Cyclical medicine for hair loss management and improved results in hair transplantation

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Cyclical medicine for hair loss management and improved results in hair transplantation

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Apart from androgenetic changes, hair loss, especially in women, has been attributed to internal factors such as nutritional deficiencies, hormonal imbalance, metabolic changes, and seborrheic scalp. External factors that might contribute to hair loss include dust, pollution, chemical treatments, dyes, excess heat or cold, and poor hygiene. While minoxidil and finasteride are useful for treating androgenetic hair loss, our treatment philosophy is to treat all cases of hair loss with the combination treatment described below.

In this study of 500 patients we combined the use of antioxidants, iron, calcium, zinc, amino acids, and vitamins E, D, and C1-3 with minoxidil and finasteride4-6 to control hair loss, reverse miniaturization, and achieve new hair growth within 2–4 months. The patients were also followed clinically for 2 years and were observed to maintain their improvement. The supplements and finasteride are used cyclically once every 3 days. We believe the cyclical approach helps to prevent vitamin overdose and the side effects of finasteride.

Material and Methods

The study included 500 patients randomly selected irrespective of age, sex, and grade of hair loss who were grouped as follows:

- **Group I:** Male test group with 200 patients who followed cyclical medicine (Tables 1 and 2)
- **Group II:** Male control group with 200 patients of similar age and hair loss grades as Group I, but who followed conventional minoxidil 2% and finasteride 1mg daily
- **Group III:** Female test group with 50 patients who used cyclical medicine; finasteride was not used
- **Group IV:** Female control group with 50 patients of similar age and hair loss as Group III, who used minoxidil 2% and B complex with biotin 260mg daily

### Table 1. Cyclical Medicine Program

- Treatment repeats in 3-day cycles
  - **Day 1:** Antioxidants, Calcium
  - **Day 2:** Iron, Folic Acid & Vitamin C
  - **Day 3:** Amino Acids & Finasteride 1mg (Biotin in females)
- Minoxidil 2% local application every day
- 2% Ketoconazole & Zinc Pyrithione Shampoo every 3 days

All patients were clinically evaluated every 2 months using digital photographs7,8 and folliscope analysis. Evaluations were performed by four different assistants who were not aware of the patient profile and patient group. In male groups, the serum DHT levels were studied every 4 months. Male patients were asked to report any sexual side effects or breast tenderness.9

### Results

Age varied from 15 to 73 years, with 79% of the patients in the range of 21–40. Fifty-five percent of the patients were Hamilton Grades III and IV.

In Group I, the average improvement in density with cyclical medicine was 30% at 2 months and 52% at 4 months.

The average improvement in caliber was 37% at 2 months and 47% at 4 months (Figure 1, A and B; Chart 1). Patients with temporal angle receding and thinning in the crown area also responded well to 4 months of cyclical medicine. In control Group II, density improved by an average of 2% at 2 months and 3.6% at 4 months. Caliber was unchanged in 44% of the patients, it was improved by 1.4% at 2 months and 5.5% at 4 months, at which time 26% of patients still had no improvement.

Group III, female patients on cyclical medicine, showed an average 31% improvement in density at 2 months and 51% at 4 months. The improvement in caliber was 21% at 2 months and 53% at 4 months (Chart 2). Patients with Polycystic Ovarian Disease (PCOD) also responded without the use of anti-androgens (Figure 2, A and B). Receding female hair also showed marginal correction. Control Group IV
patients had follicles of better caliber, which were easy to dissect, easy to handle, and easy to implant. The transplanted hair growth started at 2½ instead of 4 months, and these patients did not have shock loss.

Complications

An irritation to minoxidil 2% solution application was seen in 0.8% patients. One percent of patients in the control group using 1mg finasteride daily reported loss of libido or decreased seminal volume in the first 8 weeks of therapy. This required reassurance and the symptoms improved as the treatment continued. No sexual side effects were reported by any of the patients taking 1mg finasteride once every 3 days.

Discussion

It has been suggested that promoting hair growth requires supplementation of certain minerals, vitamins, amino acids, and antioxidants, as well as control of sebum secretion and antifungal treatment.

There are drawbacks to using vitamins, minerals, and amino acids together. Excess of vitamin A and E lead to improper keratinization of hair and cause hair loss. Absorption of minerals and vitamins is dependant on their relative deficiency in the body; iron and calcium given together reduce the absorption of one another. We have addressed these problems by giving these components once every 3 days. A combination of two different drugs per day was used on a schedule that repeated every 3 days for one complete cycle of 4 months (Table 1). Contents and composition of these readily available over-the-counter preparations used are in Table 2. In female patients the same regimen was followed with 2% minoxidil but finasteride was omitted. The combinations were easy to remember and followed the days of the week. The same drug combinations repeated on Monday/Thursday, Tuesday/Friday, and Wednesday/Saturday, with no medicine on Sundays. Minoxidil 2% was used every day and 0.2% ketoconazole plus zinc pyrithione shampoo twice a week.

Finasteride has good receptor binding and 0.2mg finasteride per day can achieve 60% suppression of DHT levels suggesting that every 3 day dosing may be effective.

Conclusion

Improvement in hair count, hair caliber, and control of hair loss was better with cyclical medicine than in the control groups. Improvement was noted in males and females in all age groups and grades of hair loss at 2 months and continued at 4 months. No patients reported any side effects of finasteride using the cyclical regimen. Pre-conditioning the hair with cyclical medicine before hair transplantation appeared to prevent shock loss, improve growth, and made the grafts easy to dissect and easy to implant.
References