

A Single Blind Randomized Control Study to Endeavor the Effect of Wiesbaden Dilution 30C in the Treatment of Telogen Effluvium

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ABSTRACT

Background and Objective: Telogen effluvium is a hair shedding disorder, which is characterized by an abnormal increase in the amount of hair shed from the scalp.

The current study is aimed at finding the effectiveness of Wiesbaden Dilution 30C in managing Telogen Effluvium using Hairpull test

Methods: A study at MNR Homoeopathic Medical College assessed 550-600 students experiencing excessive hair fall (100+ hairs/day). 60 severe cases with positive hair pull tests were selected based on inclusion/exclusion criteria. Randomized into two groups (odd/even method):

Group A (n=30): Wiesbaden 30C once/week for 4 months

Group B (n=30): Placebo once/week for 4 months

Hair pull tests were conducted at baseline and monthly intervals. Patient progress was monitored for 4 months.

Results: Efficacy of Wiesbaden 30C was evaluated by comparing pre- and post-treatment hair pull test results. Notably, 23 out of 30 patients (76.66%) in the Wiesbaden 30C group demonstrated significant reduction in hair fall, indicating substantial improvement.

Results highlighted 76.66% success rate in reducing hair fall, 23 patients showed

significant improvement. Wiesbaden 30C treatment yielded promising outcomes

Conclusion: This study confirms Wiesbaden 30C's efficacy in treating Telogen Effluvium, with 76.66% success rate (23/30 cases), No adverse effects, new hair growth, including darker hairs. Most affected age group was 18-25 with higher incidence in females. Clinical verification supports Wiesbaden 30C's effectiveness in managing Telogen Effluvium, irrespective of age and gender. Results suggest potential therapeutic benefits for excessive hair fall.

Keywords: Telogen Effluvium, Excessive Hair Fall, Homoeopathy, Hair Shedding Disorder, Wiesbaden 30C, Clinical Trial, Hair Fall Treatment

INTRODUCTION

Telogen Effluvium was initially described by Saboraud in 1932 and he called it "defluvium capillorum". The term Telogen Effluvium was coined by Kligman in 1961. He hypothesized that it was because of premature termination of anagen follicles. Telogen Effluvium has been defined as "a diffuse, non-scarring and reversible type of alopecia due to abnormality of hair cycle, occurring as a reaction pattern to various physical and mental stressors ^[1]. Nearly after 3 months of stressful events, the hairs

begin to fall and continue until all the telogen hair are lost^[2].

Normally the 3 phases (anagen, catagen and telogen) of growth cycle of adjoining hair follicles are asynchronous. When anagen (growth) phase of several adjoining hair follicles is aborted at the same time, they all enter telogen (resting) phase synchronously and are then shed simultaneously and this called Telogen Effluvium^[3].

Age, gender, race and genetic factors influence the normal average daily loss of hair in an individual. Hair loss can also occur in relation to different conditions affecting the quality of life of a person. The loss of hair is more common in women due to parturition, cessation of an oral contraceptive and crash dieting.^[4] It can also be affected by the daily increasing levels of stress in one's life. The effect of age is also unclear, with elderly women being reported to be more susceptible to acute telogen effluvium (ATE) following high fever, surgical trauma, severe haemorrhage, or immense psychological stress^[5] Telogen effluvium is the second most common cause of alopecia after androgenetic alopecia in the USA^[4].

Telogen Effluvium (TE) presents with excessive scalp hair loss, often accompanied by thinning, prompting anxiety and fear of baldness. Patients typically report a precipitating event 3-4 months prior. Clinical findings include Diffuse scalp hair shedding, Gentle hair pull yields multiple telogen hairs, Hair loss across scalp, sides, and back, Short, fine regrowing hairs near scalp, No scalp abnormalities, Possible nail changes include Beau lines (transverse lines/grooves on fingernail/toenail plates). Symptoms reflect a sudden shift from anagen to telogen phase, triggered by stress, hormonal changes, or other factors^[6]

Telogen Effluvium can be clinically diagnosed through hair pull test. It is done by grasping around 40 hairs and giving a light hair pull, which will extract loose hair. The presence of excessive telogen hairs supports the diagnosis of TE. A false negative test (>4-6 telogen hairs) due to

recent shampooing and conversely a false positive hair pull test will be noted if the patient has not shampooed or combed for several days. In acute telogen effluvium, it is positive at the vertex and the scalp margins. Paradoxically a negative hair pull test does not exclude the diagnosis of telogen effluvium.^[7]

Aims & Objectives

- The aim of this study is to determine how effective Wiesbaden 30C is in treating Telogen Effluvium.
- The objective is to determine the effectiveness of Wiesbaden 30C in treating Telogen Effluvium through hair pull test.

LITERATURE REVIEW

- Medcin Research, Brazil conducted a comparative evaluation between two oral nutritional supplements where female adult patients with telogen effluvium of group 1 were given supplement composed of zinc, biotin, iron, vitamins A, C, E, and B complex, folic acid, magnesium, and amino acids of keratin and collagen and group 2: calcium pantothenate cystine, thiamine nitrate, medicinal yeast, keratin, and aminobenzoic acid for 180 days after which there was significant improvement only in group 1.^[8]
- Molecular Dermatology Research Center, Iran conducted a histopathological study with hair counts on 114 cases diagnosed with non-scarring alopecia. The findings showed that Androgenetic alopecia (AGA) was the most common subtype followed by alopecia areata (AA) and combined AGA/telogen effluvium (TE).^[9]
- Department of Dermatology, Leicester conducted a study to investigate the process of cytotoxic hair loss and any protective effect on the hair of pre-treatment with topical calcipotriol in Breast cancer patients receiving chemotherapy. After results there was a consequent decrease in normal telogen

- hairs, baseline mean 98% of all telogen hairs falling to 55% ($P = 0.0005$) during treatment. ^[10]
- Department of Dermatology and Paediatrics, USA conducted a study on a group of 355 patients (346 females, 9 males) having Chronic Telogen Effluvium and on Androgenetic alopecia (193 male, 219 female). Significant degrees of inflammation and fibrosis were present in only 10% to 12% of cases of CTE and normal controls, but occurred in 37% of cases of AGA. CTE ran a prolonged and fluctuating course in many patients. ^[11]
 - Skin and Cancer Foundation, University of Melbourne conducted a study on 207 women presenting with chronic diffuse hair loss had three 4-mm punch biopsy sectioned horizontally. The findings were compared with 305 women who underwent two biopsies (horizontally and vertically). By using each single biopsy as the criterion for diagnosis, 398 (61%) were classified as Female Pattern Hair Loss, 99 (16%) as Chronic Telogen Effluvium, and 124 (20%) as indeterminate. ^[12]
 - 113 children with hair loss and scalp disorders consulted the University of Nigeria Teaching Hospital Skin Clinic between February 2002 and March 2003. The data collected included age, sex, clinical presentation, associated symptoms, and family history. Laboratory tests [full blood count (FBC), thyroid function test (TFT), antinuclear antibody (ANA), urinalysis], microscopic examination etc were conducted. Commonly occurring diagnoses were tinea capitis (62; 54.9%), alopecia areata (43; 38.1%), psoriasis (5; 4.4%), and telogen effluvium (3; 2.7%). ^[13]
 - Division of Dermatology, Italy studied 1932 patients with hair loss were submitted to the modified wash test (which counts the total number of telogen hairs lost and the percentage of vellus hairs) and divided into patients having pure Telogen Effluvium (403), patients with Androgenetic Alopecia +Telogen Effluvium (1235) and patients with pure Androgenetic Alopecia (294). Dystrophic hairs were detected with a low magnification microscope. Dystrophic hairs were observed in 13 patients with TE (3.2%), in 54 with AGA+TE (4.4%) and in none with AGA. In addition, 7 patients with TE and 32 with AGA+TE developed small patches of alopecia areata in 6 to 9 weeks. No patches developed in patients with AGA. ^[14]
 - Eshini Perera and Rodney Sinclair's retrospective study examined the efficacy of oral minoxidil in treating chronic telogen effluvium (CTE) in women. Results showed significant improvements in hair shedding scores and trichodynia symptoms after 12 months of treatment. While some side effects were observed, they were generally mild and manageable. The study suggests that oral minoxidil may be an effective option for women with CTE. ^[15]
 - A study conducted by Olsen et al. investigated the prevalence of iron deficiency (ID) in women with female pattern hair loss (FPHL) or chronic telogen effluvium (CTE). They compared these groups to a control group of women without hair loss. The study found that the incidence of ID was similar across all groups, regardless of menopausal status or hair loss diagnosis. This suggests that iron deficiency is not a significant factor in causing FPHL or CTE. ^[16]
 - A study by Karashima et al. investigated the effectiveness of oral zinc supplementation in treating zinc deficiency-related alopecia. They found that zinc administration, in the form of polaprezinc, was successful in improving or curing hair loss in five patients with telogen effluvium. The researchers suggested that zinc may play a crucial role in maintaining normal hair

growth by supporting the activities of metalloenzymes, hedgehog signaling, and immunomodulation. [17]

MATERIALS & METHODS

100 students studying in MNR Homoeopathic Medical college who were having around 100s of hairs falling a day were assessed through the hair pull test in March 2023. Out of which 60 patients were having severe hairfall and were having a positive hair pull test. These cases were taken as samples on the basis of Inclusion and Exclusion criteria. The 60 patients were allocated randomisation using the odd even method. Group A was the medicine group containing 30 patients who were administrated with Wiesbaden 30C once a week for a period of 3 months. In addition, the other group, Group B was the control group having 30 patients who were given Placebo once a week for 3 months from a certified pharmaceutical. The hair pull test was done before the treatment. It was done once in every month for a period of 3 months. Recording of progress of patients was observed for a period of 4 months.

All the information collected in the study was kept strictly confidential and the identity of the patient will not be revealed as per the law.

Ethical clearance from the Institution and Ethical Committee was taken. Consent was taken from the participant.

All medicines were procured from GMP certified pharmaceutical companies approved by the Institutional Ethical Committee. Drug was acquired from standard homeopathic pharmacy and drugs were stored as per the rules of Indian Homoeopathic Pharmacopoeia.

STATISTICAL ANALYSIS

Results were subjected to statistical analysis and hypothesis were tested using Unpaired t test

RESULT

Age groups 18 to 25 were taken into the study. Out of these, the age group 22-23 showed increasing frequency with ranging 50% shown in the below table 1 & figure 1

Age Group	Frequency	Percentage (Approx.)
18-19	11	18.3
20-21	16	26.6
22-23	30	50
24-25	3	5
26-27	0	0
28-29	0	0
30-31	0	0
Grand Total	60	100

Table 1 Distribution of age

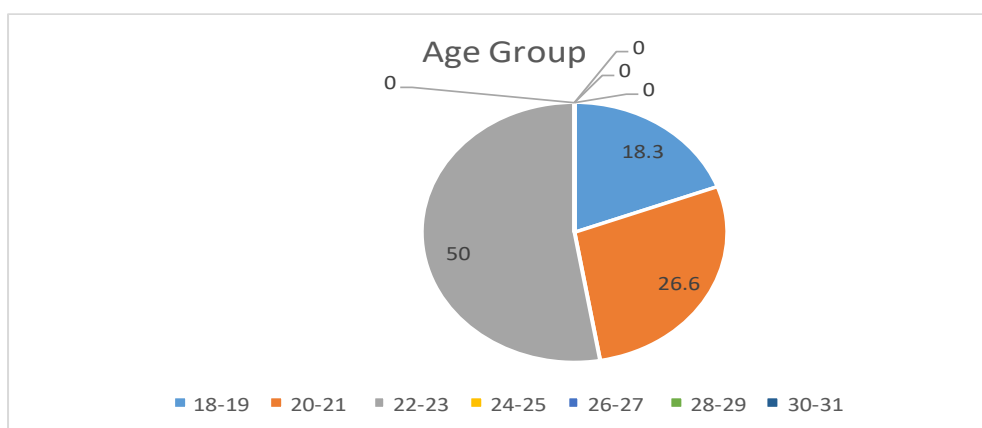


Figure 1 Distribution of age

Out of the 56 females who were included in the study, 25 females (44%) have shown a remarkable improvement. In addition, out of

the 4 male who were in the study, 1 male (25%) has shown improvement, which is given in Table 2 & Figure 2.

	No of cases	Improved	Percentage
Male	4	1	25%
Female	56	25	44%

Table 2 Improvement rates in Gender

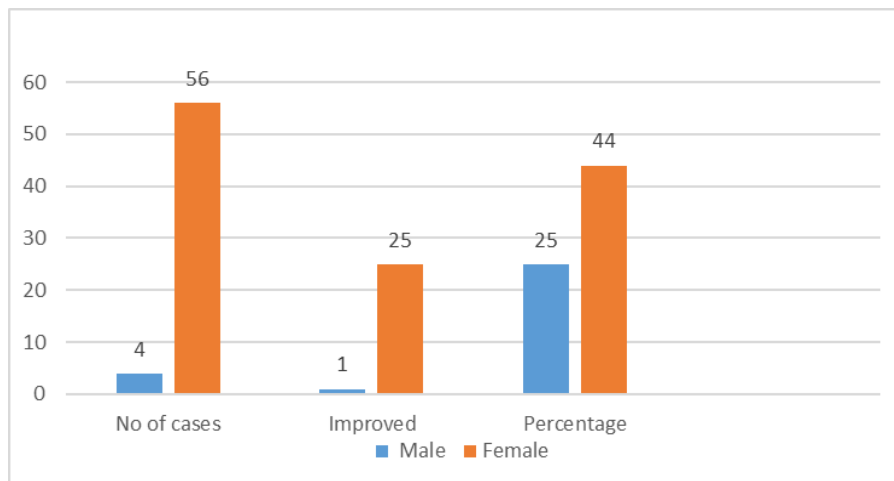


Figure 2 Improvement rates in Gender

Out of the 30 patients of the medicine group, 23 cases (76.6%) have been cured. 5 cases (5%) have dropped due to

aggravations. In addition, 2 cases (6.66%) persist as same, which is shown in Table 3 & Figure 3.

Effectiveness	Number of cases	Percentage
Cured	23	76.6%
Dropped	5	16%
Persist as same	2	6.66%

Table 3 Distribution of cases on Effectiveness of treatment in Wiesbaden 30C group

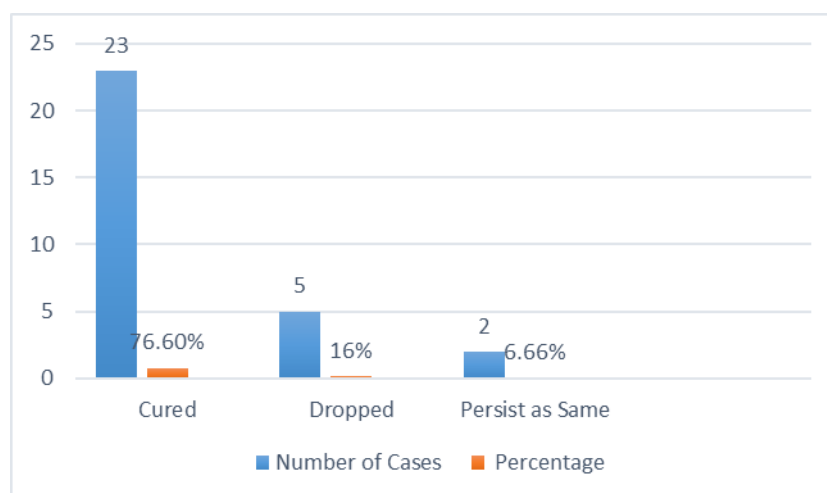


Figure 3 Distribution of cases on Effectiveness of treatment in Wiesbaden 30C group

Results were subjected to statistical analysis and hypothesis were tested using Unpaired t test.

The Degree of freedom [df] for my study is [df = n_1+n_2-2] is 58. The standard probability value for this study is $p = <0.05$. As my calculated value is 8.97 and the table value is 1.672, my research hypothesis is accepted and null hypothesis is rejected. That means Wiesbaden 30C is effective in controlling Telogen Effluvium.

DISCUSSION

The study included people of ages 18-30, but 18-25 age group had more frequency. Among 60 cases 56 (93.3%) are female and 4 (6.7%) are male. Many studies have stated that there is no gender discrimination in male and female for Telogen effluvium. However, in my study females had more frequency for hairfall. The cure rates in males and females are 44% and 25% respectively. Among Wiesbaden group which included 30 individuals, 23(76.6%) have shown complete cure, 2(6.66%) persist as same and 5(16%) dropped. In Placebo group which included 30 individuals, 3(10%) got cured, 26(86.66%) persist as same and 1(6.66%) dropped. Few individuals were facing severe aggravations (increased hairfall) due to which they dropped out of the study both from the medicine and placebo group. Out of 30 cases of Wiesbaden, 23(76.66%) are improved and 30 cases of Placebo, 3(10%) improved. Many individuals have also noticed that along with hairfall their hair texture has also improved. People noticed growth of new baby hairs. Their hair turned smooth and straight and they became dark in colour too. A few also noticed that the split and dry ends of the hairs were improved.

CONCLUSION

This study concludes that Wiesbaden acts effectively in the treatment of Telogen effluvium as observed during this study. Wiesbaden showed effectiveness in 23 cases (76.66%) irrespective of the age and gender

without any adverse effects. Wiesbaden has helped many in controlling the hairfall. It has caused growth of new hairs on the scalp. It has proved the growth of new dark hairs, which were darker than before. The most effected age group was 18-25 which had more frequency. Through my study, I have noticed that females had more frequency of Telogen Effluvium. The study had assessed the effectiveness of Wiesbaden in Telogen Effluvium when administered in 30C attenuation. Based on the outcome of this study we have clinically verified the use of Wiesbaden in Telogen Effluvium.

Declaration by Authors

Ethical Approval: Approved

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Conflict of Interest: There are no conflicts of interest in my project

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