thesis topic presents a valuable bridge between classical ayurvedic pathophysiology and modern endocrinology. The core of this research correlating rasa pradoshaja vikara (disorders arising from the vitiation of rasa dhatu) with hypothyroidism – is a compelling area of study.

Conclusion: Kalingakadi kwatha effectiveness comes from its powerful blend of herbs with katu and tikta tastes and ushna veerya. These properties work synergistically as a strong Deepana and pachana, which ignites the jatharagni to "burn" and clear accumulated ama. By correcting digestion and promoting srotoshodhana blocked by the sticky toxins, it breaks the core pathological cycle, stops the vitiation of rasa dhatu at its source, and allows the body to once again produce healthy, nourishing plasma. Hence its safe to give to the patients of rasa pradoshaja vikara.

KEYWORDS: Rasa Pradoshaja Vikara, Hypothyroidism, Srotorodha, Jatharagni

INTRODUCTION

In Ayurveda, the ancient holistic system of medicine from India, the concept of *Rasa Pradoshaja Vikara* encompasses disorders arising from imbalances or impurities in the *Rasa Dhatu*. *Rasa Dhatu* can be likened to plasma and lymph in modern terms and is responsible for nourishing tissues and transporting nutrients throughout the body. Disruption in the quality or flow of *Rasa* can lead to ailments that echo the manifestations of metabolic and nutritional deficiencies. In Ayurveda, the ancient holistic system of medicine from India, the concept of *Rasa Pradoshaja Vikara* encompasses disorders arising from imbalances or impurities in the *Rasa Dhatu*. *Rasa Dhatu* can be likened to plasma and lymph in modern terms and is responsible for nourishing tissues and transporting nutrients throughout the

body. Disruption in the quality or flow of *Rasa* can lead to ailments that echo the manifestations of metabolic and nutritional deficiencies. Hypothyroidism is a common endocrine disorder characterized by an underactive thyroid gland, which fails to produce sufficient amounts of thyroid hormones. The thyroid gland, located at the base of the neck, plays a crucial role in regulating the body's metabolism through the secretion of hormones such as thyroxine (t4) and triiodothyronine (t3). These hormones influence various bodily functions, including heart rate, temperature regulation, and energy production.



Aims

To find out the role of *Rasa pradoshaja vikara* in hypothyroidism.

To find out the efficacy of *kalingakadi kwatha* in *rasa pradoshaja vikara* (hypothyroidism).

Objectives

Correlating the symptoms of *Rasa pradoshaja vikara* with the sign & symptoms of hypothyroidism.

Study the efficacy of *kalingakadi kwatha* in *rasa pradoshaja vikara*

REVIEW OF LITERATURE

The existence of purusha is due to rasa. The functions of rasa dhatu starts from intra-uterine life and continue through out the life. When rasa dhatu vitiated so many diseases arise. So acharya charak has allotted a separate chapter *vividhasitapitiya adhyaya* for *dhatu pradoshaja vikara* in which *rasa pradoshaja vikara* is mentioned. Acharya sushruta has mentioned the same as *rasadoshaja vikara* as in the sutra sthana. Where as in bhela samhita the term "*rasavyapattijaniya vikara*" was used instead of *rasa pradoshaja vikara*. The nidana panchaka which has mentioned in ayurveda are properly used for diagnosis perfectly a disease and used during selections and collections of patients for the study. Hypothyroidism, an endocrinal disease describe in modern classics. The aetiology, sign, symptoms, prognosis and treatment are required for review of literature for present study. Thyroid hormone is known to play a role in regulating the synthesis, metabolism and mobilization of lipids.

MATERIALS AND METHODS

Study Design

This was an open label, randomized clinical trial conducted on 30 patients diagnosed with *Rasapradoshaja vikara* (Hypothyroidism). Patients were randomly selected from the OPD and IPD of Govt. Ayurvedic College & Hospital, Balangir and Saradeswari Govt. Ayurvedic Hospital, Balangir, Odisha. Written informed consent was obtained from all participants prior to enrolment.

Selection of Patients

A special proforma was prepared for screening, including detailed history taking, physical examination, subjective and objective parameters, and relevant pathological investigations. Patients fulfilling the diagnostic criteria for *Rsapradoshaja vikara* and *Hypothyroidism* were included.

Inclusion Criteria

- Patients of both sex.
- Patients are in the age between 18-60 years.
- Patients who fulfil the diagnostic criteria of both *rasa pradoshaja vikara* and hypothyroidism.
- Subject willing to follow the procedure as per the study protocol and voluntarily signing informed consent form.

Exclusion Criteria

- Patients of breast-feeding mother.
- Undergone recent surgeries.
- Patient taking allopathic medications.
- Other metabolic syndromes.
- Patients having malignant disorders.
- Patients suffering from various autoimmune disorders.
- Patients having congenital anomalies.
- Patients with other systemic disorder like diabetes mellitus, thyrotoxicosis, cardiovascular disorders
- Patient having chronic, contagious infection disease such as active tuberculosis, hepatitis a, b, c or HIV.

Selection and Preparation of Drug

Sephālipatra Kwātha (*Nyctanthes arbortristis* Linn.) was identified and authenticated by experts of the Department of Dravyaguna, approved by DRC and IEC, Govt. Ayurvedic College & Hospital, Balangir, and Sambalpur University. The decoction was prepared daily in the departmental mini-pharmacy following Good Manufacturing Practice (GMP) under the supervision of the H.O.D., Department of Rasa Shastra & Bhaishajya Kalpana. A sample was sent to Quality Control Laboratories, Sambalpur University for analytical verification.

- Dose: 50 ml twice daily (morning and evening)
- *Anupāna*: Lukewarm water
- Duration: 30 days

The Subjective parameters are-

- Aruchi (disinclination for food)
- Gaurava (heaviness of the body)
- Angamarda (generalised body ache)
- Angasada (tiredness to body)
- Pandutwa (anaemia)
- Klaivya (impotency)
- Akala valaya (wrinkles)
- Oligomenorrhea / amenorrhea

The Objective parameters are:-

- DC
- TLC
- ESR
- Hb%
- FBS
- Lipid profile
- Serum T3, T4, TSH

Scoring Method

Severity was graded on a scale of 0–3 for each parameter and assessed on 15th and 30th day of treatment.

Observation and Result

The subjective and objective parameters were observed during clinical Study. The percentage of improvement were also observed and assessed after clinical trial. After observation of subjective and objective parameters, the statistical analysis of parameters, were assessed by the help of statistical method.

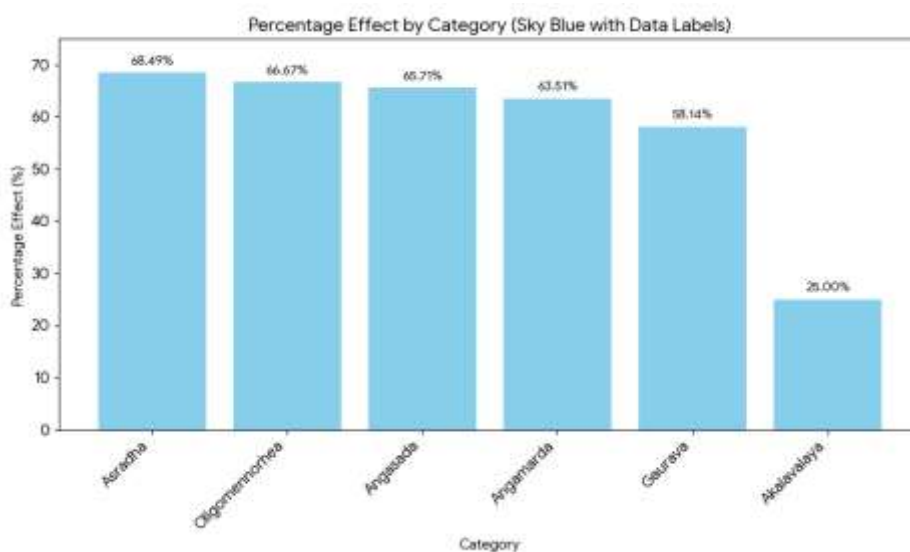


		Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
Asradha	BT	2.43	2.50	0.63	0.11	-4.909	0.009	68.49	Sig
	AT	0.77	1.00	0.57	0.10				
Gaurava	BT	2.87	3.00	0.43	0.08	-4.983	0.006	58.14	Sig
	AT	1.20	1.00	0.48	0.09				
Angamarda	BT	2.47	3.00	0.73	0.13	-4.875	0.001	63.51	Sig
	AT	0.90	1.00	0.66	0.12				
Angasada	BT	2.33	2.00	0.55	0.10	-4.909	0.009	65.71	Sig
	AT	0.80	1.00	0.76	0.14				
Oligomenorrhea	BT	0.60	1.00	0.67	0.12	-3.464	0.005	66.67	Sig
	AT	0.20	0.00	0.61	0.11				
Akalavalaya	BT	0.40	0.00	0.67	0.12	-1.732	0.0832645	25.00	NS
	AT	0.30	0.00	0.47	0.09				
T3	BT	106.10	30	45.41	8.29	2.310	0.02	8.35	Sig
	AT	97.24	30	35.66	6.51				
T4	BT	11.41	30	16.43	3.00	2.056	0.04	5.71	Sig
	AT	10.76	30	15.01	2.74				
TSH	BT	9.53	30	13.15	2.40	8.160	0.001	28.19	Sig
	AT	6.84	30	12.70	2.32				
TC	BT	178.20	30	32.10	5.86	6.037	0.001	14.76	Sig
	AT	151.90	30	30.59	5.59				
TG	BT	155.13	30	49.16	8.98	4.310	0.001	15.04	Sig
	AT	131.80	30	41.99	7.67				
HDL	BT	35.61	30	5.75	1.05	-2.936	0.006	6.53	Sig
	AT	37.94	30	6.10	1.11				
LDL	BT	116.01	30	26.95	4.92	4.963	0.00002813	15.88	Sig
	AT	97.59	30	26.62	4.86				

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% Effect Parameter (Subjective)

Parameter (Subjective)	% Effect
Asradha	68.49
Gaurava	58.14
Angamarda	63.51
Angasada	65.71
Oligomenorrhea	66.67
Akalavalaya	25.00
Average % Effect	57.92

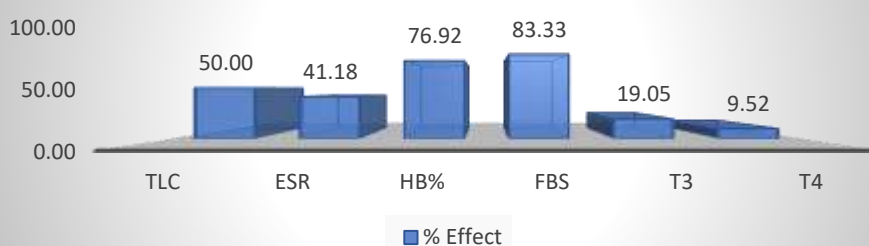




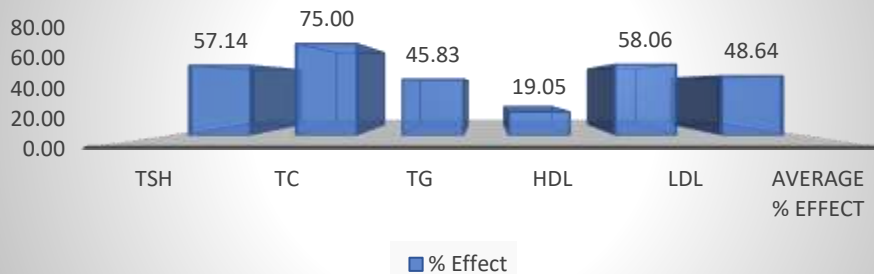
% Effect Parameter (Objective)

Parameter (Objective)	% Effect
T3	19.05
T4	9.52
TSH	57.14
TOTAL CHOLESTEROL	75.00
TRIGLYCERIDE	45.83
HDL	19.05
LDL	58.06
Average % Effect	40.52

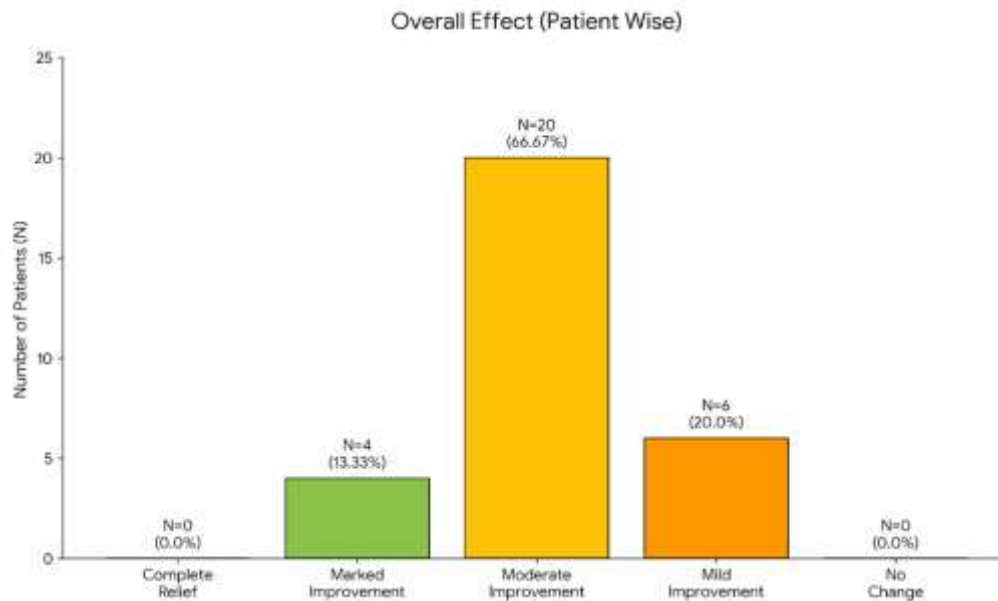
% Effect Parameter (Objective)



% Effect Parameter (Objective)



Overall Effect (Patient Wise)	Overall Effect	
	N	%
Complete Relief	0	0.00%
Marked Improvement	4	13.33%
Moderate Improvement	20	66.67%
Mild Improvement	6	20.00%
No Change	0	0.00%
Total	30	100.00%



DISCUSSION

- Age:** Majority of the patients i.e. 26.67% were in age group of 21- 30 and 51-60 years followed by 23.33% in age group of 31-40 years and 20.00% in 41-50 years. The immense hormonal and immune system shifts during and after pregnancy are a major trigger for thyroid problems.
- Sex:** Majority of the patient i.e. 73.33% were female. Females are far more likely to have hypothyroidism primarily because its main cause is autoimmune disease (hashimoto's thyroiditis), and women are much more prone to autoimmune disorders than men.
- Ages 50-60:** menopause and aging
- Menopause:** The massive drop in estrogen and progesterone during perimenopause and menopause places significant stress on the entire endocrine (hormone) system, including the thyroid.
- This increased risk in women is linked to three key factors:
- Hormones:** The female hormone estrogen makes the immune system more reactive.
- Pregnancy:** The high demand for thyroid hormone during pregnancy, followed by the intense "rebound" of the immune system after birth, can stress the thyroid and trigger postpartum thyroiditis, which often leads to permanent hypothyroidism
- Marital status:** Maximum no. of patients i.e. 73.33 % were married as the age group selected for the study. Thus it could be said that marital status does not have any relation with the disease. But we may assume that married people have more responsibility leads to more stress negligence toward lifestyle.
- Religion:** 96.67 % of the patients were Hindu religion. This signifies the demographical dominance of the community in the region and religion; as such it does not have any impact on the existence of the disease Rasa pradoshaja vikara.
- Education:** 100.0 % patients were from Literate group. It is not possible to establish a logical relationship between the disease and educational status .
- Socio-Economical status:** 86.67% patients were belonging to middle class. On this observations it could be said that the middle class group of persons are more prone to this diseases, because improper, dietetic habits, higher level of stress and physical activity may have contributed to the pathogenesis of Rasa pradoshaja vikara (hypothyroidism).
- Vyayama:** Maximum no. of patients i.e. 43.33% were occasional doing any kind of Vyayama. The sedentary lifestyle leads to but it can significantly worsen the symptoms and complications of hypothyroidism, creating a difficult cycle.
- Occupation-** In this study 40.00% of total patient was housewife. Emotional stress from family responsibilities, caregiving, and lack of social support affects the HPA (hypothalamus-pituitary-adrenal) axis.
- Skipping meals, late breakfast, consuming tea on an empty stomach, and depending on leftover/quick foods → metabolic imbalance and micronutrient deficiency.
- Addiction-** In this study 63.33% patients were addicted to tea. Excess tea consumption may interfere with **iodine metabolism**, which is crucial for thyroid hormone production. It can vitiate rasa dhatu, leading to *rasavaha srotodushti*.
- Diet-** In this study 76.67% patients were taking mixed diet.
- Sleep-** In this study 53.33% patients were having sound sleep followed by 46.67 % patients having disturbed sleep. Disturbed sleep increases *vata* and *ama*, weakens rasa dhatu formation and slows metabolism → causing thyroid under-functioning and *rasapradoshaja vikara*.
- Bowel-** In this study 60.00% patients were having constipation. In *rasapradoshaja vikara*: Rasa dhatu is impaired when rasa is not properly formed → body tissues do not get proper nourishment this leads to *vata* aggravation. When *vata* increases due to poor rasa formation, stress, improper *ahara-vihara* it leads to *bibandha*.



- **Urine-** In this study 96.67 % patients were having normal urine.
- **Blood group** –In this study 70.00% of patients were o+ blood group.
- **Family history-** In this study 83.33% of patients having no family history.
- **Treatment history-** In this study 80.00 % of patients having treatment history before. After getting no relief or mild relief from their symptoms they came for the ayurvedic treatment.
- **Prakruti-** In this study 53.33% patients were having PK prakruti. Pitta–kapha prakriti individuals, due to their naturally slow metabolism (kapha) and *Mandagni*, are more prone to *rasa-pradoshaja Vikara* (hypothyroidism).
- **Vaya-** In this study 96.66 % Patients were belongs to madhyama vaya. In madhyama vaya having work pressure, family duties, mental overthinking, sleep disturbance. These lead to *rasa dhatu kshaya* and *vata* aggravation.
- **Nadi-** In this study 53.33% patients were having pitta-kaphaja nadi.
- **Srotos-** In this study *rasavaha sroto dushti* seen in 100.00%, *annavahi sroto dushti* seen in 96.67% patients and also *medovaha sroto dushti* seen in 96.67%, seen in patients, *swedavaha sroto dushti* seen in 90% patients.
- In the pathogenesis of *rasa pradoshaja vikara*, the vitiation begins in the *rasavaha srotos* as the primary site of origin. Due to etiological factors like improper diet and stress, the *jatharagni* becomes impaired, causing a failure in its digestive function. This functional *dushti* leads to the production of *ama*. This *ama* then mixes with the *ahara rasa* to form a toxic, immature fluid known as *sama rasa*. Here, the sticky and heavy nature of the *sama rasa* causes the primary type of vitiation known as *sanga*, physically blocking the channels. This *srotorodha* and the vitiated quality of the *rasa dhatu* itself prevent proper nourishment, leading directly to the manifested symptoms of *rasa pradoshaja vikara* like *gaurava* and *tandra*.

The effectiveness of kalingakadi kwatha

- This research substantiates the effectiveness of kalingakadi kwatha in the management of *rasa pradoshaja vikara*, an ayurvedic condition presenting with a constellation of symptoms analogous to hypothyroidism. The pathogenesis, rooted in *mandagni* (impaired metabolic fire), leads to *ama* formation, *srotorodha*, and vitiation primarily of *kapha* and *vata* doshas. This manifests clinically through key symptoms investigated in this study, including *asradha*, *gourava*, *angamarda*, *angasada*, and *artava kshaya* (*oligomenorrhea*), all

reflecting the systemic metabolic slowdown akin to hypothyroidism.

CONCLUSION

- Both hypothyroidism and *rasa pradoshaja vikara* are describing a state where our body's "engine" or metabolism is running too slow. In modern medicine, this is caused by a lack of thyroid hormone. In ayurveda, it's caused by a weak *agni*. Because the root cause (slow metabolism) is the same, the symptoms match up almost perfectly: The fatigue, weakness, and brain fog of hypothyroidism are what ayurveda calls *tandra* and *angasaada*. The unexplained weight gain is the same as *gouravam*. The poor appetite and constipation are known as *aruchi* and *avipaka*. So, *rasa pradoshaja vikara* is basically the ayurvedic way of describing the systemic slowdown and collection of symptoms that we now call hypothyroidism.
- This study successfully establishes a significant clinical correlation between the *lakshanas* of *rasa pradoshaja vikara* and the systemic manifestations of hypothyroidism. The high prevalence of key symptoms such as *asradha*, *gaurava*, *angamarda*, *angasada*, and *oligomenorrhea* in diagnosed hypothyroid patients provides strong evidence for this correlation. These findings validate the ayurvedic *samprapti* of hypothyroidism as a systemic disorder rooted in *agnimandya* and the subsequent vitiation of the *rasa dhatu*. This alignment confirms that hypothyroidism is not merely a localized glandular disease but a profound impairment of the body's primary nutrient fluid, supporting the rationale for utilizing *chikitsa sutra* aimed at *ama pachana* and restoring the health of the *rasa dhatu* for its holistic management.

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