



INTERNATIONAL JOURNAL OF AYURVEDA AND PHARMACEUTICAL CHEMISTRY

(A peer reviewed journal dedicated to allied Sciences)

PUBLISHED BY

Greentree Group Publishers (GGP)
greentreegrouppublishers@gmail.com

Volume 10 Issue 2 | 2019

CONTACT DETAILS

- submittoijapc@gmail.com
- www.ijapc.com
- e issn 2350-0204
- editor@ijapc.com

INDEXED IN

Open Access Scholarly Resources, ZB MED Germany, ZB MED Search Portal for Life Sciences, ZDB, Electronic Journals Library, Directory of Research Journals Indexing, I2OR, IP Indexing Portal, Geneva Foundation for Medical Education and Research, hbx composite catalog and many more..



Ayurvedic Management of *Khalitya* (Hairfall)-A Review of Clinical Researches Conducted at Gujarat Ayurveda University, Jamnagar

Sujata P. Dhoke^{1*}, H.A.Vyas², M. K. Vyas³, A.S.Baghel⁴ and Shubhangi Kamble⁵

^{1,2,4,5}Department of Basic Principles, IPGT & RA, Jamnagar, Gujarat, India

³AIIA, New Delhi, India

ABSTRACT

Hair is an important anatomical structure of the body which plays protective function as well as adds beauty to the face. Nowadays *Khalitya* (Hairfall) is a burning issue as large number of population especially young men and women in present times are suffering from this disease. Present study is aimed to highlight the effective role of Ayurveda drugs. Till date more than 10 research work had been carried out in Gujarat Ayurveda University, Jamnagar out of which five PG level clinical researches have been selected for review of this study. The data obtained in clinical studies were compared and arranged in tabular format. *BhringarajaoilNasya* along with the local application provided highly significant result on the cardinal symptoms like Hairfall, Dandruff, and Dryness of hair. *Bhringaraja* tablets with local application provided highly significant result in above three and in Itching additionally. The combined therapy of *BhringarajatailaNasya* and tablet with local application gave the highly significant result in Hair fall and Dryness of hair with significant result in other symptoms. Comparative effect of Nasya Karma with *ChandanadhyamTailaa* was found to be more effective in reducing *Keshpatan* than Nasya Karma with *YashtimadhukadhyamTailaa*. Also the difference between the results was found to be significant. *ChandanadhyamTailaa* (Group B) is better than *YashtimadhukadhyamTailaa* (Group A) in one trial. So these trial drugs were found to be effective and safe on *Khalitya*.

KEYWORDS

BhringarajaTailaam, *Bhringaraja Tablet*, *Khalitya*, *Nasya Karma*, *ChandanadhyamTailaam*, *YashtimadhukadhyamTailaam*



Greentree Group Publishers

Received 24/01/19 Accepted 06/02/19 Published 10/03/19



INTRODUCTION

Khalitya has been described by different Ayurveda Classics. A very short description is found about this disease in all *Samhitas*. According to survey up to 40% of men and 25% of women in India are victims of hair fall¹. Acharya Charaka has described *Khalitya* under the heading of “*Trimarmiya Chikitsa Adhyaya*” in very close relation of *Shiroroga* while Acharya Sushruta, under the heading of “*Kshudra Roga Nidana*”. Again Acharya Vagbhata describes *Khalitya* as one of the nine ‘*Shirah Kapala Vyadhi*’ in “*Shiroroga Vigyanaya Adhyaya*”.

HETU (Etiological Factors):

Acharya Charaka and Vagbhata who has mentioned the major factors as follows- *Pitta Prakarti*², *Lavana Rasa Atisevan*, *Usharbhomi*, *Viruddha Aharasevan*, *Kshara atisevan*³ ignorance of *Pratishyaya*, taking of *Lavana* during pregnancy would be result in congenital hair loss (*Khalitya*)⁴, combing hair excessively during the ovulatory period of the mother leads to hair fall in the child⁵.

General etiological factors of *Shiroroga* can be considered as a etiological factors of *Khalitya* such as⁶ –

- ✓ *Vegavidharana* (Suppression of the natural urges),
- ✓ *Abhyanga Dwesha* (Grudge against

massage),

- ✓ *Prajagarana* (Waking at night),
- ✓ *Divaswapna* (Day sleep),
- ✓ *Sheetaambu Sevana* (The use of very cold water),
- ✓ *Desha Kala Viparyaya* (Abnormal climate and season),
- ✓ *Manahtapa* (Mental affliction), *Madya* (Intoxication),
- ✓ *Rodana* (Excessive weeping),
- ✓ *Uchibhashya* (Talking too loud),
- ✓ *Atimaitihuna* (Excessive sex act),
- ✓ *Asatmya Gandha* (Inhalation of unwholesome odours),
- ✓ *Ama* (Undigested or semi-digested material),
- ✓ *Raja* (Dust),
- ✓ *Dhooma* (Smoke),
- ✓ *Atapa* (Heat), *Hima* (Cold),
- ✓ *Avashyaya* (Exposure to frost at night),
- ✓ *Prakvata* (Facing head winds).

PURVA RUPA (Premonitory symptoms):

The vitiated *Doshas* getting *Sthanasamshraya* in their respective *Dhatus* (having *Khavaigunya*) presents some of the symptoms which are known as *Purvarupa*. In case of *Khalitya*, no specific *Purvarupa* has been described. According to Ayurvedic literature, in such cases appearance of the symptoms in very mild form may be considered as



Purvarupa. In this way occasional loss of some hairs may be considered as *Purvarupa* of *Khalitya*.

RUPA (Symptoms):

In case of *Khalitya* few explanations is found in *Ayurveda* classics. Thus the cardinal symptom of *Khalitya* is gradual loss of hair. Along with this cardinal symptom *Acharya Vagbhata* also

mentioned some associated symptoms according to its five type viz. *Vataja*, *Pittaja*, *Kaphaja* and *Sannipataja Khalitya*. Though *Khalitya* is a *Tridoshaja Vyadhi* its types depends on the dominancy of individual *Dosha*. *Rupa* of *Khalitya* according to its types are as given below in table 1:

Table 1 Types of *Khalitya*

Sr. No.	Types of <i>Khalitya</i>	<i>Keshaboomi</i> Appearance
1	<i>Vataja Khalitya</i>	<i>Agnidaghashaman</i> (Appears like burnt skin), <i>Shyava-Aruna verna</i> (blackish in colour)
2	<i>Pittaja Khalitya</i>	<i>Pitta-Neela-Haritavarna</i> , <i>Siraavruta</i> (surrounded by veins), <i>Swedukta</i> (sweat all over the scalp)
3	<i>Kaphaja Khalitya</i>	<i>Ghana</i> (thickened), <i>Swetabha</i> (whitish in colour), <i>Snigdha</i> (oily)
4	<i>Tridoshaja Khalitya</i>	<i>Tridoshalakshana</i> , <i>Nakhaprabha</i> (scalp looks like bears nail), <i>Daha</i> (burning sensation), <i>Kesharahita</i>

SAMPRAPTI (Pathogenesis)

Due to taking different *Nidanasevana*, vitiation of *Vata Prakapa*, *Pita Prakopa*, *Kapha Prakopa* occurs which leads to *Rasarakta Dushti* & *Asthidhatwagni Dushti* formed *Kesha Patana* & *Siramukha Avarodh* leads to *Khalitya*.

CHIKITSA SIDDHANTA (Treatment Protocol)

Acharya Charaka says that after adequate *Samshodhana* of patient *Khalitya* should be subjected to *Nasya*, massage of oil and *Shirolepa*⁷. *Acharya Ashtanga Samgrahakara* advises to adopt regimens of *Indralupta* and *Palitya* in *Khalitya* along with administration of *Samshodhana* as per *Dosha*. He adds further that the *Sira* nearer the site of

disease should be opened successively different *Pralepa* should be applied. He suggests another method for the *Raktamokshanaby* scratching of the scalp either by *Suchi*, *Kurchika* or by rough leaves before application of *Lepa*. After *Snehana*, *Swedana* and *Asravana*, *Acharya Vagbhata* advises to give *Nasya*⁸.

DETAILS OF RESEARCH WORK CONDUCTED ON KHALITYA:

As per the availability of data in different databases, total five PG level research works have been carried out on *Khalitya* in Panchkarma Department and Kayachikitsa Department, Institute of Post graduate Teaching and Research in Ayurveda, and Panchkarma Department of Government Akhandalal Ayurveda college, Gujarat



Ayurveda University, and Jamnagar.

Detailas are given below in table no.2

Table 2 Details of trial groups of research works conducted at Gujarat Ayurveda University, Jamnagar

Study No.	Name of Researcher	Year of work done	Study Design	No. of Patient Registered	Indication	Intervention (Treatment Group with Medicine)	Time period
1.	Deepa Mehta	2001 in Dravyaguna Dept	Random Sampling Method	35	Sign and Symptom of Hairfall	Group A- <i>BhringarajaTailaam</i> (Nasya and local application) Group B- <i>Bhringaraja</i> Tablet Group C- <i>Bhringaraja TailaamNasya</i> , Tablet And Local application	8Weeks
2.	Hetal Jyotishi	2003 in Panchkarma Dept		38		Group A- <i>Yashtimadhukadhya m TailaaNasya</i> (6-10 drops) along with 7.5gm Narsimhaghrita Group B- <i>Yashtimadhukadh yam TailaaAbhyanga</i> (30ml) along with 7.5gm Narsimhaghrita	28 days
3.	Namrata Sharma	2006 in Kayachikitsa Dept	Random Sampling Method	30	Sign and Symptom of Hairfall	Group A- <i>GunjaTailaamNasya</i> Group B- <i>GunjaTailaam</i> along with <i>keshya drug</i>	4 Week
4.	Jigisha Patel	2009 in Panchkarma Dept	Single group	15	Sign and Symptom of Hairfall	ChandanadyaTailaaNasya	30 15 days Nasya on alternate days
5.	Sonam Dangi	2015 in Panchkarma Dept	Random Sampling Method	30	Sign and Symptom of Hairfall	Group A- <i>Yashtimadhukadhya m TailaaNasya</i> (8 drops) Group B- <i>Chandanadhyam TailaaNasya</i> (8 drops)	3 cycle of Nasya in between gap of 3



AIMS AND OBJECTIVES

1. To highlight the effective role of different *Ayurvedic* medicines and procedure in the management of *Khalitya*.
2. To compare the effect of Ayurveda procedures in the management of *Khalitya*.

Study type- Retrospective Observational study

MATERIALS AND METHODS

Source-Material related to *Khalitya* were collected from Charaka Samhita, Sushruta Samhita, Ashtang Sangraha and Ashtang Hridaya along with available literature, journals, books, websites and for retrospective observation study researches collected from Ayurveda Research database VI which is open source of data collection.

Inclusion Criteria: As per data the diagnosed patients of *Khalitya* attending the different OPD of IPGT &RA, GAU, Jamnagar and Akhandalal Ayurveda College, Ahmadabad were taken for the study.

Exclusion Criteria: Patients having local disease like Alopecia areata (Indralupta), Alopecia totalis, Tinea capitalis, Folliculitis decalvans, hairfall related to any systemic disorders, any hormonal disorders, post CA treatments and vitiligo were excluded from the study.

Drugs: All the trial drugs were prepared in the pharmacy of Gujarat Ayurved University, Jamnagar and pharmacognostical and analytical studies were done in laboratories of IPGT & RA, GAU, and Jamnagar for studies conducted in same College and for Akhandalal Ayurveda College researches the drug is prepared in Govt. *Ayurvedic* Pharmacy, *Rajpipala*. Dist.*Rajpipala*.

Criteria of assessment:

As per the reviewed data special research proforma was prepared to study the Etiopathogenesis and response to the given treatment and any complications. The efficacy of therapy was assessed on the basis of suitable scoring pattern.

Objective Criteria:

Routine haematological and biochemical investigations were carried out to assess the general condition of patients. (Hb%, ESR, Sr. Total Protein, Sr. Creatinine, Sr. Alkaline phosphate, Sr. Calcium, Sr. Uric acid, LFT). Some special investigations (Sr. Iron metabolism, Sr. ferritin level, TIBC) were done in some patient as per requirement to rule out any pathology and for exclusion of patient.

Subjective Criteria: The subjective criteria for assessment include the *Khalitya* (hairfall), *Darunaka* (Dandruff), *Palitya* (white hair), *Shiraha Kandu* (etching on



hairs), *Shiraha Daha* (burning on scalp), *Kesha-Rukshata* (Dryness of hairs) etc.

Criteria of assessing overall effect of therapy: An assessment scale was made to assess the rate of improvement. At the end of treatment, the results in view of percentage of relief were classified.

Statistical analysis:

The data obtained in clinical studies were subjected to statistical tests and analyzed in to the following parts:

Paired 't' test was applied to evaluate the effect of therapy in individual group for subjective parameters. Unpaired 't' test was applied to the statistical data for evaluating the differences in the effect of two groups

and Anova test for three groups in improvement of subjective criteria. Overall effect of therapy in each group was calculated with reference to percentage improvement in all cardinal features.

RESULTS

Deepa Mehta (2001) in comparative clinical study of Group A (Bhringaraja Taila Nasya), Group B (Bhringaraja Taila Nasya & Bhringaraja Tablet) and Group C (Bhringaraja Taila Nasya & Bhringaraja Tablet and Local application of Bhringaraja Taila) study (n=35) is reported in table 3, 4 and 5⁹.

Table 3 Effect of Bhringaraja Taila Nasya on Group-A (N=9)

Cardinal sign and Symptoms	BT Mean	AT Mean	% Relief	SD	SE	t	p
<i>Khalitya</i>	2.44	0.44	81.81	0.71	0.23	8.48	<0.001
<i>Darunaka</i>	1.77	0	100	0.83	0.27	6.44	<0.001
<i>kandu</i>	1	0	100	0.70	0.23	4.24	<0.01
<i>Kesharukshata</i>	1.77	0.22	0.22	0.72	0.24	6.24	<0.001
<i>Keshatanutva</i>	1	0.44	0.44	0.52	0.17	3.16	< 0.05

Table 4 Effect of Bhringaraja Taila Nasya and Bhringaraja Tablet on Group – B (N=16)

Cardinal sign and Symptoms	BT Mean	AT Mean	% Relief	SD	SE	t	p
<i>Khalitya</i>	2.37	0.97	84.21	0.51	0.12	15.49	<0.001
<i>Darunaka</i>	1	0	100	0.81	0.20	4.89	<0.001
<i>kandu</i>	1	0	100	0.57	0.14	6.53	<0.001
<i>Kesharukshata</i>	1.12	0.12	88.88	0.51	0.12	7.14	<0.001
<i>Keshatanutva</i>	0.56	0.25	55.55	0.47	0.11	2.16	< 0.01

Table 5 Effect of Bhringaraja Taila Nasya & Bhringaraja Tablet and Local application of Bhringaraja Taila on Group –C (N=10)

Cardinal sign and Symptoms	BT Mean	AT Mean	% Relief	SD	SE	t	p
<i>Khalitya</i>	2.2	0.4	81.81	0.42	0.13	13.5	<0.001
<i>Darunaka</i>	1	0	100	0.81	0.25	3.87	<0.01
<i>kandu</i>	1	0	100	0.82	0.26	2.68	<0.05
<i>Kesharukshata</i>	1.4	0	100	0.69	0.22	6.33	<0.001
<i>Keshatanutva</i>	0.7	0.3	57.14	0.51	0.16	2.44	< 0.05



Hetaljyotishi (2003) in his study (n=38) reported that¹⁰ in *Yashtimadhukadhyam Taila Nasya* Group, *Keshapata* was relieved by 71.07%, *Keshatanuta* by 39.02%, *Pratishyaya* by 89.06%. The result were statistically highly significant for associated complaints in *Nasya* Group, *Rukshata* was relieved by 41.35% and *Kesha Kathinya* by 50% the result being statistically significant. In *Yashtimadhukadhyam Taila Shirobhyanga*

Group, *Keshapatanawas* relieved by 50%, *KeshaRukshataby* 71.61% and *Keshabhoomi Kandu* by 100%. These results were statistically highly significant. **Namrata Sharma** (2006) in his comparative clinical study between Group A (*Gunja Taila Nasya*) and Group B (*Gunja Taila Nasya* along with *Keshya* drug Combination) study (n=30) reported in 6-10¹¹.

Table 6 Effect of *Gunja Taila Nasya* (N=14)

Complaints	N	Mean			% Relief	SD	SE	't' value	P Value
		BT	AT	difference					
<i>Keshashatan</i>	14	2.35	0.64	1.71	73	0.46	0.12	13.68	<0.001
<i>Darunaka</i>	11	2.27	0.45	1.81	80	0.40	0.12	14.90	<0.001
<i>Shirakandu</i>	11	1.90	1.18	1.73	90	0.46	0.14	12.26	<0.001
<i>Kesharukshata</i>	12	2.08	0.25	1.83	88	0.38	0.11	16.31	<0.001
<i>Keshatanuta</i>	3	1.66	1	0.66	40	0.57	0.33	2	<0.05
<i>KeshaParushya</i>	11	1.72	0.18	1.54	90	0.52	0.15	9.81	<0.001
<i>Keshabhoomi Toda</i>	3	1.66	0.33	1.33	80	0.57	0.33	4	<0.001
<i>KeshabhoomiDaha</i>	5	1.80	0.20	1.60	90	0.54	0.24	6.53	<0.001

Table 7 Effect of *Gunja Taila Nasya* along with *Keshya* drug Combination i.e. *Narsimha Rasayanam* (N=16)

Complaints	N	Mean			% Relief	SD	SE	't' value	P Value
		BT	AT	difference					
<i>Keshashatan</i>	16	2.68	0.87	1.81	67	0.40	0.10	17.98	<0.001
<i>Darunaka</i>	16	2.25	0.31	1.93	86	0.57	0.14	13.50	<0.001
<i>Shirakandu</i>	15	1.93	0.13	1.80	93	0.67	3.87	10.31	>0.001
<i>Kesharukshata</i>	14	2.07	0.28	1.78	86	0.57	0.15	11.54	>0.001
<i>KeshaKathinya</i>	3	2	0.66	1.33	66.50	0.57	0.33	4	<0.001
<i>KeshaParushya</i>	6	1.83	0.16	1.66	90	0.51	0.21	7.90	>0.001
<i>Keshabhoomi Toda</i>	6	2.16	0.33	1.83	84	0.40	0.16	11	>0.001
<i>KeshabhoomiDaha</i>	8	2.12	0.12	2	94	0.92	0.32	6.11	>0.001

Jigisha Patel (2009) in her Clinical trial of drug *Chandanadya Taila Nasya* reported that¹² (Table 8)

Table 8 Effect of *Chandanadya Taila Nasya* in the Management of *Keshashatan* (N=15)

Complaints	Mean			% Relief	SD	SE	't' value	P Value
	BT	AT	difference					
<i>Keshashatan</i>	2.57	0.28	0.29	89.74	0.6	0.63	13.19	0.001
<i>Darunaka</i>	1.64	0.35	0.29	84.28	0.6	0.65	7.67	0.001
<i>Shirokandu</i>	1.50	0.35	0.15	82.05	0.6	0.72	6.12	0.001
<i>Kesharukshata</i>	0.86	0.13	0.73	84.61	0.87	0.79	3.55	0.01
<i>KeshabhoomiDaha</i>	0.93	0.13	0.8	85.71	0.87	0.77	4	0.01
<i>KeshabhoomiSweda</i>	0.06	0.47	0.53	53.33	0.87	0.74	2.78	0.05
<i>Palitya</i>	1.27	0.47	0.8	63.16	0.87	0.56	5.53	0.001
<i>Keshatanutva</i>	1.4	0.33	0.07	76.19	0.87	0.79	5.17	0.001



SonamDangi (2015) in Comparative Clinical Study of Group A (*YashtimadhukadhyamTailaNasya*) and Group B (*ChandanadhyamTailaNasya*) (n=30) reported that¹³-(Table 9, 10, 11)

Table 9 Effect of *Yashtimadhukadhyam Tailaa Nasya* on complaints of *Khalitya* (N= 15):

Complaints	Mean		Diff.	% Relief	SD	SE	“t” value	“P” value
	BT	AT						
<i>Keshpatan</i>	2.933	1.000	1.933	65.91%	0.594	0.153	12.614	<0.001
<i>Darunaka</i>	1.600	0.533	1.067	66.69%	0.799	0.206	5.172	<0.001
<i>Kesha-Rukshata</i>	1.600	0.867	0.733	45.82%	0.704	0.182	4.036	0.001
<i>ShirahKandu</i>	0.933	0.333	0.600	64.31%	0.737	0.190	3.154	0.007
<i>Palitya</i>	1.333	1.333	0.000	0%	0.000	0.000	0.000	1.000
<i>Keshbhoomi Toda</i>	0.200	0.0667	0.133	66.65%	0.352	0.0909	1.468	0.164
<i>KeshbhoomiDaha</i>	0.133	0.0667	0.0667	49.85%	0.258	0.0667	1.000	0.334
<i>KeshbhoomiSweda</i>	0.133	0.0667	0.0667	49.85%	0.258	0.0667	1.000	0.334
<i>KeshbhoomiDaurgandhya</i>	0.200	0.0667	0.133	66.65%	0.516	0.133	1.000	0.334
<i>KeshTanutva</i>	1.667	1.533	0.133	8.04%	0.516	0.133	1.000	0.334

Table10 Effect of *ChandanadhyamTailaNasya* on Complaints of *Khalitya*(N= 15)

Complaints	MEAN		Diff.	% Relief	SD	SE	“t” VALUE	“P” VALUE
	BT	AT						
<i>Keshpatan</i>	2.800	0.400	2.400	85.72%	0.632	0.163	14.697	<0.001
<i>Darunaka</i>	1.200	0.333	0.867	72.25%	0.640	0.165	5.245	<0.001
<i>Kesha-Rukshata</i>	1.333	0.467	0.867	64.97%	0.743	0.192	4.516	<0.001
<i>ShirahKandu</i>	0.867	0.267	0.600	69.21%	0.737	0.190	3.154	0.007
<i>Palitya</i>	1.467	1.467	0.000	0%	0.000	0.000	0.000	1.000
<i>Keshbhoomi Toda</i>	0.333	0.0667	0.267	79.97%	0.458	0.118	2.256	0.041
<i>KeshbhoomiDaha</i>	0.133	0.000	0.133	100%	0.352	0.0909	1.468	0.164
<i>KeshbhoomiSweda</i>	0.200	0.0667	0.133	66.65%	0.352	0.0909	1.468	0.164
<i>KeshbhoomiDaurgandhya</i>	0.133	0.000	0.133	100%	0.352	0.0909	1.468	0.164
<i>KeshTanutva</i>	1.400	1.400	0.000	0%	0.000	0.000	0.000	1.000

Table 11 Showing the Overall Effect of Therapy (%)

Assessment of results	Study 1			Study 4		
	Group A	Group B	Group C	Single	Group	
Complete improvement (100%)	44.44	37.5	40	6.66		
Marked improvement (>75%)	12.12	37.5	50	46.6		
Moderate improvement (40-75%)	44.44	25	10	48.67		
No improvement (< 40%)	00	00	00	00		
Assessment of results	Study 2		Study 3		Study 5	
	Group A	Group B	Group A	Group B	Group A	Group B
Maximum improvement (>75%)	24	23.07	14	19	00	20
Moderate improvement (51-75%)	64	7.69	50	69	53.33	40
Mild improvement (26-50%)	12	53.85	21	13	40	33.33
No improvement (0-25%)	00	15.38	14	00	6.66	6.66



DISCUSSION

Deepa Mehta (2001) in her study reported that the Bhringraja Taila Nasya (Group A) showed highly significant results in *Khalitya* and *Darunaka* ($P < 0.001$). *Kandu* was reduced by 100 % which is statistically significant ($P < 0.01$). The *Nasya* and *Abhyanga* might have cleared the local vitiation of the *Vata* and *Pitta*. *Nasya* is the best remedy for all *Urdhavajatugata* problems and hence, *Pratishyaya* has also received significant improvement. (Table no.3)

In Group B i.e. Bhringraja Taila Nasya and Bhringaraj tablet, highly significant result were found in *Khalitya Darunaka*, *Kandu* and *Kesha Rukshata* ($P < 0.001$). Thus *Keshatanuta* was reduced only by 55.55 % but statistically significant ($P < 0.01$). In this group Bhringraja is used as a Rasayana drug. It is better than group A. (Table no.4)

In Group C (Bhringraja Taila Nasya & Bhringraja Tablet and Local application) highly significant result were found in hairfall and *Kesharukshata* ($P < 0.001$). Significant result were found in *Darunaka* and *Kandu*. This is due to combined effect of therapy. (Table no.5)

Namrata Sharma (2006) in his study ($n=32$) reported that in Group A (*Gunja Taila Nasya*) statistically highly significant ($P < 0.001$) relief were found in

Keshashatan, *Daurbalya*, *Shirahkandu*, *KeshaRukshata*, *Keshabhoomi Parushya*, *Keshabhoomi Toda* and *KeshabhoomiDaha*. (Table No. 06)

Prepared taila had *Laghu* and *Snigdha* properties with *Madhura*, *Kashaya*, *Tikta* and *Katu Rasa* with *Madhura Vipaka* and *Ushna Virya* which was intended to have a *Tridosha-shamaka* effect. The *Laghu* and *Snigdha* properties would act on the vitiation of the *Kapha* and *Vata Dosha* whereas *Shita Virya* and *Madhura Vipaka* would act on *Pitta Dosha*. *Ushna Virya* and *Snigdha* property would act on the vitiation of *Kapha* and *Tikta Rasa*, *Shita Virya* and *Madhura Vipaka* would act on *Pitta Dosha*. The *Ushna Virya* and *Snigdhatva* would act in liquefying the dried *Kapha* in the pores of the scalp. It also clearing up the obstruction offered to the growth of new hairs. The application of Taila on the scalp with finger tips leads to increase the local blood circulation and promotes the absorption of the drug. *Keshya* and *Rasayana* action of drugs enhance the nutritive beneficial effect on the hair. *Vishaghna*, *Kandughna* and *Jantughna* property removes the local infection and helps in checking the hair fall and thus help in ceasation of the further process of *Khalitya*.

In group B (*Gunja Taila* along with *Keshya* drug combination i.e. Narsimha



Rasayanam) statistically highly significant ($P < 0.001$) result was found in *Khalitya*, *Darunaka*, *Shirokandu*, *Kesharukshata*, *Keshabhoomi Parushya*, *Keshabhoomi Toda* and *Keshabhoomi Daha* while it provided significant relief in *Keshakathinya* and ***Keshatanutva***. The relief was found 79.00% in *Pitta Dushti Lakshana* which is statistically highly significant ($P < 0.001$). (Table No. 07)

Narsimha Grita is having the *Rasayana*, *Keshavriddhikara*, *Keshya*, *Kriminashaka*, *Vishanashaka* and *Twachya* properties. So, this combination would promote the hair growth through its property and may help in eradication of fungus and bacterial infection.

Jigisha Patel (2009) in her study reported highly significant result in *Keshashatan*, *Darunaka* and *Kandu*. “*Nasa hi shirasodwaram*” as per this statement nasal pathway is entry for the cranium. The medicine whichever has been administered through the nasal route reaches the head. *Chandanadhyataila nasya* administered through *nasya* reaches the root of the hair, by its *doshagna* property, pacify the *doshas* which cause the *khalitya*, and does the *tarpana* of *shiras* through the properties like *keshya*, *balya*, etc.

Chandanadyatailanasya also clears the obstruction of the hair roots by its *sookshmasrotogaami* property and

nourishes the hair root thus leading to regrowth of the hair. The ingredients of *Chandanadhyataila* have mainly *Madhura* & *Tikta Rasa*, maximum drug has *Sheeta Virya* and *Madhura Vipaka* properties. *Chandanadhyataila Nasya* is indicated especially in *Valita*, *Palitya* and *Khalitya*. *Chandanadhyataila* possess mainly *Snigdha*, *Guru Guna*, *Vata-Pitta Shamaka* properties, which relieves *Keshabhoomisphutan* and *Rukshata* of *Keshabhoomi*. *Kanduis* manifested generally due to aggravation of *Kapha Dosh*. *Nasya* due to its therapeutic effect as well as pharmacological effect of *Chandanadyataila* helped to break the pathology of *Srotosanga* and *Tridoshashamaka* properties helped to relieve the *Kandu*.

SonamDangi (2015) in her study reported that in Group A (*Yashtimadhukadhyam Taila Nasya*) highly significant results were found in *Keshapatan*, *Darunaka*, *Kesha-Rukshata* ($P \leq 0.001$). Significant results were obtained in *ShirahKandu* ($P < 0.05$).

In Group B (*Chandanadyam Taila Nasya*) highly significant ($P \leq 0.001$) result were found in *Keshapatan*, *Darunaka*, *Kesha-Rukshata*. Significant improvement was found in *Shirakandu* and *KeshaBhoomi Toda* ($P < 0.05$). *Chandanadyam Taila* (Group B) showed better result than



Yashtimadhukadhyam Taila (Group A).
(Table No 9 & 10)

Adverse drug reaction (ADR): All the trial drugs found clinically safe as no adverse drug reactions were reported during treatment period.

CONCLUSION

In clinical study, *Shiro-abhyanga* of *Gunja Taila* is effective in liquefying the dried *Kapha*. It also removes the local infection and help in checking the hair fall and thus helps in cessation of the future process of *Khalitya*. *Keshya* drugs combination promotes the hair growth through its property i.e. *Rasayana* and *Keshya*. Better result can be obtained by the use of *Gunja Taila* as *Shiroabhyanga* along with *Keshya* drug combination orally than the *Shiroabhyanga* alone.

Bhringaraja Taila Nasya along with the local application provided highly significant result on the cardinal symptoms like hair fall, dandruff, dryness of hair. *Bhringaraja* tablets with local application provided highly significant result in above

three and in itching additionally. The combined therapy of *Bhringaraja Taila Nasya* and tablet with local application gave the highly significant result in hair fall and dryness of hair with significant result in other symptoms. Comparative effect of *Nasya Karma* with *Chandanadhyam Taila* was found to be more effective in reducing *Keshpatan* than *Nasya Karma* with *Yashtimadhukadhyam Taila*. Also the difference between the results was found to be significant. *Chandanadhyam Taila* (Group B) is better than *Yashtimadhukadhyam Taila* (Group A). In addition to *Nasya Karma*, it's also necessary to stay away from the causes of hair fall regarding *Ahara-Vihara*, *Mansika Nidana* any other if there. *Nasya Karma* is also a part of *Dinacharya*. Hence, it should be done daily to prevent *Khalitya*. All five research work showed better results so can conclude that *Ayurvedic* medicines are effective in management of diseases *Khalitya*.



REFERENCES

- 1 RajaniThankan, VasantPatil, PrasannaAithal. Clinical Study On Effect Of Different Procedures Of Nasya With BhringarajaTailaa In *Khalitya*, Journal Of Ayurveda And Holistic Medicine, April, 2014, Volume 2, Issue 4.
- 2 KashinathaShastri and Dr.Gorakhanathachaturvedi ed. Charakasamhita-I Vimanasthan, 8/97, chaukhambhaBharati Academy, Varanasi, reprint-2012, p;773.
- 3 Kashinathashastri and Dr.Gorakhanathachaturvedi ed. Charakasamhita-I Vimanasthan, 8/97, chaukhambhaBharati Academy, Varanasi, reprint-2012, p; 678.
- 4 KavirajaAtridevaGupt, AstangaSamgraha-I, Sharirsthana, 2/61, ChaukhambaKrishnadas Academy, Varanasi, reprint-2005, p; 280-281.
- 5 AmbikadattaShastri, SushrutaSamhita, Sharirsthan, 2/26, Chaukhamba Sanskrit Sansthan, Varanasi, reprint-2012, p;17.
- 6 KavirajaAtridevaGupt, AstangaSamgraha- II, Uttartantra 27/2, ChaukhambaKrishnadas Academy, Varanasi, reprint-2011, p; 287.
- 7 Y.T. Acharya, CharakaSamhita, reprint ed., Chikitsasthana 26/262, Chakrapani Commentary ChaukhambaOrientalia, Varanasi, 2007,p;611.
- 8 KavirajaAtridevaGupt, AstangaSamgraha-II, uttarsthana, 28/43, ChaukhambaKrishnadas Academy, Varanasi, reprint-2005, p; 292-293.
- 9 Deepa Mehta (2001) et al a pharmaco – clinical study on bhringraj in the management of *Khalitya*, M. D. (Ayu) Dissertation, Dept. Of *Kayachikitsa*, IPGT&RA, Gujarat Ayurved University, Jamnagar
- 10 Hetaljyotishi (2003) et al A comparative study of nasya Karma and Shirobhyanga along with narsimhaGhrita in the management of *Khalitya*, M. D. (Ayu) Dissertation, Department of *Panchkarma*, IPGT&RA, Gujarat Ayurved University, Jamnagar.
- 11 Namrata Sharma (2006) et al Clinical study on etiopathogenesis of *Khalitya* and its management with GunjaTailaa and Keshya Drugs combination, M. D. (Ayu) Dissertation, Department of *Kayachikitsa*, IPGT&RA, Gujarat Ayurved University, Jamnagar.
12. Jigisha Patel(2009) et al Efficacy of Nasyakarma in the Management of Keshashatan w.s.r.to Hair falling, M. D. (Ayu) Dissertation, Department of *Panchkarma*, GovtAkhandanandAyurved College and Hospital, Ahmedabad, Gujarat Ayurved University, Jamnagar.
- 13 SonamDangi (2015) et al A comparative study of nasya karma with yashtimadhukadhyamtailaa and chandanadhyamtailaa in the management



of *Khalitya* (hair fall), M. D. (Ayu)
Dissertation, Department of *Panchkarma*,
IPGT&RA, Gujarat Ayurved University,
Jamnagar