

A CLINICAL STUDY ON THE EFFICACY OF LYCOPODIUM 200 IN THE TREATMENT OF CANITIES

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ABSTRACT- Premature Greying Of Hair (PGH) is defined as greying of hair before the age of 20 years in Caucasians and before 30 years in African and American population. It can severely effect the self esteem of an individual. In homeopathy, natural medicines are used to treat any medical condition. Lycopodium clavatum is amongst one of the highly effective homeopathic medicines for premature greying of hair. A total number of 14 volunteers were included in this study, randomly divided into two groups with 7 in each group. One group was given lycopodium 200 1dose with every 15 days follow up, The other group was given placebo with 15days follow up for a period of 3 consecutive months. Analysis was done on the basis of observations of intensity of grey hairs before the study & after the study. It was observed that the change in the colour of hair was gradual in the shaft which was turning more and more darker.

KEYWORDS- Canities,, Lycopodium Clavatum 200, Greying Score Chart.

INTRODUCTION

Greying of hair also called canities or achromotrichia occurs with normal aging. Premature greying of hair is seen among young adults; starting in Caucasians before the age of 20 years, while in Africans before the age of 30 years. Due to an increase in its incidence more people are giving medical attention to its psychological effects. Studies regarding loss of hair pigmentation and associated factors have been done in other Asian countries like Turkey and India. The exact etiology for premature greying of hair (PGH) remains uncertain to this day but low serum calcium, serum ferritin and vitamin D3 levels have been linked to premature greying of hair. A decrease in the synthesis of melanin is associated with the reduced activity of tyrosine. Free radical theory of hair greying has also been suggested. PGH has been found to be associated with a number of autoimmune diseases, disorders of endocrine systems, UV radiation, drugs, smoking, deficiencies of trace elements and nutritional deficiencies. Calcium and vitamin D3 deficiencies play a less prominent role. It is an indicator for either genetic diseases or non-genetic diseases such as myocardial infarction, congestive heart failure, stroke, liver cirrhosis, or cancer.

Cosmetic choices such as the use of hair products, hair dyes may damage the hair by breaking through the cuticle shield to invade the cortex. They may also cause an autoimmune reaction leading to alopecia or a skin disease called dermatitis, blow drying, straightening machines. When hair is straightened or curled, tremendous heat is applied in order to change its natural shape. This converts the protein cystine to cysteine and then manipulated into a certain look, before changing back. However, in the process some amount of cystic acid is generated. This process results in 20 percent of the hair getting destroyed and could lead to canities.

I. Homoeopathic Remedy For Premature Greying Of Hair

1. Lycopodium Clavatum

Therapeutic action - Lycopodium clavatum is a natural homeopathic medicines prepared from a plant named 'club moss' from the Lycopodiaceae family. Lycopodium acts profoundly on the entire organism. Lycopodium is an remedy for halting the process of greying of hair when the de-pigmentation of hair occurs in spot. It acts in the most natural and harmless manner to halt the canities, hairfall, eczema and Psoriasis.

METHODOLOGY

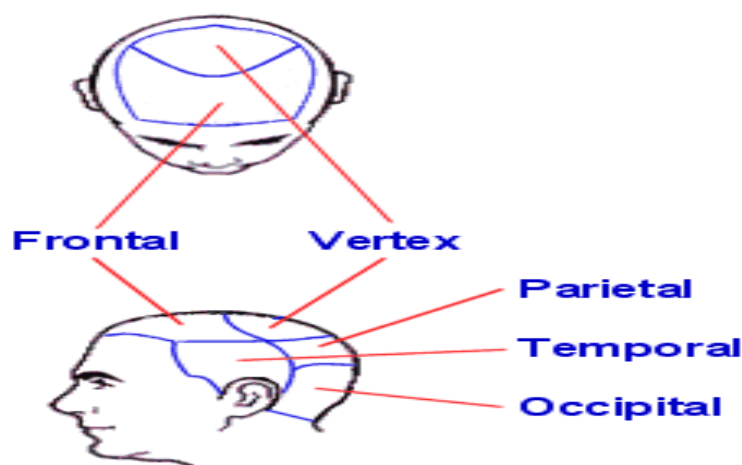
Ethical committee clearance obtained from institution prior to the study. Signed informed consent obtained from all the participants. Selection of volunteers was based on inclusion and exclusion criteria after obtaining informed consent from signed. Subjects was randomly selected into two groups by using randomization. GROUP A: Study group with Lycopodium 200 (1dose with every 15days follow up) (n=7). GROUP B: Control group SL (with every 15days follow up) (n= 7). Pre-assessment was done before the intervention. Intervention was done for the Duration of 3 consecutive months. Entire scalp surface was divided into 5zones i.e. Frontal region, vertex, right temporal, left temporal and occipital region of the scalp and the observations was recorded in a tabular form. Analysis was done on the basis of observations of intensity of grey hairs before the study & after the study. Intensity of grey hairs monitored during follow up on every 15thday till 3months, efficacy of Homeopathic medicine in the treatment of premature graying of hair in teenagers and early adult group was assured by calculating the percentage of cure.

INCLUSION CRITERIA:-

- 12 to 30years of age [teenagers and young adults].
- Both sexes.
- Cases of premature graying of hairs.

EXCLUSION CRITERIA:-

- Subjects with any systemic co-morbidities.
- Weak and debilitating persons.

Figure.1 - AREAS OF SCALP**Table.1 - GRADES OF CANITIES**

NUMBER OF GREY HAIRS	GRADE	SCORE
No. of grey hair	Grade 0	0
Mild Greying	Grade 1	Less than 20
Moderate Greying	Grade 2	20-30 grey hair
Severe Greying	Grade 3	More than 30

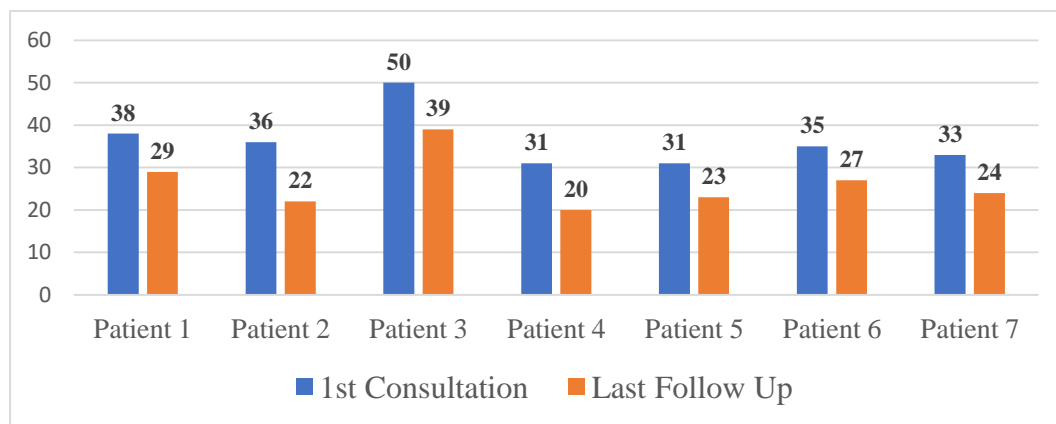
RESULT AND ANALYSIS

The following was inferred in the study of 14 cases which were taken is randomly for the study. 7 of these cases were prescribed lycopodium 200 (Experimental group) and the remaining 7 cases were prescribed placebo (control group) and the conclusion was arrived at following the statistical analysis.

The statistical analysis made here is based on the data obtained from the 14 patients (7 experimental group & 7 control group).

**Table No. 2 - DISTRIBUTION OF CASES ACCORDING TO TREATMENT OUTCOME
EXPERIMENTAL GROUP**

	1 st Consulta- tion (No. of Gray Hairs)	F/U-1 (No. of Gray Hairs)	F/U-2 (No. of Gray Hairs)	F/U-3 (No. of Gray Hairs)	F/U-4 (No. of Gray Hairs)	F/U-5 (No. of Gray Hairs)	F/U-6 (No. of Gray Hairs)	GRADE
Patient-1	38	38	38	38	35	31	29	G1
Patient-2	36	36	36	35	30	24	22	G2
Patient-3	50	50	50	46	44	41	39	G3
Patient-4	31	31	31	30	27	23	20	G2
Patient-5	31	31	31	31	29	25	23	G2
Patient-6	35	35	35	34	31	30	27	G2
Patient-7	33	33	33	32	30	28	24	G2

Chart No.1- DISTRIBUTION OF CASES ACCORDING TO TREATMENT OUTCOME EXPERIMENTAL GROUP

The graph shows reduction in grey hairs in all the 7 patients from the first consultation to the last follow up

Table No. 3- DISTRIBUTION OF CASES ACCORDING TO TREATMENT OUTCOME CONTROL GROUP

	1 st Consultation (No. of Gray Hairs)	F/U-1 (No. of Gray Hairs)	F/U-2 (No. of Gray Hairs)	F/U-3 (No. of Gray Hairs)	F/U-4 (No. of Gray Hairs)	F/U-5 (No. of Gray Hairs)	F/U-6 (No. of Gray Hairs)	GRADE
Patient-1	20	20	20	20	20	20	20	G2
Patient-2	20	20	20	20	20	20	20	G2
Patient-3	35	35	40	35	35	35	35	G2
Patient-4	30	30	30	30	30	25	30	G3
Patient-5	30	30	30	30	30	30	30	G3
Patient-6	35	35	35	35	35	35	35	G3
Patient-7	20	20	20	20	20	20	20	G3

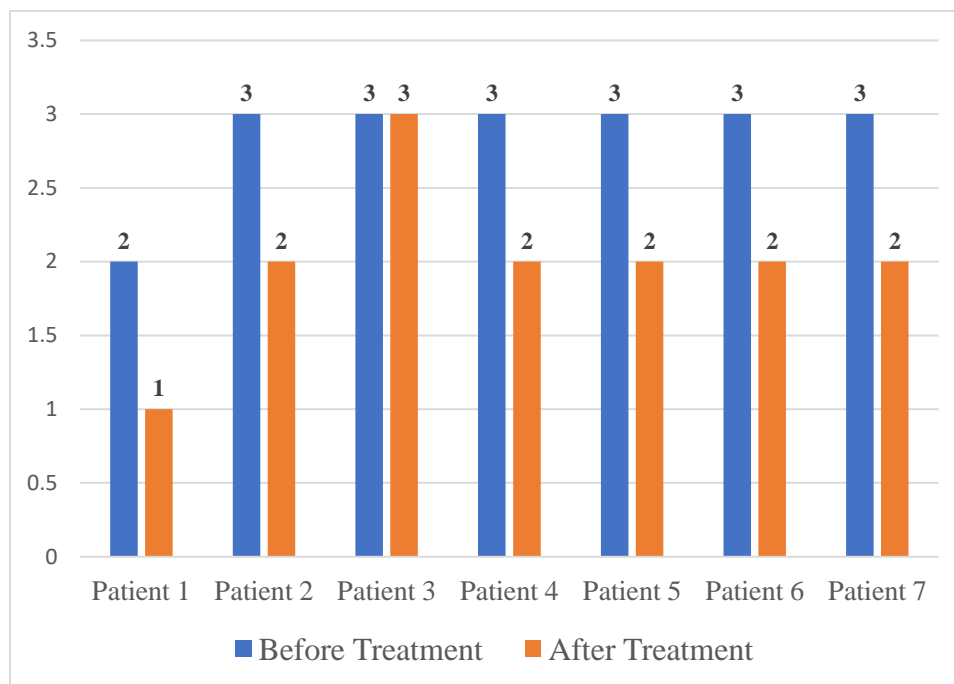
CONTROL GROUP	T0						T1(15)						T2(30)						T3(45)						T4(60)						T5(75)						T6(90)																								
	F	V	RT	LT	O	G	F	V	RT	LT	O	G	F	V	RT	LT	O	G	F	V	RT	LT	O	G	F	V	RT	LT	O	G	F	V	RT	LT	O	G	F	V	RT	LT	O	G	F	V	RT	LT	O	G													
	V8	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2	1	N	N	1	2					
	V9	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2	5	N	N	1	2
	V10	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3	2	N	N	5	3					
	V11	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3	2	N	N	1	3										
	V12	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3	5	N	N	2	3										
	V13	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3	3	N	N	5	3										
V14	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1	1	N	N	2	1											

ZONES= F-frontal, v-vertex , RT.T-right temporal ,LT.T-left temporal, O-occipital.

GRADES= G0- nil (no of grey hairs), G1-mild(less than 20), G2-moderate(20-30 grey hairs), G3-severe(more than 30)

Table No. 4 - DISTRIBUTION OF CASES ACCORDING TO GRAYING SEVERITY SCORE EXPERIMENTAL GROUP

	BEFORE TREATMENT	AFTER TREATMENT	INFERENCE
Patient-1	G2	G1	Significant Change
Patient-2	G3	G2	Significant Change
Patient-3	G3	G3	No Significant Change
Patient-4	G3	G2	Significant Change
Patient-5	G3	G2	Significant Change
Patient-6	G3	G2	Significant Change
Patient-7	G3	G2	Significant Change

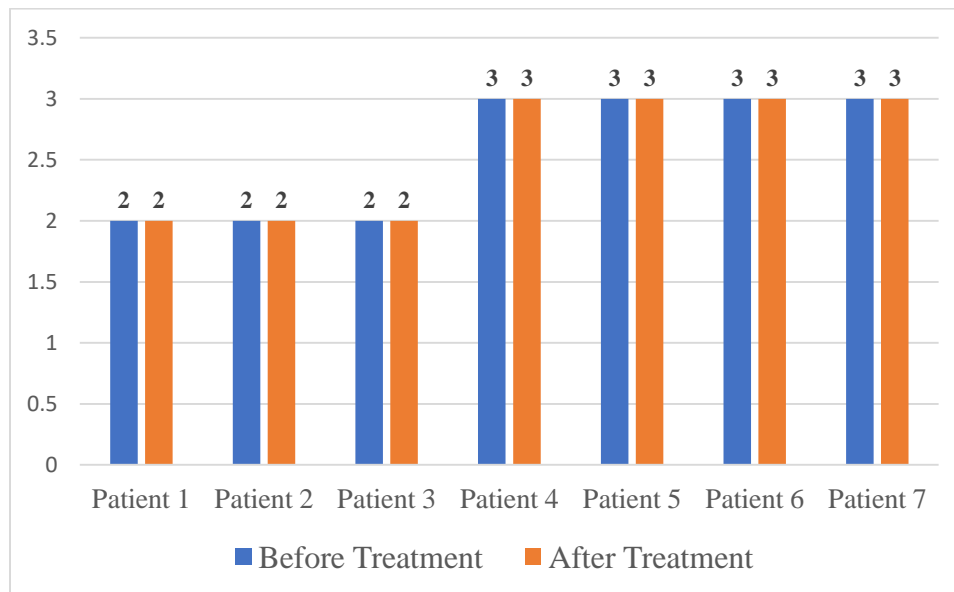
Chart No. 4- DISTRIBUTION OF CASES ACCORDING TO GRAYING SEVERITY SCORE EXPERIMENTAL GROUP

The graph shows significant changes in graying severity score in 6 patients from the first consultation to the last follow up

Table No. 5 -DISTRIBUTION OF CASES ACCORDING TO GRAYING SEVERITY SCORE CONTROL GROUP

	BEFORE TREATMENT	AFTER TREATMENT	INFERENCE
Patient-1	G2	G2	No Significant Change
Patient-2	G2	G2	No Significant Change
Patient-3	G2	G2	No Significant Change
Patient-4	G3	G3	No Significant Change
Patient-5	G3	G3	No Significant Change
Patient-6	G3	G3	No Significant Change
Patient-7	G3	G3	No Significant Change

Chart No. 5 - DISTRIBUTION OF CASES ACCORDING TO GRAYING SEVERITY SCORE CONTROL GROUP



The graph shows no significant changes in graying severity score in all the 7 patients from the first consultation to the last follow up



FIGURE.2 - Changes in colour of hair turning more and more darker and thickness of hair can be seen.

DISCUSSION

In the experimental group out of 7 subjects all shown decrease in grey hairs after treatment (on 90th day). But as per GSS scale there was no change in one of subject, yet other 6 shown reduction GSS scale by 1 Grade. Where as in control group out of 7 subjects none of subject shown any improvement in GSS scale or reduction in number of grey hair, after treatment (on 90th day).

CASES PRESCRIBED LYCOPODIUM 200

1. Significant changes in GSS scale is 86%, i.e 6 cases out of 7 cases.
2. No significant changes in GSS scale 14%, i.e 1 cases out of 7 cases.

CASES PRESCRIBED PLACEBO

1. No significant changes in GSS scale, i.e 100% out of 7 cases.

Premature greying of hair was found in the age group 25 years (6 cases 42.85%) and 24 years (6 cases 42.85%) and 23 years (1 case 7.14%), 22 years (1 case 7.14%).

In the experimental group it was observed that the change in the color of hair was gradual in the shaft which was turning more and more darker (Brown to Black) with the new growing shaft where as remaining hair was grey.

CONCLUSION

Lycopodium is an excellent remedy for halting the process of greying of hair when the depigmentation of hair occurs in spots and acts in the most natural and harmless manner to halt the greying of hair. All the subjects for whom Lycopodium was of great help usually suffered from gastric troubles like eructation after the meals, constipation and gas in the abdomen and shown an increased craving for sweets and hot drinks. Few of the subjects from experimental group complain about eructation after the meals & flatulence during the study period.

Homoeopathic medicines need not to be taken continuously, as compared to chemical drugs; which are taken until the body responds, then healing occurs spontaneously and treatment is halted. The Homoeopathic remedies only need to be repeated if the symptom progress is hindered or halted, here in this study Lycopodium 200 was repeated at interval of 15 days as a fixed protocol. This eliminates the compliance issue we experience with chemical drugs; as they operate only on a physiological level. Homoeopathic medicine can be taken safely along with dietary and lifestyle changes to achieve the maximum results.

Patient education is of the utmost importance with special attention to dietary Vitamin D3, Vitamin B12, Folic Acid consumption to rule out any dietary deficiency, as most of study subjects were migrated for studies from different states and they were consuming food offered in the college mess.

An important aspect evident in this Homoeopathic research study is that, it has proved to be effective despite the fact that a language barrier might have existed during the case taking or consultation between the researcher and the subject, as most of study subjects were migrated for studies from different states. It would still be advisable to speak the same language as the subject; this would enable the clinician to be more efficient. Communication was a problem when inquiring mental symptoms experienced by the subjects though this study was not aimed at individualistic treatment. With respect and honour to Dr. Samuel Hahnemann I conclude in this study that Lycopodium is highly effective in treatment of premature greying of hair (change in GSS scale was 86% among experimental group).

This work would be helpful in our day to day practice to understand Lycopodium. It would be interesting to conduct a study on a larger population. A very important aspect to consider in future studies or even in clinical practice is the prolonged time factor it takes to complete such a case study exercise. Obviously as the clinician becomes more proficient with Homoeopathy it will be easier. The time frame for this kind of case study was very small (3months), as one has to gain the confidence of the subject and this takes time which is important to develop a rapport. So this work has to be studied further for long period of time, to evaluate more about efficiency of Lycopodium in different type of clinical cases, and conditions; therefore, this is an opening window for the new field of researches.

BIBLIOGRAPHY

1. Daulatabad D, Singal A, Grover C, Chhillar N. Prospective Analytical Controlled Study Evaluating Serum Biotin, Vitamin B₁₂, and Folic Acid in Patients With Premature Canities. *International Journal of Trichology*. 2017 Jan;9(1):19.
2. Saxena S, Gautam RK, Gupta A, Chitkara A. Evaluation of Systemic Oxidative Stress in Patients With Premature Canities and Correlation of Severity of Hair Graying With the Degree of Redox Imbalance. *International Journal of Trichology*. 2020 Jan 1;12(1):16.
3. Bhat RM, Sharma R, Pinto AC, Dandekeri S, Martis J. Epidemiological and Investigative Study of Premature Graying of Hair in Higher Secondary and Pre-University School Children. *International Journal of Trichology*. 2013 Jan;5(1):17.
4. Pandhi D, Khanna D. Premature Graying of Hair. *Indian Journal of Dermatology, Venereology, and Leprology*. 2013 Sep 1;79(5):641.
5. Boericke W. *Pocket Manual of Homeopathic Materia Medica Comprising the Characteristic and Guiding Symptoms of All Remedies*. 09th repeated Ed. New Delhi, India: B. Jain; 2016.
6. Kent J. *Lectures on Homeopathic Material Medica*. 1ST Ed. New Delhi: Jain Pub. Co.; 1980.
7. Saad M, Babar NF, Majeed R, Rehman AU, Khan OA, Chatha DE, Aamir U, Nadeem A, Abbas S. Impact of Premature Greying of Hair on Socio-cultural Adjustment and Self-esteem among Medical Undergraduates in Foundation University, Islamabad. *Cureus*. 2019 Jul;11(7).
8. Anagha Bangalore Kumar, Huma Shamim, Umashankar Nagaraju. Premature Graying of Hair: Review with Updates. *Int. J Trichology*. 2020 28th Sept; 10(5): 198–203.
9. Tobin DJ, Paus R. Graying: Gerontobiology of the hair follicle pigmentary unit. *Exp Gerontol*. 2001;36:29–54.
10. Goodier M, Hordinsky M. Normal and aging hair biology and structure ‘aging and hair’ *Curr Probl Dermatol*. 2015;47:1–9.