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A comparative clinical study on the efficacy of *Nityanand Ras* with (or) without *Jeernakarkaruka Nasya* in Hypothyroidism

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ABSTRACT

Hypothyroidism also known as underactive thyroid gland, where the gland fails to produce enough thyroid hormones to meet the demands of physical body. The thyroid gland is a small approximately two inches butterfly shaped gland, situated in the anterior aspect of the throat regulates the way the body uses its energy, including the way how one's heart beats. The normal functioning of this organ is very crucial for the metabolic homeostasis of the body. The rapid changes in the lifestyle and stressful life events are leading to the major disturbance of the normal metabolic functions of the human body, in Ayurveda the signs and symptoms of Hypothyroidism may be superficially compared to *Atihraswa* (dwarfism) and *Atisthula* (Obesity), but apart from this also, based on the other visible signs and symptomatology, the disease may be understood and treated accordingly. It is also can be considered as an *Santarpanotta Vikara*, since most of the *Santarpanotta Vikara's* share common etio-pathogenesis. The *Panchakarma* treatment is known for removing the morbidity deeply from the body, and restores metabolic homeostasis. With this approach the current study was designed to observe the efficacy of *Nityananda Ras*, which is indicated in the *Shlipada Adhikara* of *Bhaishajya Ratnavali*, in the management of HT, and also in comparison with *Nasya Karma*, since the nasal administration of medicine is the best root for the elimination of the diseases of Head and neck. This research has shown the *Nityanand Ras*, is found effective and in the *Nasya* with *Jeerna Karakaruka Swarasa* group patients the results were encouraging in comparing with *Nityanand Ras.*

Key words: *Hypothyroidism, Goitre, Nasya, Nityanand Ras, Jeerna Karkaruka Rasa.*

INTRODUCTION

The rapid paradigm shift in the lifestyle of the Indian population and the current socio-cultural conditions has triggered shooting up of many lifestyle related disorders at an alarming scale in the fertile age group, Hypothyroidism posing a serious health threat among fertile age group females with respect to their metabolic health, it is leading to various other potential clinical conditions like osteoporosis, myxedema, etc. Its incidence is escalating day by day and is considered as the current silent epidemic globally. Hypothyroidism is a hypometabolic clinical state resulting from inadequate production of Thyroid hormones. The prevalence of self-reported goitre or thyroid disorder in National family Health Survey IV [NHFS IV (2015-2016)] was 2.2%, while it was 2.9% in NFHS –V (2019-2021). The NFHS- IV has reported that amongst individuals between the ages 15-49 years, the self-reported prevalence of goiter or thyroid disorder was nearly 2% in females and less than 1% in males. Also, the reported prevalence increased with age in women (15-19 years: 0.7%; 20-34 years: 1.8%; 35-49 years: 3.4%). As per the NFHS, Kerala tops with the highest reported cases of thyroid followed by J&K, Delhi NCT, Telangana, West Bengal and Andhra Pradesh. As per the NFHS, the women in their reproductive age group (15-49 years) are found to be having three to four fold higher risk of thyroid disorder.[1] It is a major concern, since this condition affects a women's health very badly, since it disturbs the entire metabolic homeostasis, identifying the early signs and symptoms and timely initiation of metabolic corrections through Ayurveda may potentially reverse the disease progress.

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In Ayurveda though there is no direct mentioning of this disease, the disease related clinical manifestations can be seen in *Atihraswa* (Dwarfism), and *Atisthula* (Obesity), apart from these conditions also, based on the other set of clinical features of HT it is very much possible to understand the pathophysiology of the disease and design effective treatment protocol. In *Charaka Samhita Sutrastana* it is rightly quoted that, every disease essentially not needed to have a specific name,[2] the aggravated/vitiated *Doshas*, may produce unique types of diseases based on their association with different variables, manifestation, place, etc., and hence the treatment should be initiated, after properly diagnosing the nature of the disease, the place of manifestation and the special causative factors involved.[3] The near possible description of the disease in Ayurveda could be *Galaganda*, where the growth around the neck is visible, i.e., the enlargement of thyroid gland. This is the local visible symptoms, in Ayurveda three types of *Galaganda* is describes a. *Vataja*, b. *Kaphaja*, and c. *Medoja*., in modern medicine to three types of goitre is described, viz, a. Simple goitre, b. Goitre with Hypothyroidism, and c. Goitre with hyperthyroidism or Toxic goitre. *Galaganda* is described as *Kaphaja Nanatmaja Vikara* by *Charaka*,[4] and it is also mentioned in the *Trishotiya Adhyaya*.[5] The etiological factors for *Galaganda* are mentioned in *Susruta Samhita*, in *Rasa Viseshiya Adhyaya*, he describes the excessive intake of *Madhura Rasa* causes *Galaganda*, and in other places also the etiology is found,[6] In *Susrutha Nidana*, the classical feature of *Galaganda* is described as the swelling which is small or big, hangs like a scrotum over the surface of neck.[7] and Charaka describes it as the vitiated *Kapha* accumulates and condenses firmly around the neck causes *Galaganda*.[8]

Charaka describes *Galaganda* as only *Kaphaja Nanatmaja Vikaras*, whereas *Susrutha* and *Vagbhata* describes three types of *Galaganda*. *Vagbhata* describes the *Samprapti* as, the provocated *Vata*, *Kapha*, and *Medha* gets accumulated around the neck and produces the swelling, once the swelling is enlarged, it will hang out like a scrotum, thus it manifests *Galaganda*.[9]

Sushruta state that, the vitiated *Dosha*'s while moving throughout the body, wherever it finds the obstructions on its path, it produces the *Vyadhi* there,[10] further he says that the vitiated *Vata* and *Kapha*, when gets accumulated at the *Manya* along with *Medas,* produces glandular enlargement, is known as *Galaganda, Charaka* calls it as purely *Kaphaja* disease. With the support of the above references, the pathophysiology of *Galaganda* in Ayurveda may be attributed to three crucial pathological changes, (a).*Kapha Vata* vitiation, (b).*Khavaihgunya* at *Manya* region, (c).*Medhodushti*. Followed by this the *Dushita Medha* and *Kapha* gets accumulated in the *Manya* region, and it begins to swell further. The condition Hypothyroidism associated with the generalized symptomatology (details are mentioned in the methodology) In addition to the above factors, the vitiated *Rasadhatu* plays a vital role in the pathogenesis, to this the *Dhatwagnimandhyata* is another major contributing factor which is responsible for HT, it is primarily induced by the *Mandagni* at the *Koshta*. In HT, thyroid dysfunction is the key factor, it is more often associated with other metabolic diseases such as Diabetes, CVD, dyslipidemia, PCOS, etc. In fact thyroid gland functioning is key to metabolic homeostasis, the failure of this glands leads to the huge metabolic disturbances of the body and it may produce series of clinical implications. In *Ashtanga Hridaya, Vagbhata* emphasizes the importance of *Kayagni* and its direct implication on the status and maintenance of the *Dhatwagni*, the *Vriddhi*/*Kshina Avastha* of the *Jatharagni* would result in the same status of *Dhatvagni* too.[11] The normal functioning of the tissue is directly influenced by the *Jatharagni*. In most of the lifestyle related disorders, the disturbance of metabolic functions begins with the irrational consumption of food, and inadequate physical activities. In *Astanga Hridaya Dwividopakramaniya Adhyaya*, it is precisely mentioned how the treatment should be planned according to the intensity of the host morbid factors, accordingly different treatments such the *Langhana* measures, including *Dipana, Pachana, Vayu Atapa Sevana, Vyayama*, and *Panchakarma* can be employed.[12] Although the

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pathophysiology of *Galaganda* is considered for the understanding of the process of *Samprapti*, for the current clinical studies the goitre cases were not selected, the patients of Hypothyroidism as per the selection criteria's mentioned in the methodology were selected for the clinical trial. Keeping in view of the eternal applicability of Ayurvedic principles, the current study was planned to see the clinical efficacy of *Nityanand Ras*, which is indicated in the *Shlipada*, which is again a *Shotha* condition and a *Kaphaja Vyadhi,* based on the probable pharmacological actions, which would produce desirable actions in HT, and *Nasya* with *Jeerna Karakaruka Swarasa*, again a *Avapidana Nasya* variety, for the elimination of the morbid *Kapha Dosha*.

METHODOLOGY

The study was conducted with the following objectives, a).To elicit the therapeutic efficacy of *Nityanand Ras* and Jeernakarkaruka *Nasya* in Hypothyroidism, b). To compare the efficacy of *Nityanand Ras* with (or) without *Nasya*, and c).To assess the changes in thyroid profile before and after treatment. Hypothyroidism is a multifactorial disorder and arguably the most challenging due to its manifold clinical presentation. For such a disease involving multi systems, after reviewing all the available literature *Nityanand Ras* is found to be having a better approachability to all possible etio pathological reasons which are probable in hypothyroidism. It has a total of 33 ingredients of them 7 are *Tridoshahara*, 18 are *Vatakaphahara* and almost all the ingredients have *Deepana, Pachana, Srotoshodaka, Medohara, Lekhana,* and *Rasayana* properties which are likely to check the basic pathogenesis of Hypothyroidism, and *Rasayana* agents revitalize the whole body tissues and generate potent immunity in the individuals. As hypothyroidism is a multisystemic disorder, a single remedy may not be able to combat its *Samprapti*. Keeping this in view the drug with multiple compositions, easy availability, and compatibility for a clinical trial. The *Nityanand Ras*[13] was preferred to see its clinical efficacy in reverting the pathogenesis of Hypothyroidism. Hypothyroidism has *Bahudosha Linga* (Complex Symptoms), in such conditions, the *Samshodana Chikitsa* (Purificatory therapy) is indicated. As the thyroid gland is located in *Galapradesha*, *Nasya* is considered to be best in *Urdhwajatrugata Vikara*. Hence, a *Shodana Nasya* is attempted in the present research work. *Nasya Dravya* used is *Jeernakarkaruka* (*Vruddha Kushmanda*) *Swarasa* along with *Saindava* and *Vida Lavana* has its reference from *Yogaratnakara*.[14]

Patients and Methods

Source of data

40 patients of Hypothyroidism of both sexes were randomly selected from OPD and IPD of Dr. BRKR Govt. Ayurvedic hospital, Erragadda and they were assigned in to two groups A and B consisting 20 patients in each group.

Study design

It was an Open-labeled randomized comparative clinical trial under 2 groups.

Group A: 20 patients were administered *Nityanand Ras* orally.

Group B: 20 patients were administered *Nityanand Ras* orally along with *Jeerna Karkaruka Nasya.*

Criteria for selection of patients

Inclusion criteria

- Patients who present with clinical features of Hypothyroidism with abnormal thyroid profile.
- Patients previously known cases of hypothyroidism and newly diagnosed cases.
- Patients with the age group between 18 to 60 years of either gender.
- Patients who are fit for *Nasya Karma.*

Exclusion criteria

- Patients suffering from other major systemic illnesses like diabetes, Tuberculosis, and Malignancies necessitating long-term treatment.
- Complicated cases of hypothyroidism like coronary artery diseases,
- Thyrotoxicosis, Thyroid neoplasms.
- Patients of age groups less than 18 and more than 60 years.

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- Patients who are unfit for *Nasya Karma.*
- Pregnant and lactating women are excluded.

Diagnostic parameters

The patients were selected based on the following diagnostic criteria on the features of Hypothyroidism, and TSH of more than 5.5IU/ml.

1. Subjective Parameters with grading

SN	Parameter	Grade
1.	**Constipation**	
	No constipation	0
	Passing stool daily with difficulty	1
	Passing stool freely only with laxatives	2
	Passing stool difficulty even with laxatives	3
2.	**Weight Gain**	
	No weight gain	0
	5kgs in 3months	1
	10kgs in 3months	2
	>10kgs in 3months	3
3.	**Hair Fall**	
	No hairfall	0
	Mild Hairfall (< 50 strands/day)	1
	Moderate Hairfall (50-100 strands/day)	2
	Severe Hairfall (>100 strands/day)	3
4.	**Fatigue**	
	No fatigue	0
	Exertional fatigue	1
	Fatigue not disturbing the routine work	2
	Fatigue disturbing the routine work	3

2. Objective Parameters

For the objective parameters, the thyroid hormonal assay was conducted with the following tests such as, Serum T3, Serum T4, and Serum TSH.

Investigations

The routine investigations CBP, ESR were conducted, and special investigations Serum T3, Serum T4, and TSH were done.

Drug Intervention

1. *Nityanand Ras* - [*Bhaishajya Ratnavali – Sleepada Chikitsa* 30-38]

Mineral drugs: *Parada, Gandhaka, Tamra, Kamsya, Vanga, Haratala, Tutta, Shankha, Varatika, Loha*

Herbal drugs: *Trikatu, Triphala, Panchalavana, Vidanga, Chavika, Hapusha, Vacha, Shati, Patha, Devadaru, Ela, Vruddadaru, Trivruth, Chitraka, Danti*

Method of preparation: All the ingredients are taken in equal quantities (7.35mg each). Prepare *Kajjali* using *Parada* and *Gandhaka*. Add the rest of the *Rasa Dravyas* and triturate to form a homogenous mixture. Then add all *Kashtoushadi Churnas* and make a homogenous mixture. Give one *Bhavana* with *Haritaki Rasa.* Finally, prepare pills measuring 250mg each. Dry and preserve them in a glass bottle.

Dosage: 1 pill = 250mg BD,

***Anupana*:** *Jala*

2. *Jeernakarkaruka Nasya* - [*Yogaratnakara-Galaganda Chikitsa* - 7]

The major ingredients are, *Jeerna Karkaruka Swarasa* (*Purana Shweta Kushmanda Swarasa*) *Saindava Lavana*, and *Vida Lavana.*

Method of preparation: Take a ripened *Kushmanda*, wash it properly, remove the peel and seeds, and extract juice from the pulp. Add 1 *Masha* of *Saindava Lavana* and *Vida Lavana* to the juice

Method of administration: As a *Poorvakarma* protocol, *Abhyanga* with *Tila Taila* followed by *Mrudusweda* to face and neck was given, followed by the administration of *Nasya* with *Jeernakarkaruka*

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Swarasa 6 drops in each nostril for 7 days in a month for three consecutive months (90 days) was done. *Ushnodaka Kavala Dharana* was given for all the patients after *Nasya Karma* in the *Pashchat Karma*. A review was done for every 15 days after the *Nasya Karma*, and follow up after three months of treatment was done.

Assessment of results

Excellent Response : 76-100% Improvement

Good Response : 51-75% Improvement

Moderate Response : 26-50% Improvement

Mild Response : 0-25% Improvement

Observations and Results

The observation was made on the subjective and objective parameters on the both group patients, the subjective parameters used for the assessment are 1. Constipation, 2. Weight gain, 3.Hairfall and 4.fatigue. And, for the objective parameters the thyroid profile was done.

Results

Statistical Analysis of Subjective Parameters using Wilcoxon's Sign Rank test:

Group A

SN	Parameter	W mean	SD	Z value	P value	Remarks
1.	Constipation	68	19.34	-3.51	<0.05	Significant
2.	Weight gain	39	12.75	-3.05	<0.05	Significant
3.	Hair fall	68	19.34	-3.51	<0.05	Significant
4.	Fatigue	85.5	22.96	-3.72	<0.05	Significant

Group B

SN	Parameter	W mean	SD	Z value	P value	Remarks
1.	Constipation	85.5	22.96	-3.72	<0.05	Significant
2.	Weight gain	52.5	15.93	-3.29	<0.05	Significant
3.	Hair fall	105	26.79	-3.91	<0.05	Significant
4.	Fatigue	95	24.85	-3.82	<0.05	Significant

Statistical Analysis of Objective Parameters using Paired t-test

Group A

Parameters	Mean		SD		SE		t-value	p-value	Remarks
	BT	AT	BT	AT	BT	AT			
T3	105.12	109.65	15.72	14.12	3.51	3.16	1.98	>0.05	Not Significant
T4	7.83	7.94	1.64	1.48	0.37	0.33	0.43	>0.05	Not Significant
TSH	10.79	5.45	8.32	2.29	1.86	0.51	3.72	<0.05	Significant

Group B

Parameters	Mean		SD		SE		t-value	p-value	Remarks
	BT	AT	BT	AT	BT	AT			
T3	105.74	111.11	24.12	22.52	5.39	5.04	2.19	<0.05	Significant
T4	7.91	8.34	1.67	1.41	0.37	0.31	1.62	>0.05	Not Significant
TSH	10.87	4.79	4.97	1.42	1.11	0.32	6.10	<0.05	Significant

Showing Overall Assessment of relief in Subjective Parameters

SN	Result	Group A		Group B	
		No. of Patients	Percentage	No. of Patients	Percentage
1.	Excellent response	3	15%	5	25%
2.	Good response	10	50%	13	65%
3.	Moderate response	7	35%	2	10%

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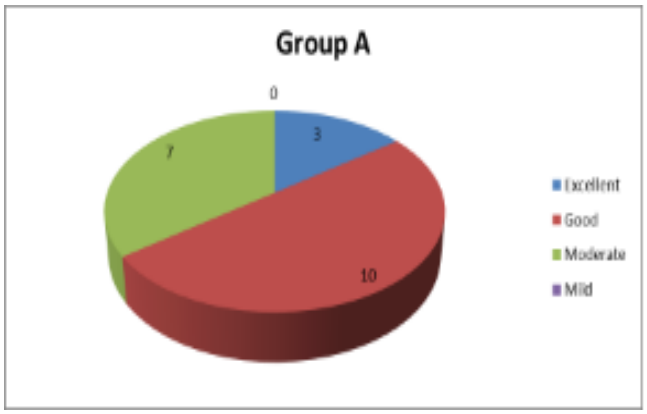
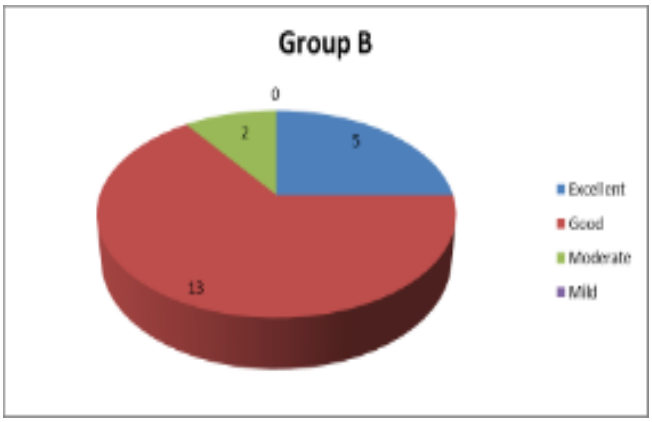
4.	Mild response	0	0	0	0





Overall assessment of both the groups including Subjective and Objective Parameters

SN	Group	% of Improvement	Remarks
1.	A	40.26%	Group B is found to be more significant
2.	B	47.22%	

DISCUSSION

The symptomatology of Hypothyroidism often varies among different people, and in most cases it will be difficult to identify the disease at the earlier stage. The severity of the disease affects the manifestation of signs and symptoms and its time. The early symptoms could include weight gain and fatigue more commonly. Hypothyroidism has a variety of causative factors in adults like, Hashimoto's thyroiditis, Lymphocytic thyroiditis, Thyroid destruction, Pituitary or Hypothalamic disease, Medications and Severe iodine deficiency, etc. The symptoms of Hypothyroidism are often subtle, and these symptoms will mimic many other conditions, Patients with mild hypothyroidism may have no signs or symptoms. The symptoms generally became more obvious as the condition worsens and majority of these conditions are related to the slow metabolism in the body. The common symptoms are Fatigue, Weight gain, Constipation, Dry hair, Dry skin, Sleepiness, depression, etc. As the disease becomes more severe, there may be puffiness of the face, and later puffiness around the eyes. In more severe form of cases Hypothyroidism may lead to severe metabolic disturbance, goiter, and myxedema. It can be suspected in patients with Fatigue, cold intolerance, constipation, dry, flaky skin. A blood Thyroid hormonal assay is needed to confirm the disease. When Hypothyroidism is present, the blood thyroid hormones are usually decreased, and even T3 and T4 levels in initial hypothyroidism may be normal. Hence the major tool for the diagnosis of hypothyroidism is TSH levels; it will be elevated in Hypothyroidism. In the current study the cases of Hypothyroidism with the specific subjective and objective parameters were selected for the study, to find the efficacy of the *Nityanand Ras* with and without *Nasya*.

In the current study the subjective parameters, Constipation, Fatigue, Weight gain and Hair fall were primarily considered for the screening of the patients along with thyroid hormonal profile, since the above cardinal symptoms bear high significance in the diagnosis of hypothyroidism clinically. These symptoms often ignored as not so significant symptoms, but this is the initial symptoms showing the derangement of metabolic activities of the body. At this stage it is difficult to attribute the condition to a specific causative factor, with the screening of hormonal assay, if the diagnosis is confirmed, the early initiation of the treatment may prevent the disease progress. The hormonal regulation in the body is governed by the feed back axis regulation, and it always functions in sync with many endocrine glands and other organs/ tissues involved. In Ayurveda, the *Vata Dosha* is crucial for the regulation of all the

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messenger activities of the body, the vitiated *Kapha Dosha* at different levels gets *Sanchaya* at the *Dhatus*, specifically at *Rasadhatu* initially, and *Medo Dhatu* in the later phase, may lead to the development of goitre. The primary treatment goal in this condition is to achieving metabolic corrections, specifically to target the *Mandagni* (*Kapha* association). In Ayurveda, there are many lifestyle factors are attributed for the *Mandagni*, and *Kapha Pradosha*, in the current research work, the ideal lifestyle practices were also instructed through counselling. The Medicine *Nityanand Ras*, which is indicated in the *Shlipada Adhikara* of B.R., was selected here for its effectiveness in managing *Kaphaja*/ *Shotha*. The pathophysiology in hypothyroidism also bears the similar *Samprapti,* hypothetically the drug was found suitable. The tablet was indicated as 1BD (250mg), the tablet has *Ushna, Tikshna, Laghu Guna's,* which helps to improve *Agni,* and also helps to remove the *Sanga* at the *Dhatu* level. The medicine not only corrects the *Agni,* it has *Rasayana* properties too, thorough which it ensures the function of the all tissues and their cells too, and thus it helps to relieve the *Dosha Sanchaya* at *Rasa* and *Medodhatu.* The present study revealed that the *Nityanand Ras* was effective in correcting Agni, improving digestion, absorption and excretion thus relieving constipation up to 56.6% in all patients. It was effective in reducing weight by 48.1%, and hair fall reduced by upto 60.7% indicating its efficacy in correcting metabolic rate. It was effective in maintaining the rhythmic functioning of *Agni* and increasing the *Utsaha* and *Bala* in patients, thus reducing fatigue by up to 61.1% among Group A patients.

The involvement of hypothalamus and pituitary gland is very certain in hypothyroidism, the nature of involvement may be different, due to various factors the coordinated functions of pituitary gland and hypothalamus may alter the production and regulation of thyroid hormones. As per Ayurveda, *Shiras* is considered as *Uttamanga,* since it provides the place for all *Indriya's, Praana. Vagbhata* says for the *Urdwa Jatru Gata Vikara's Nasya* is recommended specifically, since nose is the track for *Shiras*[15] Among Group B patients, the study revealed that the effect of treatment on constipation gave 66.6% improvement, reduction in weight up to 53.3%, 69.7% effective in reducing hair fall, and 74.3% effective in correcting fatigue. Both *Nityanand Ras* and *Nasya Dravya* combination was found effective in regulating the thyroid hormones. The study revealed that there are 4.2% of results in group A and 4.8% of results in group B on Serum T3 levels, 1.3% of results in group A, and 5.1% of results in group B on serum T4 levels, 49% of results in group A and 55.93% of results in group B on serum TSH levels which shows that the treatment given to group B was found to be more effective.

In overall comparison of the results, the Group B found having comparatively good improvement, the group was given *Nasya* followed by the *Nityanand Ras*, *Nasya* was administered followed by the *Koshta Anulomana.* The *Avapidana Nasya,* is a *Shodhana Nasya* in nature, the *Jeerna Karakuraka Swarasa* is having *Medhya Rasayana* properties too. This undoubtedly removes the *Sanga* caused by *Kapha* and *Medha,* and facilitates the movement of *Vata Dosha*. The activated *Vata Dosha* when it becomes actively functioning, it receives the impulses across the body through feedback mechanism, this would also enable the hypothalamus and pituitary to function normally. *Nasya*, undoubtedly has the ability to cleanse the obstructed channels through *Shiras*, and enables the ideal functioning of it. In addition to this treatment, the *Nityanand Ras* helps to correct the digestive impairment. The symptoms such as constipation, weight gain and fatigue seems like the *Lakshana's* of *Amavasta,* and if the accumulated Ama is digested, the tissues will perform better including the endocrinal glands.

The drugs used for *Nasya* have got *Ushna, Teekshna* and *Vyavayi* properties, these qualities especially *Vyavayi Guna* accelerate the process of drug diffusion and improve the rate of absorption as it bypasses the first-pass metabolism thus enhancing the bioavailability of the drug. These drugs produce *Draveekarana* (liquefication) and *Chedana* (expulsion) of vitiated *Doshas* while the *Madhura Rasa* of *Swarasa* produces cooling and Nourishing effect.

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Percentage of Improvement in both the groups

Parameter	Group A	Group B
Constipation	56.6%	66.6%
Weight gain	48.1%	53.3%
Hairfall	60.7%	69.7%
Fatigue	61.1%	74.3%

Altogether the combination of internal drugs and *Nasya* had been found to be more effective. Extremely statistically significant results were seen in serum TSH levels, there was no significant difference observed in serum T3 and T4 levels.

CONCLUSION

Hypothyroidism manifests with varying signs and symptoms, which very often mimics like any other clinical conditions, since goiter is not visible in the early phase of the disease. The very common symptoms being are Constipation, Weight gain, Fatigue, and Hair fall are crucial for the diagnosis of the disease along with the increased TSH levels and impaired T3 and T4 levels. The timely diagnosis and treatment will fairly reverse the disease progress, since this disease affects fertile females in larger number, out of apprehension in many cases once the diagnosis is done, they will be put on hormonal therapy, which may cause further system deterioration, since hormonal homeostasis plays central role in the female reproductive and overall health. In such cases, Ayurveda treatment would help these patients to manage the condition more effectively without much deterioration of general health status. The *Nityanand Ras*, found effective in one BD dosage for three months, along with *Nasya* prior to the oral medication. This combination therapy found to be very useful in establishing the normal functioning of the thyroid gland. And, while taking the treatment, in no patients no adverse drug reactions were reported, it was largely found safer for the consumption. *Nityanand Ras* is found to be significant in treating Hypothyroidism and *Jeernakarkaruka Nasya* also found to be useful and significant. In both the groups symptomatic relief is observed and quality of life is improved, but the significant changes in biochemical parameters were more noticed in the *Nasya* group. This shows that the approach of disease management through the addition of *Nasya* can have more significance on the moderation of biochemical indices.

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