

LE Magazine March 1997

On The COVER

The Hair RE-Growth Formulas Of Peter Proctor, M.D., Ph.D.

Even for people who don't go completely bald, hair loss can be a problem. All people - both men and women - lose hair as they grow older. The hair they manage to hold onto becomes thinner and less pleasing to the eye and touch as it used to be.

THE FAILURE OF MINOXIDIL

In the 1980s, Americans were excited about Minoxidil. Minoxidil was developed as a blood pressure medication by The Upjohn Company. Researchers noticed that as a side effect, the drug grew hair. This "miraculous" ability reached the public, who clamored for it. Finally Upjohn announced, with great fanfare, that it would seek FDA approval to market Minoxidil (now called " Rogaine") for baldness.



As it turns out, however, Rogaine doesn't grow hair very well. Upjohn's latest version of the drug, which was recently approved by the FDA to be sold over-the-counter, is even less likely to work than the prescription version because it is half-strength.

After eight years of clinical experience with Rogaine, the results have been mixed. Some people get benefit, others don't. It seems to work better in women than in men. However, it appears that Rogaine is much better at helping people keep and improve the hair they still have than in growing new hair.

While some terminal hair does regrow in some people who use Rogaine, less than 10% show enough new growth in bald areas to cover them, especially in front. Those who grow a noticeable amount of hair tend to be people whose hair loss is at an early stage.

In people with fine hair, the combination of regrowth plus "deminaturization" of the existing hair can provide an acceptable cosmetic result about 40-50% of the time. As a bonus, most of these people stop getting balder. However, the expense, the side effects and the lack of efficacy of the drug prevent many people from using it.

Although Minoxidil is the only FDA-approved treatment for baldness, people do not have to subject themselves to this drug to grow new hair. State-of-the art hair growth formulas have been developed by physician and scientist Peter Proctor, M.D., Ph.D.

ANDROGENETIC ALOPECIA

Although hair loss is part of aging, it occurs in young people who suffer from a condition called Androgenetic Alopecia (AGA), which leads to accelerated hair loss. AGA is commonly known as Male Pattern Baldness, but, in fact, occurs in both men and women.

The pattern of hair loss varies by gender. With men it usually begins with a receding hair line. In women the pattern is more diffuse, typically sparing the anterior hairline and predominately affecting the crown.

PATHOGENESIS OF ACCELERATED HAIR LOSS



The current model of how accelerated hair loss (AGA) occurs involves a combination of genetic, hormonal and immunologic factors.

Despite what some doctors (and TV infomercials) would have you believe, AGA has nothing to do with clogged hair follicles, which has been the basis for many "hair growth" products. Good scalp hygiene will improve the appearance of, and can add volume to, existing hair but will do nothing to prevent AGA or actually increase hair counts.



There are at least 20 different products on the market today, which claim, either directly or indirectly, that they will grow hair or prevent baldness by "unclogging" hair follicles. The effectiveness of virtually all of these products can be summed up in three simple words-they don't work!

The only exception to this are the compounds Polysorbate 60 and Polysorbate 80-which are found in a few hair products, including LIFE EXTENSION SHAMPOO. Polysorbate 60 and 80 appear to be useful in slowing down hair loss when applied topically because of their ability to emulsify androgen-rich sebum deposits from the scalp. They are rarely able to generate any degree of hair regrowth, however, but may be useful in conjunction with other agents.

HORMONES, IMMUNITY AND HAIR

The latest scientific model to explain baldness involves the action of dihydrotestosterone (DHT)-the major metabolite of the male hormone testosterone. Scientists have found that excessive secretion of DHT stimulates a localized immune reaction, which, in turn, generates an inflammatory response that damages hair follicles, resulting in their miniaturization and eventual loss.

What appears to happen is that DHT (and, perhaps, other androgenic hormones) causes the immune system to react to the hair follicles in the affected areas as foreign bodies. This is suggested by the presence of hair follicle antibodies as well as by the infiltration of immune system cells around the hair follicles of balding men and women.

Blood vessel diseases such as atherosclerosis may also contribute to accelerated hair loss, as evidenced by the higher incidence of these diseases in balding persons.

Successful prevention and treatment of accelerated hair loss necessitates dealing with some, if not all, of these factors involved in the process, except for the genetic component of baldness.

GROWING NEW HAIR-MECHANISM OF ACTION

It is still unclear how Rogaine works. The active metabolite of the drug appears to be minoxidil sulfate. Speculation has centered around its ability to imitate hair growth factors produced by vessel linings such as nitric oxide and other endothelium-derived relaxing factors (EDRFs) If Rogaine is discontinued, the hair will go back to its former state.

ROGAINE IN COMBINATION WITH SIMILAR AGENTS

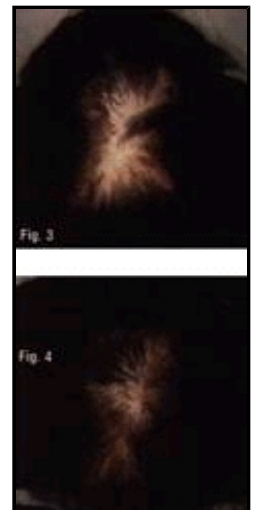
When Rogaine is combined with tretinoin (Retin A), the results are significantly better than with Rogaine alone. Retin-A increases the percutaneous absorption of Rogaine and also appears to promote epithelial and vascular proliferation.

Among the other hair-growth stimulators that appear to work in a manner similar to Rogaine are pyridine N-Oxides and their derivatives, Diazoxide, and Phenytoin (Dilantin), all of which probably also duplicate or enhance naturally occurring levels of endogenous hair growth stimulators such as EDRFs.

In order to maintain a beneficial effect, Rogaine therapy must be continued forever. In many people, a tolerance effect develops after 2-3 years. As a result of this, the drug is often discontinued.

OTHER ANTI-ANDROGEN HAIR GROWTH AGENTS

Since the male hormone dihydrotestosterone is involved in premature hair loss, scientists have experimented with a wide variety of anti-androgens in an attempt to prevent or reverse the process. Among the anti-androgens that have been used to treat hair loss are: Progesterone, Spironolactone (Aldactone), Flutamide (Eulexin), Finasteride (Proscar), Cimetidine (Tagamet), Serenoa



Repens (Permixon) and Cyproterone Acetate (Androcur/Diane). Of these anti-androgens the most effective have proved to be oral Finasteride (Proscar) and topical Spironolactone, both of which have been able to grow hair to some degree, with minimal side effects.

PROSCAR

Proscar-which is already approved for the treatment of benign prostatic hypertrophy-is an inhibitor of 5-alpha reductase, the enzyme that converts testosterone into DHT. Proscar markedly reduces circulating levels of DHT, which inhibits the balding process.

Preliminary data indicate that 58% of men on 5 mg. per day of Proscar will experience a 10% or greater increase in the total number of hairs on their heads. In virtually all the subjects receiving Proscar, there was a halt in the hair loss process. However, about 3-5% of them experienced a reversible decrease in libido and/or penile impotence. Proscar will probably be approved by the FDA for the treatment of hair loss, perhaps in 1 mg doses, within the next two years.

PERMIXON

Permixon, or saw palmetto extract, which also is used to treat benign prostatic hypertrophy, may also be of use in treating baldness. It is both a 5-alpha reductase inhibitor and blocks 50% of the uptake of DHT at its target tissue receptor sites. It has minimal side effects.

To date, there have been no studies published in the medical literature evaluating the effects of Permixon on balding, though it is reasonable to assume that its benefits would be roughly equivalent to Proscar.

SPIRONOLACTONE

Spironolactone, a diuretic anti-hypertensive drug, is currently being prescribed as an anti-androgen therapy for the treatment of female hirsutism (excessive hair growth on the body) (Note: Androgens make body hair grow. They make scalp hair thin). It is also used to treat acne and AGA. Spironolactone blocks the formation and activity of testosterone metabolites (such as DHT) entering hair follicles and oil glands by binding to the receptor protein. Spironolactone reduces scalp hair shedding and initiates scalp hair regrowth.

Spironolactone is effective both topically and orally. Systemic use in men is precluded, however, because its anti-androgenic effect causes loss of libido and gynecomastia (larger-than-normal breasts). There are no side effects associated with the topical use of spironolactone, other than occasional contact dermatitis.

The use of anti-androgens by themselves generally produces a very limited degree of hair regrowth. However, they are necessary and useful as adjuvants to other therapies such as hair-growth stimulators and oxygen free radical scavengers.

IMMUNOSUPPRESSION AND FREE RADICAL SCAVENGERS

The immune response provoked by male hormones such as DHT probably plays the most significant role in balding. Stimulated by androgens, the immune system targets hair follicles in genetically susceptible areas to cause the premature loss of hair characteristic of male pattern baldness and other forms of accelerated hair loss.

Thus, a side effect of the immunosuppressive drug cyclosporine (which is used to prevent the rejection of transplanted organs) is scalp hair regrowth. It may be that cyclosporine is the most potent single hair regrowth agent known. But the drug causes potentially severe toxic side effects when used systemically, including kidney damage, hypertension (high blood pressure)-and even death-which precludes its use as a hair growth stimulant. However, other ways (with no potential for system toxicity) have been found to inhibit the localized immune response that leads to hair loss.

TOPICAL OXYGEN RADICAL SCAVENGERS

Among the most potent hair growth stimulators are topical oxygen radical scavengers such as the superoxide dismutases (SODases)- enzymes that play a critically important role in countering excessive free radical activity throughout the body.

Among the SODases that have been shown to promote hair growth are Tricomin, a patented copper tripeptide from the Procyte Corporation, and "Copperbinding Peptides" from Proctor & Gamble. To give you some idea of how mature this technology is getting, Proctor & Gamble has even patented an SODase inhibitor (DDTC) to block hair growth.

SODases not only inhibit oxygen radicals, they also may inhibit the localized immune response responsible for so much of hair

loss, and may offset some of the damage and inflammation already incurred. Unless the immunologic factors involved in the hair loss process are dealt with effectively in treatment, the potential for significant regrowth may be very limited.

A MULTI-MODAL APPROACH TO HAIR TREATMENT

There are many pharmaceutical agents (such as Rogaine) which can stimulate a degree of hair regrowth in some people. However, none of them alone can produce the kind of cosmetic benefits that balding people desire. What's needed is a multi-modal approach to hair treatment that combines anti-androgens with autoimmune protective agents, oxygen free radical inhibitors, and other hair growth stimulators to halt hair loss and generate hair regrowth to a degree well beyond the abilities of single compounds.

DR. PETER PROCTOR, M.D., PH.D. THE WORLD'S FOREMOST AUTHORITY ON HAIR LOSS AND BALDNESS

Dr. Peter Proctor is the only hair treatment practitioner in the world who has developed unique, patented multi-ingredient hair formulas that address all the known factors in the balding process. He is the author of over 30 scientific articles and book chapters, and holds several broad patents for hair loss treatment.

Dr. Proctor has a dermatology practice in Houston, Texas, where he specializes in the treatment of premature balding and age-related hair loss. Over the past 12 years, Dr.Proctor has successfully treated more than 3,500 people of all ages for hair loss and baldness.

To provide you with examples of the kind of success Dr.Proctor has had with his hair treatment formulas, we've represented in this article before-and-after photographs from several of his patients.

WHY DR.PROCTOR IS NUMBER ONE!

Dr.Proctor has already patented for his hair formulas "copperbinding peptides" that are virtually identical to the compounds in both Tricomin from Procyte and Pileil from Life Medical Sciences. Industry insiders have been buzzing about "miraculous" upcoming "baldness cures" from these companies over the past year and, as a result, the stock of both companies has risen considerably. In Dr. Proctor's formulas, however, copperbinding peptides are only one component. His multi-modal approach has enabled him to achieve better hair growth results than anyone else.

In fact, Dr.Proctor is so far ahead in hair growth research that both the Upjohn Corporation and Unilever have had major European hair loss patents rejected because Dr.Proctor made the discoveries first.

HOW CAN A SINGLE PHYSICIAN BE SO FAR AHEAD OF MULTI-BILLION DOLLAR CORPORATIONS?

One reason is that-in contrast to drug companies-private physicians can use any approved agent for any medically indicated purpose. As a result, they can easily explore, develop, and quickly refine new therapies. Many new therapies are developed by private physicians, scientists and laboratories, but usually they are sold to major pharmaceutical companies.

Another reason that Dr. Proctor has been able to singlehandedly develop effective hair regrowth products is that in addition to being a physician, he is also a pharmacologist who has been active in skin drug research for more than 25 years.

DR. PROCTOR'S HAIR TREATMENT FORMULAS

Dr. Proctor offers both prescription and non-prescription hair treatment formulas, which vary both in potency and cost. However, even the least potent of Dr. Proctor's formulas has proven to be superior to Rogaine.



Dr.Proctor's Hair Regrowth Shampoo

The least expensive of Dr.Proctor's hair regrowth formulas is Dr.Proctor's Hair Regrowth Shampoo. This formula includes an abundant supply of the most potent hair growth stimulator available- NANO (3-carboxylic acid pyridine-N-oxide), which is known as "natural" Minoxidil.

Dr.Proctor's Hair Regrowth Shampoo has been shown to work effectively in many people who have not responded to Rogaine. It may be all you need if you have only experienced small-to-moderate hair loss, or if your primary need is for a prophylactic program.

Dr.Proctor's Hair Regrowth Shampoo should be used whenever you wash your hair (at least 3 times a week). It should be used just like any other shampoo. Some people will feel a "tingling" sensation shortly after they use Dr. Proctor's Hair Regrowth

Shampoo.

DR.PROCTOR'S ADVANCED HAIR REGROWTH FORMULA

The second hair growth formula developed by Dr. Proctor is the Advanced Hair Regrowth Formula. The formula contains a potent dose of a "natural" minoxidil (NANO) combined with EDRF enhancers, SODases, and free radical scavengers.

This multi-agent, natural formula is the most potent natural hair growth formula you can buy. It includes every type of natural hair treatment agent available to counter DHT, autoimmune, and inflammatory effects which cause baldness. Dr.Proctor's Advanced Hair Regrowth Formula is a liquid that is applied to the scalp. It can be used in conjunction with his Hair Regrowth Shampoo or with Rogaine to provide synergetic benefits that may be better than using these formulas alone.

Dr. Proctor's Advanced Hair Regrowth Formula should be used in the following manner: 8-10 drops should be applied to the thinning areas on the scalp once or twice a day. Its only side effect is: Contact Dermatitis (an itchy, scaly rash at the site of application).



DR. PROCTOR'S EUROPEAN HAIR FORMULA

If you have a really serious hair loss problem, you may need to try Dr.Proctor's most potent hair growth formula, which contains an array of natural hair growth protectors combined with several drugs compounded into a cream. Dr. Proctor's European Prescription Hair Regrowth Formula contains topical anti-androgens which increase EDRF levels and oxygen free radical scavengers. These agents are combined with the following drugs: Minoxidil, phenytoin (dilatant), tretinoin (Retin-A) and spironolactone.

The protocol for using Dr. Proctor's European Prescription Hair Regrowth Formula is as follows: Apply 1/10 (one-tenth) of a teaspoon. (A dab on the end of your finger) once a day for 8-to-12 months, then every other day for maintenance.

Dr. Proctor Has Achieved an Unprecedented 80% Success Rate in Balding Patients with this Unique, Patented Hair Growth Formula!

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