



A COMBINED EFFECT OF VAMANA KARMA FOLLOWED BY SHIROVIRECANA WITH HIMSRADI TAILA IN THE MANAGEMENT OF HYPOTHYROIDISM - A CASE REPORT

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Abstract : *Hypothyroidism is one of the most common thyroid disorders in India, affecting one in ten adults. Although the diagnosis and treatment of hypothyroidism are often considered simple, there are large number of people with this condition who are suboptimally treated. Due to wide spectrum of the disease and high prevalence in the society, the current issue was opted for study and its management by means of Ayurvedic principles.*

KEYWORDS: *Hypothyroidism, Vamana karma, Shirovirecana, Himsradi Taila*

I. INTRODUCTION

Hypothyroidism refers to deficiency of thyroid hormone, including hypothalamic or pituitary disease and generalized tissue resistance to thyroid.⁶

Hypothyroidism is condition where elevated Thyroid Stimulating Hormones (TSH) is present along with normal or varying values of serum Triiodothyronine (T₃) and thyroxine (T₄).⁷

Hypothyroidism occurs when the thyroid gland does not produce enough thyroid hormones. The prevalence of hypothyroidism was high, affecting approximately one in 10 adults in the study population. Female gender and older age were found to have significant association with Hypothyroidism and the ratio of female to male is 6:1¹.

The sedentary lifestyle and stress leads to alterations in the activities of neuro-endocrine systems causing newer health challenges like hypothyroidism.

Hypothyroidism leads to a long life of pathological events and makes the affected person to remain on thyroid medications for the whole life. Looking at its chronicity and ill effects on the various body systems, it is the need of the hour to have a careful search to find out an effective and safe remedy for the management of hypothyroidism.⁸

The signs and symptoms of hypothyroidism nearly related to a condition called as Galaganda² and some of the Kaphaja Nanatmaja Vyadhis³ and In Hypothyroidism the main pathogenesis occurs due to the Kapha Vridhi and due to which Strotro avrodha of Vata occurs.

There is also symptoms of Rasavaha sroto dushti. Kapha is also mala of Rasa Dhatu. Due to Rasa Dhatvagni Mandya there is also vridhi of mala rupi Kapha. So the line of treatment for this kind of dushti which helps in evacuation of Mala rupa Kapha Is Vamana⁴ and it is best treatment for vitiated Kapha.

In Ayurveda principles of treatment are mainly Shodhana and Shamana and role of Shodhana in Metabolic and Autoimmune disease are highly effective. Vamana karma and Shirovirechana⁵ are one among Shodhana measures.

Shirovirechana / Nasya is a unique treatment modality in the management of Urdwa jatrugata rogas, where Galaganda is one among Urdwa jatrugata roga. Shirovirechana karma stimulates the olfactory nerve, which acts on higher centers i.e., Hypothalamus and pituitary gland, thus it regulates and normalizes endocrine system.

Vamana Karma is done with Madanaphala yoga which vata-kapha hara, lekhana and medogna action, Nasya with Himsradi Taila which is Vata-Kapha hara in nature is selected in this study

So an attempt is made “TO EVALUATE THE COMBINED EFFECT OF VAMANA KARMA FOLLOWED BY SHIROVIRECANA WITH HIMSRADI TAILA IN MANAGEMENT OF HYPOTHYROIDISM”

OBJECTIVES

Evaluate the combined effect of Vamana karma followed by Himsradi Taila shirovirecana in the management of Hypothyroidism

MATERIAL AND METHODS

• Drug Source

Required raw drugs were brought from Anamaya pharmacy and medicines were prepared in department of rasashastra and bhaishajya Kalpana.

• Clinical source:

A total of 30 patients who are diagnosed with Hypothyroidism will be selected from the OPD of TGAMC and Hospital, Ballari ,

Inclusion criteria:-

1. age group of 20 to 50year.
- 2 diagnosed case of hypothyroidism and under treatment
3. Patient is willing to participate in the study.
4. Patient is fit for Vamana Karma and Nasya Karma.

Exclusion criteria:-

- 1.Cardiac problem.DM and Sepsis.
2. Myxedema coma.
3. Hyperthyroidism. Toxic Goitre.
4. Patients who are not fit for Vamana Karma and Nasya Karma.
5. Lactating and Pregnant Women

Laboratory Investigation: T3, T4, TSH

Study Design

Group	No. of Patients	Intervention
Single Group	30	Vamana Karma followed by Himsradi Taila shirovirecana

PLAN OF TREATMENT

➤ TOTAL STUDY DURATION

- Treatment duration: 24 days
- Followup : 14days
- Total duration of study: 1 month 8 days
- Selected 30 patients diagnosed for Hypothyroidism were randomly selected.

Table 1: Showing Intervention

Deepana Pacana	Trikatu Curna	3days
Snehapana	Tiktaka Gruta	5days
Vishrama Kala	Abhyanga f/b Baspa Sweda	1 day
Vamana Karma		1day
Samsarjana Krama	Peyadi krama	3-7days
Nasya Karma	Himsradi Taila	7 days

DIAGNOSTIC CRITERIA : Subjective parameter like Lethargy, Hairfall, Muscle Ache, Puffiness of face, Dryness of skin, Menstrual disturbance, Constipation and Objective parameter like t3, t4, TSH were done.

Assessment Criteria: The patients response was assessed based on subjective and objective parameters.

Table 2: Parameters

Symptoms	Assessing parameter	Grade
Lethargy(Klama)	Absence of letharge	0
	Mild letharge	1
	Moderate letharge	2
	Severe letharge	3
Hair fall(Kesha chyuti)	No hairloss	0
	Hairfall on washing	1
	Hairfall on combing	2
	Hairfall on stretching	3

Cold intolerance(Ushnakamitwa)	Absence of cold intolerance	0
	Can touch cold things	1
	Cold experienced	2
	Always deserved to be warm	3
Dryness of skin(Twakrukshata)	Absence	0
	Mild dryness	1
	Dryness experienced by cloth	2
	Dryness with scaling/itching of skin & roughness	3
Puffiness of the face(Shotha)	No	0
	Occasional	1
	Daily, periorbital edema/puffiness in the morning, relieved in later part of day	2
	Persistent	3
Muscle ache & stiffness(Angamarda)	No pain	0
	Mild pain in some place of body	1
	Pain in extrimities	2
	Severe pain with stiffness	3
Menstrual disturbance(Aniyataartava)	Normal menses	0
	Occasionally irregular menses	1
	Regularly irregular menses	2
	Severe menstrual irregularity	3
Constipation (Shakrudgraha)	Once a day	0
	Once in two days	1
	Once in three days	2
	More than 3 days	3

RESULTS

The assessment parameters like lethargy, Hairfall, Cold intolerance, Dryness of skin, puffiness of face, muscle ache & stiffness, menstrual irregularities and constipation were subjected to Freidman's Test followed by Wilcoxon signed rank test to compare the Mean Rank within the group. The assessment parameter TSH was subjected to Mean, SD, t-test and results were analyzed.

LETHARGY	N	MEA	SD	SEM	Wilcoxon Rank	N	z-value	p-value	result
BT-DT	7	.8666	.434715	.0792	NR	25	-4.914	<.001	HS
					PR	0			
					Ties	5			
DT-AT	3	.1333	.34575	.0631	NR	4	-2.000	.022	S
					PR	0			
					Ties	26			
AT-AF	3	.0333	.18257	.0333	NR	1	-1.000	.163	NS
					PR	0			
					Ties	29			

CONSTIPATION	N	MEA	SD	SEM	Wilcoxon Rank	N	z-value	p-value	result
BT-DT	3	.3333	.47946	.0875	NR	10	-3.162	1	<0.00
					PR	0			
					Ties	20			
DT-AT	7	.0666	.25371	.0463	NR	2	-1.414	0.080	S
					PR	0			
					Ties	28			

AT-AF	0	.0000	.000	.0000	NR	0	-	0.000	NS
					PR	0			
					Ties	30			

MENSTRUAL DISTURBANCE	N	MEA	SD	SEM	Wilcox on Rank	N	z- value	p- value	result
BT-DT	3	.0333	.182 57	.033 33	NR	1	-	1.000	NS
					PR	0			
					Ties	29			
DT-AT	3	.0333	.182 57	.033 33	NR	1	-	1.000	NS
					PR	0			
					Ties	29			
AT-AF	0	.0000	.000 00	.000 00	NR	0	.000	.000	NS
					PR	0			
					Ties	30			

MUSCLEAC HE STIFFNESS	N	MEA	SD	SEM	Wilcox on Rank	N	z- value	p- value	result
BT-DT	3	.1333	0.34 575	.063 12	NR		-	2.236	NS
					PR				
					Ties				
DT-AT	3	.0333	0.18 257	.033 33	NR		-	1.000	NS
					PR				
					Ties				
AT-AF	0	.0000	.000 00	.000 00	NR		0.00	1.00	
					PR				
					Ties				

HAIRFAL L	N	MEA	SD	SEM	Wilcox on Rank	N	z- value	p- value	result
BT-DT	0	.3000	.466 09	.0851 0	NR	9	-	3.000	HS
					PR	0			
					Ties	21			
DT-AT	7	.0666	.253 71	.0463 2	NR	2	-	1.414	S
					PR	0			
					Ties	28			
AT-AF	7	.0666	.253 71	.0463 2	NR	2	-	1.414	S
					PR	0			
					Ties	28			

DESCRIPTIVE DATA							
TSH	MEAN	SD		t value	Df	P value	Result
BT	1.7333	1.08066		4.955	29	<.005	HS
AT	.8333	1.20583					
BT-AT	.90000	.99481					

DISCUSSION

Lethargy

Effect of treatment on lethargy was found statistically highly significant from BT-AF (p value is <0.001)

Lethargy or fatigue are the common symptoms present in the hypothyroidism, usually these symptoms are caused due to underproduction of thyroid hormones that leads to lower energy levels.

As per sushruta these symptoms are included under klama and tandra caused due to vata-kapha prakopa.

Vamana and shodhana Nasya itself mitigates Kaphadosha along with Vata dosha. Trikatu churna of deepana pachana, drugs of Himsradi taila acts as Kapha-Vatahara, Specially Chandana, Nimbha, Parpata used in Tiktaka Ghrita for snehapana acts as Klamahara, Shramahara thus Lethargy may be relieved.

Hairfall

Effect of treatment on Hairfall was highly significant from BT-AF (p-value <0.001)

Hairfall occurs due to Prolonged Hypothyroidism. It is due abnormal production of thyroid Hormone, and when the Thyroid Hormone is not functioning properly and is controlled due to the correction of Thyroid Hormone which is achieved after Vamana Karma.

Hairfall occurs due to impairment in Vata-Pitta dosha, the drugs like Musta, Bhunimbha, Chandana, Patola used in Tiktaka Ghrita helps in combating Vata-Pitta and certain drugs like Amalaki, Bibitaki, Bhringaraja acts as Keshya and helpful in Hair growth and reduces thinning of hair.

Nasya karma nourishes hair follicles which strengthen the hair and reduce Hair falling.

Muscleache and Stiffness

Effect of treatment on muscleache & stiffness was found to be significant from BT-AF (p-value <0.001).

In Hypothyroidism Muscle pain, cramping of muscles are due to thyroxine deficiency that leads to an abnormal metabolism that causes excessive release of protein because of protein deposits in the muscles and thickens that inturn increases the pain, stiffness, weakness of muscle.

Muscle aches and stiffness might be due to involvement of the Vata dosha, due to agni deepana, Vata anulomana, Pachana property of shunti, Vacha, Chitraka might have help to improve metabolism and rasyana property of Amalaki, Haritaki, Pippali would have provided proper nourishment to the tissues thus relieving muscle ache.

Menstrual Disturbance

Effect of treatment on menstrual disturbance was found to non-significant from BT-AF (p-value=0.194).

This symptom was seen in minimum no. of patients i.e 3 patients, as the sample size is very small, so result can be assessed in large number of samples which can be studied in further studies.

Constipation

Effect on constipation was found to be highly significant from BT-AF (p-value <0.001)

Deficiency of thyroid hormone leads to intestinal hypomotility, sluggish, slower or weaker colon contractions and fluid retention can be characteristic of hypothyroidism and are contributing factors to chronic constipation.

Vibhandha is due to impairment of jatharagni, so the drugs like Trikatu, Triphala used in Murchita Ghrita. Bhunimbha, Patola used in Tiktaka ghrita has Rechana property.

Vacha, Chitraka used in Himsradi Taila has Vibandhahara and Pacana action combinedly helpful in reduction of constipation.

TSH

Reduction in TSH value was found to be Statistically significant from BT-AT (p value <0.005)

Increased Thyroid hormone in the body fluids inturn decreased the secretion of TSH by Anterior pituitary.

Mainly Kaphavruta Vata takes place in the body leading to decreased the secretion of TSH hormone.

By Vamana Karma Kapha nirharana takes place along with Vatahara effect and Shodhana Nasya Has direct access to Hypothalamopituitary axis in addition to that Rasyana effect of Amalaki, Haritaki, Vacha, Guduchi of Himsradi Taila targeted on the Samprapti Ghatakas ving TSH decreasing effect.

Effect of treatment on Overall assessment :

- 1 - Complete Cured (100% relief) – 0
- 2 - Marked Improvement (>75% to >100%) - 1
- 3 - Moderate Improvement (>50% to >75%) - 2
- 4 - Mild Improvement (>25% to <50%) - 24
- 5 – Unchanged (up to 25% relief) - 3

CONCLUSION

- Hypothyroidism refers to any state that results in deficiency of thyroid hormone, including hypothalamic or pituitary disease and generalized tissue resistance to thyroid hormone and disorders that affect the thyroid gland directly.
- Hypothyroidism is a highly prevalent condition which impact on childhood development, women's fertility and risk of malignancy, making it an important global health issue of high priority and treatment includes long standing use of medicaments, hormonal replacement therapy so its a need of hour to choose alternate line of treatment to cure hypothyroidism
- Most of the symptoms of hypothyroidism show Kapha dominance which causes obstruction in the channels and hence obstruction to the proper movement of Vayu producing Margavaranajanya Vata Prakopa. Impaired metabolism can be considered as Pitta Dushti.
- Some clinical conditions correlating with hypothyroidism described below include Kapha dominant conditions like Rasapradoshaja Vikaras, Kaphavritta UdanaVata, Kaphavruta Samana Vata, etc. Hence the disease is Tridoshaja in nature.
- As the disease is having involvement of mainly kapha pradhana tridosha and it is a santarpanottha vikara, apatarpana in which shodhana chikitsa should be done
- So here an attempt is made to evaluate the combined effect of Vamana Karma followed by Himsradi Taila Nasya Karma in Hypothyroidism.

Based on the conceptual analysis, Observations and results, following conclusions can be drawn

- a) In this study, Maximum no. of patients 24(80%) were between 25-45yrs age group, 25(83%) patients were female, 24(80%) patients were married, 18(60%) patients were housewives, 12(40%) patients were Kapha-Vata prakruthi, 17(57%) patients were rasa, rakta, 22(73%) patients were having madhyama Samhanana.
- b) Subjective parameters like lethargy, Hairfall, Constipation was found to be statistically highly significant, muscle ache & stiffness was found to be significant, & menstrual disturbance was found to be statistically non- significant.

- c) Objective parameter like TSH was found to be statistically highly significant.
- d) Hypothyroidism can be evaluated and managed in two ways: Sthana Vishesh and Samprapti Vishesh. In Sthana Vishesh, Hypothyroidism is the disorder of thyroid gland situated in Jatrudva pradesha, considering the predominance of kapha dosha and bahudoshavastha in Hypothyroidism, Vamana karma is done and due to improper functioning of HPA causing improper functioning of TSH. Nasya Karma is beneficial in treatment of Dusta Kapha which is present in Jatrudva pradesha. Hence Vamana Karma followed by Nasya karma was incorporated.
- e) In this study the combined effect of Vamana Karma followed by Nasya Karma showed promising results.
- f) so in total the combined effect of Vamana Karma & Nasya Karma was found to be effective.

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