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EFFICACY OF PRATIMARSHA NASYA IN PREVENTION OF AKALA PALITYA W.S.R TO PREMATURE GREYING OF HAIR

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ABSTRACT

Aim- Hair has a tendency to lose its natural color with advancing age. It is therefore natural for the hair to turn grey with age. But premature greying is a morbid condition and it makes even the young looks older. This causes a great deal of concern to the affected persons. akala palitya is a burning problem as large number. According to W H O, in India, its incidence is high in the age group of 20-30 years. Acharya vagbhata while mentioning the treatment of palitya told nasya as the first line of treatment and many acharyas have mentioned pratimarsha nasya with anu taila is one of the best ways for prevention and treatment of akala palitya. thus this drug was considered for the study. **Methods**, A total of 30 patients were selected from O,P,D of S,J,G,A,M ,College after fulfilling the inclusion and exclusion criteria. All the 30 patients were included in a single group and were advised pratimarsha nasya karma with anu taila twice a day for 90 days. Follow up was taken during treatment, Assessment of results was done by considering the base line data of subjective and objective parameters. **Results:** in this study, all 30 patients had satisfactory response to the treatment. However no more increase in greying of hair was observed during the treatment period by which we can draw conclusion that anu taila pratimarsha nasya prevents greying of hair

KEYWORDS: Akalapalitya, anu taila, premature graying of hair.

INTRODUCTION

The stress and strain of modern life induces premature ageing. Akala Palitya-premature greying of hair is an accompaniment of premature ageing and poses a clinical challenge to the medical practitioners. The incidence of premature ageing along with Akala Palitya is on rise particularly in tropical and developing countries. According to W H O, in India, its incidence is high in the age group of 20-30 years.

There are a large number of home remedies as well as over the counter products available in market such as dyes, lotions etc. that are used in Akala Palitya. However these products often carry adverse reactions such as increased hair fall increased greying of otherwise normal hair and sometimes allergic reactions. The present clinical study is intended to fill this gap where an effective, safe and non sensitizing way of treating Akala Palitya is to be made available.

Objectives of the Study

Evaluation of efficacy of Pratimarsha Nasya in Prevention of Akala Palitya.

MATERIALS AND METHODS

The materials used for the study were;
Anu Taila – For Nasya.

Materials used for Nasya karma:

- Nasya Shayana table.
- Gokarna.

Type of study: Single group clinical trial.
Source of data: Patients suffering from Akala Palitya were selected from O.P.D, Dept of Swasthavritta, S,J,G,A,M, College & Hospital, Koppal after subjecting to Inclusion and Exclusion criteria.

Sample size

30 patients of Akala Palitya irrespective of sex, aged between 18-30 year were selected in a single group.

Selection of patients

After fulfilling the criteria set in the form of inclusion and exclusion criteria, 30 patients were randomly selected and distributed in single group.

Inclusion criteria
1. Patients having features of Akala Palitya
2. Patients in age group of 18-30 years.
3. Patients who are fit for Nasya**.**

Exclusion criteria
1. Infectious diseases of scalp like Alopecia areata and other conditions were premature greying of hair is seen as one of the symptoms.
2. Akala Palitya associated with other diseases of pigmentation like Vitiligo, Leprosy & Albinism
3. Any other systemic disorders.

Diagnostic criteria
Diagnosis is made on the basis of the classical signs and symptoms as mentioned in Ayurvedic classics, like
- Split/broken hair (spuditha) Ash colored hair (shyava varna).
- Hair resembling like water (jala prabham)Yellowish hair (peetabham).
- White hair (shukla varna).

Posology: Nasya: 2 drops of Anu taila in each nostril [2]

Study duration
Total Duration - 135 days
Treatment Duration - 90 days
Follow up - 1-45th day after commencement of treatment.
2-After completion of treatment i.e. 90th day.
3-45th Day after completion of treatment i.e. 135th day.

Procedure
Patients were examined and explained about the Nasya briefly and were asked to bring extra clothing, napkin, towel etc. preferably the time chosen was morning and in the evening.

Nasya karma
Requirements
1. Table with the facility to lower the head portion.
2. Anu Taila (4 drops).
3. Nasya dropper.
4. Spittoon.

Pradhana karma
Patient made to lie down in supine position on Nasya table. The head of the patient is lowered (Pravilambita) up to an extent. Eyes of the patient were covered with a clean cloth, the tip of patients nose was drawn upward by the left thumb. At the same time with the right hand instilled 2 drop of Anu taila in both the nostrils, alternately and asked the patient to inhale deeply.

Paschathkarma
Patient in lying position is asked to count up to 100 matra i.e. approximately 2 minutes. The patient was asked to expel out the drug which comes in oropharynx. Gandusha were advocated to expel out the residual mucous lodged in Kantha.

Assessment of result
Assessment of results was done on the basis of readings of subjective and objective parameters before, during, after the treatment and after follow up.

Subjective parameters
The following four parameters were taken as subjective parameters for the assessment of results. The readings before, during, after the treatment and after the follow up were assessed for result.

Table 1:

S. N.	Grades	0	1	2	3
1	**Color of the hair (Kesha varna)**	Krishna varna	Ash colored hair	Yellowish/Copperish hair	White hair
2	**Dry split hair (Rooksha Spudita)**	Normal	Dryness visible	Dryness felt by touch	Dryness felt with split hair
3	**Unctuous Thick Hair (Snigda Sthula)**	Normal	Unctuous visible	Unctuous felt by touch	Unctuous felt with split hair
4	**Burning Sensation (Daha)**	No burning sensation	Mild (localized burning without disturbed sleep)	Moderate (localized burning with disturbed sleep)	Severe (Burning sensation all over the scalp with disturbed sleep)

Objective parameters
1. Random hair count
One square centimeter area of scalp was chosen where more grey hair are present. From this site grey hair were counted randomly before and after the treatment.

Table 2: Showing the parameter random hair count.

	Assessment	Score
Random hair count	No hair grey	0
	1-10 grey hair	1
	More than 10 and less than 25 grey hair	2
	More than 25 grey hair	3

2. Total grey hair

Total numbers of grey hair were counted before, during and after the treatment.

Table 3: Showing the parameter total grey hair.

	Assessment	Score
Total grey hair	No hair grey	0
	1-25 grey hair	1
	More than 25and less than 75 grey hair	2
	More than 75 grey hair	3

Overall assessment of clinical response

Very good Response: >75% improvement in overall clinical parameters.

Good Response: 50-75% improvement in overall clinical parameters.

Satisfactory Response: 25-50% improvement in overall clinical parameters.

Poor Response: <25% improvement in overall clinical parameters.

RESULTS

1: Showing effect of therapy on color of hair

Table 4:

Mean Score		(%) of Reduction	Pair "t"test				Results
BT	2.73		S.D	S.E	"t" value	"p" value	
DT	2.63	3.66	0.31	0.06	1.80	>0.05	NS
AT	2.53	7.32	0.48	0.09	2.26	<0.05	NS
AF	2.50	8.54	0.57	0.10	2.25	<0.05	NS

The patients who were treated with the therapy Pratimarsha Nasya showed change in color of hair with 2.63 mean score during the treatment with "t" value 1.80 at the probability level "p" value >0.05 which is statistically not significant, with 2.53 units immediate after the treatment with "t" value 2.26 at the probability level "p" value <0.05 which is statistically not significant, and with 2.50 after the follow up with "t" value 2.25 at the probability level "p" value <0.05 which is statistically not significant. The percentage of improvement was 3.66%, 7.32 and 8.54 % during, after treatment and after follow-up respectively.

2. Effect of therapy on dry split hair.

Table 5:

Mean Score		(%) of Reduction	Pair "t"test				Results
BT	1.27		S.D	S.E	"t" value	"p" value	
DT	0.83	34.21	0.90	0.16	2.64	>0.05	S
AT	0.20	84.21	1.08	0.20	5.41	<0.001	HS
AF	0.20	84.21	1.08	0.20	5.41	<0.001	HS

The patients who were treated with the therapy Pratimarsha Nasya showed change in dry split hair with 0.83 mean score during the treatment with "t" value 2.64 at the probability level "p" value >0.05 which is statistically significant, with 0.20 units immediate after the treatment with "t" value 5.41 at the probability level "p" value <0.001 which is statistically highly significant, and with 0.20 after the follow up with "t" value 5.41 at the probability level "p" value <0.001 which is statistically highly significant The percentage of improvement was 34.21% ,84.21 and 84.21 % during, after treatment and after follow-up respectively.

3. Effect of therapy on unctuous thick hair.
Table 6:

Mean Score		(%) of Reduction	Pair "t"test				Results
BT	1.13		S.D	S.E	"t" value	"p" value	
DT	0.97	14.71	0.53	0.10	1.72	>0.05	NS
AT	0.20	82.35	1.08	0.20	4.73	<0.001	HS
AF	0.20	82.35	1.08	0.20	4.73	<0.001	HS

The patients who were treated with the therapy Pratimarsha Nasya showed change in unctuous hair with 0.97 mean score during the treatment with "t" value 1.72 at the probability level "p" value >0.05 which is statistically not significant, with 0.23 units immediate after the treatment with "t" value 4.73 at the probability level "p" value <0.001 which is statistically highly significant, and with 0.20 after the follow-up with "t" value 4.73 at the probability level "p" value <0.001 which is statistically highly significant. The percentage of improvement was 14.71%, 82.35 and 82.35 % during, after treatment and after follow-up respectively.

4. Effect of therapy on burning sensation of scalp
Table 7:

Mean Score		(%) of Reduction	Pair "t"test				Results
BT	0.67		S.D	S.E	"t" value	"p" value	
DT	0.40	40	0.52	0.10	2.80	<0.01	S
AT	00	100	0.80	0.15	4.55	<0.001	HS
AF	00	100	0.80	0.15	4.55	<0.001	HS

The patients who were treated with the therapy Pratimarsha Nasya showed change in burning sensation of scalp with 0.40 mean score during the treatment with "t" value 2.80 at the probability level "p" value <0.01 which is statistically significant, with 00 units immediate after the treatment with "t" value 4.55 at the probability level "p" value <0.001 which is statistically highly significant, and with 00 after the follow-up with "t" value 4.55 at the probability level "p" value <0.001 which is statistically highly significant,. The percentage of improvement was 40%, 100 %and 100 % during, after treatment and after follow-up respectively.

5- Effect of therapy on random hair count
Table 8:

Mean Score		(%) of Reduction	Pair "t"test				Results
BT	2.30		S.D	S.E	"t"value	"p" value	
DT	2.27	1.45	0.18	0.03	1	>0.05	NS
AT	2.10	8.70	0.41	0.07	2.69	<0.05	NS
AF	2.10	8.70	0.41	0.07	2.69	<0.05	NS

The patients who were treated with the therapy Pratimarsha Nasya showed change in random hair count with 2.27 mean score during the treatment with "t" value 1 at the probability level "p" value >0.05 which is statistically not significant, with 2.10 units immediate after the treatment with "t" value 2.69 at the probability level "p" value <0.05 which is statistically not significant, and with 2.10 after the follow-up with "t" value 2.69 at the probability level "p" value <0.05 which is statistically not significant The percentage of improvement was 1.45% ,8.70 and 8.70 % during, after treatment and after follow-up respectively.

6. Effect of therapy on total grey hair
Table 9:

Mean Score		(%) of Reduction	Pair "t"test				Results
BT	2.20		S.D	S.E	"t" value	"p" value	
DT	2.13	3.03	0.25	0.05	1.44	>0.05	NS
AT	2.00	9.09	0.41	0.07	2.69	<0.05	NS
AF	2.00	9.09	0.41	0.07	2.69	<0.05	NS

The patients who were treated with the therapy Pratimarsha Nasya showed change in total grey hair with 2.13 mean score during the treatment with "t" value 1.44 at the probability level "p" value >0.05 which is statistically not significant, with 2 units immediate after the treatment with "t" value 2.69 at the probability level "p" value <0.05 which is statistically not significant, and with 2 after the follow-up with "t" value 2.69 at the

probability level "p" value <0.05 which is statistically not significant. The percentage of improvement was 3.03%, 9.09 and 9.09 % during, after treatment and after follow-up respectively.

Overall Response to the Treatment

Table 10: Showing the distribution of patients according to response.

Response	Total effect of treatment in %	No. of Patients	Percentage
Excellent	**76-100%**	**00**	**00.00**
Very good	**51-75%**	**00**	**00.00**
Good	**25-50%**	**00**	**00.00**
Satisfactory	**0-25%**	**30**	**100.00**

DISCUSSION

All ancient Acharyas have considered Nasa as the gateway of Shiras. i.e "l It does not mean that any channel directly connects brain and nose, but it may be suggestive of any connection through blood vessels, lymphatics and nerve. By all above observations one can think rationally about mode of actions of Nasya Karma.

Samprati Vighatana is said to be the treatment. Therefore the action of a drug means to dismantle the Samprati Ghataka of the disease. Hence to explain the mode of a drug means to establish a relationship between the Samprati Ghataka of the disease and penta fold principle of Rasa, Guna, Virya, Vipaka and Prabhava of a drug.

The Rasa of the Anu Taila had the dominance of Tikta, which is said to be Pitta shamaka. Tikta and Katu Rasa present in this drug possess the antagonistic properties to that of Kapha and Ama. Ushna Viryatva of drug will helpful for removing the obstruction of the Rasa vah Srotas.

All the patients were reported to have Dwandvaja Prakriti. A maximum number of patients belongs to Vata Pittaja Prakriti (50%) followed by Pitta Kapha Prakriti (33.33%). Pitta and Vata are the two main doshas, which play an important role in the occurrence of Palitya. It may be concluded from this finding that when such individuals indulge in etiological factors they are more prone to have Palitya.

Vagbhata, it has been clearly stated that the person with Vata prakriti is more susceptible to have Alpakesha, Rukshata and Chala Manasa.[3] Such persons may be easily disturbed by very trifle psychological disturbances as well as they always invite psychological problems by their wavering nature.

Constitutionally the individuals of Pitta prakriti normally have the premature greying of the hair and they are always having hair loss.[4,5] Whereas the Kapha prakriti persons are believed to be wealthy and regards to their trichological wealth. Thus the persons with Vata and Pitta prakritis are more prone to have the diseases of hair.

CONCLUSION

The following conclusions are drawn after the assessment of response clinically and statistically-

After the treatment effect of Pratimarsha Nasya on Color of hair, random hair count and total grey hair were insignificant and in parameters like dry split grey hair, unctuous thick hair and burning sensation of scalp were highly significant.

In this study, all 30 patients had satisfactory response to the treatment.

However no more increase in greying of hair was observed during the treatment period by which we can draw conclusion that Anu Taila pratimarsha Nasya prevents greying of Hair

During the course of the study the exact causative factor could not be elicite through which we can infer that it involves multi-factorial causative factors in manifestation of Akala Palitya.

Pratimarsha Nasya does not vitiate doshas rather it stabilizes the vitiated doshas.

Daily use of Anu Taila was not favorable to few patients because of burning sensation, may be caused due to teekshnata of dravya.

Dose of Pratimarsha Nasya is very less so it can be administered in any season as daily regimen.

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