The Guide.



YAEL HALAAS, M.D. F.A.C.S

Women's Hair Restoration

"Why is this happening?"



Just Breathe.

We know this is tough and just another thing you need to deal with. But this happens and there are solutions. First step is understanding why it is happening to you. Our goal is to provide education and treatments plans available to you & your hair. Hair loss typically revolves around genetics, hormones, and or lifestyle changes. There is hope and light at the end of the tunnel.

Next Steps.

What kind of hair loss are you experiencing? The most common type of hair loss in women is androgenic alopecia (genetic balding). There are other types of hair loss which we will identify throughout this guide—you will notice that the hair protocols cater to almost every category of hair loss and that a maintenance plan is required. Dr. Yael Halaas is an expert in hair restoration and is results driven.

Expectations.

No matter which treatment option is performed, results are not immediate! Please be patient with the process. Hair cells in their re-growth period are fragile while requiring consistency with supplements and treatments. Some patients start to notice results in 3-4 weeks after starting their program, others it can take a minimum of 3-4 months—this all depends on the severity of hair loss and what needs to be done.

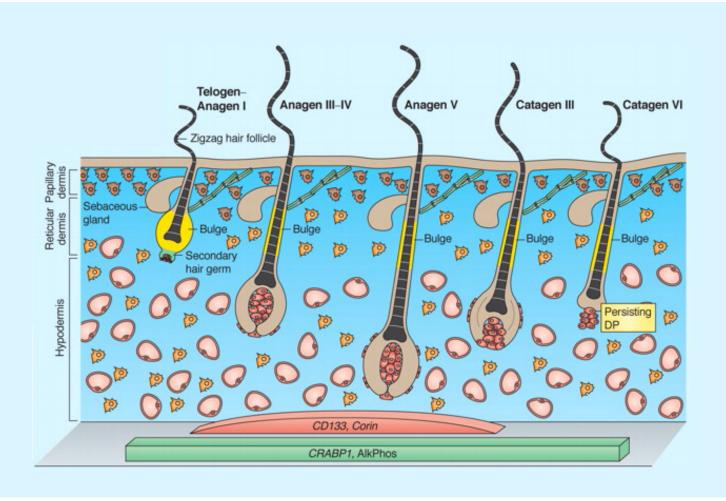
Hair Loss Types



Alopecia Areata	This form of hair loss is an "autoimmune" disease and will typically be seen as patch hair loss on the scalp, but can also target eyelashes and eyebrows.
Androgenic Alopecia	The most common cause of hair loss and thinning for women (also known as Female Pattern Hair Loss). Hormones play a major role in this type of hair loss—women tend to notice this happen when they age and in the frontal areas of their scalp.
Telogen Effluvium	This is a common but temporary cause of hair loss. It usually causes dispersed hair loss throughout the scalp. Women will notice this through increased shedding initially. It can be caused by pregnancy, rapid weight loss, emotional stress, physical trauma, surgery and some medications.
Scarring Alopecia	This rare type of hair loss tends to be more common in African American women. It is caused by inflammation around the hair follicle which eventually causes destruction of the follicle and then scarring.
Traction Alopecia	This type of hair loss occurs from pulling the hair too tightly over prolonged periods of time. Typically this is seen with women wearing their hair in tight ponytails or dreadlocks. The constant pressure on the follicle causes permeant loss.

Hair Growth Cycles





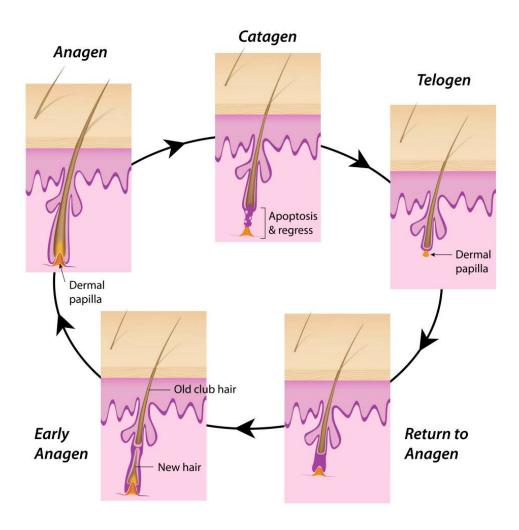
The three phases of the hair growth cycle:

- Telogen (resting phase, 2 days
 - 2 weeks depending on the cycle);
- Anagen (growth phase, lasts 2-4 weeks);
- Catagen (regression, lasts 3-7 days)

All three phases occur simultaneously. One strand may be in Anagen and other in Telogen or Catagen

Hair Growth Cycles





Anagen "Growth phase"

- The longer in this phase, the longer the hair will grow
- 85% of hair on the head is in this phase

Catagen "Transition Phase"

- 1% of all hair
- Hair shaft is pushed upwards despite not having growth

Telogen "Resting Phase"

- Despite the name, epidermal cells living in the follicle continue to grow
- This phase also includes "shedding"



Your Regimen

First Office Visit

- Baseline pictures taken of your scalp showcasing the current state of your hair
- Nutritional analysis of hair
- Hair Densitometer test
- Hair Information sheet given
- Hydrafacial & Keravive treatment for cleansing performed to scalp
- Phllotex® supplements taken home

Treatment Plan

- Based on the first office visit, we will determine which treatments for your hair and scalp will make the most sense
- Every patient should be taking their daily dosage of hair supplements and doing a monthly Hydrafacial & Keravive session in-office
- Check-in with your coordinator & provider to make sure they are in the loop with your progress





Hydrafacial Keravive

The Facial Your Scalp Never Had.

This may seem obvious or not, but an improvement to the scalp starts with proper cleansing just like your skin. When women begin the treatment plan from their initial assessment, it is important for them to know that one of the major contributors to thinning and damaged hair is poor scalp health. This can be identified by dry skin, clogged follicles, dead skin cells, and poor circulation.

The Serum.

Our proprietary serum consists of Hydrafacial's patented Vortex Technology, Keravive Peptide complex & skin proteins, growth factors, special ingredients such as EGF, VEGF, BFGF, and Thymosin Beta=4. So what does that mean? It means this formula contains the natural ability to stimulate blood vessels, produce keratin, and improve microcirculation of the scalp —resulting in a 200 times more concentrated formula than any other scalp health treatment.



Keravive Regimen

A Personalized Approach to Scalp Health.

Like all Hydrafacial treatments, Keravive is designed for anyone looking to improve their scalp health and experience fuller-looking hair.

Recommended Regimen

In-Office At Home

Once per month for three consecutive months

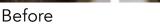
Daily use of the topical takehome spray After initial three months, clients can choose a plan that fits to maintain efficacy:

continuous monthly treatments
- or -

a minimum every 6-months maintenance

Real Results







After









After

Unretouched photographs of subjects at baseline and month 4 following 3 consecutive monthly in office Hydrafacial and Keravive treatments plus 90day continuous use of Hydrafacial Keravive Take Home Spray. Individual results may vary Protocol HF-1801 5/2/2018.

drhalaas.com

PRP Therapy



What is PRP?

PRP (Platelet Rich Plasma) is derived from your own blood and is used as a natural growth factor to improve hair health and regeneration of the cells. This type of therapy used for the hair specifically has been around for over 15 years. The innovation from Dr. Halaas is knowing the proper frequency of sessions, timeline, and combination therapy.

Am I Candidate?

Truly anyone is a candidate for PRP injections, the most important thing to know is that nothing is guaranteed. Although rare, some patients may not see a result from this treatment alone—that is why combination therapy and proper assessment of your type of hair loss is so important.



How is it done?

PRP is a non-surgical treatment that is done in our office (and usually takes less than 1 hour from start to finish). Your blood is taken and put into vials which are then spun to separate the growth factors and platelets. It will then be injected into your scalp. That's it! This should be done monthly for at least 6 months.

Exosomes Therapy



More than 1,000 signaling proteins.

Exosomes are the blueprint for healthy new cells. They include anti-inflammatory cytokines, angiogenic growth factors, anti-tumor signals, cell death inhibitors, regenerative and healing signals.

Messenger RNA (mRNA) - ON Switch -

What is occurring? Exosomes are turning on those key signals in our system to not only improve but strengthen hair cells

Messenger RNA (mRNA) - OFF Switch -

What is not happening? Matrix catabolic enzymes along with chronic inflammatory cytokines which causes cell death

Exosomes are injected into the scalp and can take more than one session to see an improvement. We combine this therapy with hair transplant surgery, PRP (Platelet Rich Plasma) injections, and supplements amongst other treatments.

Exosomes Therapy



Key Points by Main Author, Dr. Yael Halaas

In Vitro Studies

Dermal papilla (DP) cells are mesenchymal-derived cells located at the base of the hair follicle and play a critical role in growth and cycling of hair follicles. The modulatory properties of exosomes on hair growth *in vitro* were first noticed in studies using stem cell-conditioned media. As studies enhanced, exosomes isolated from DP cells increased proliferation of DP cells, hair matrix cells, and outer root sheath cells. Studies using *ex vivo*-cultured human hair follicles found that DP cell-derived exosomes increased hair shaft elongation and prolonged anlagen phase. Similarly, exosomes isolated from activated human dermal fibroblast cultures also enhance hair follicle growth *ex vivo*.

Human Studies

Although mostly anecdotal to date, exosome therapy has shown promising results for humans' hair growth. In one study, hair density and thickness were measured at start of treatment and 12 weeks after exosome treatment in 20 patients with AGA (Androgenetic Alopecia). The researchers reported that exosome therapy increased mean hair density from 105.5 to 122.7 hairs/cm 2 (P < 0.001) and mean hair thickness from 57.5 to 64.0 um (P < 0.001) from baseline to assessment at week 12, respectively.

Phyllotex®



Do I really need this? Yes.

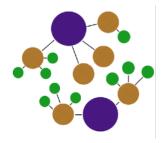
The all natural, vegetarian ingredients that form the nutraceutical Phllotex® were originally formulated by Brazilian-Israeli PhD pharmacologist, Yehoshua Maor, to reduce inflammation and boost the immune system. 74% of women had noticeable results at weeks 8-24. This supplement is used in our protocol to ensure healthy promotion of hair growth and to protect the investment you are making with your other treatments. All good results and overall health start with the immune system—this is why Phllotex® is a vital component to your regimen.



Microvascularization: blood flow to follicles



The right nutrients for healthy follicles



Prevents the hair assassin protein from binding to follicles



Shields hair from environmental stress

Formula YH



Formula YH is uniquely engineered to restore the hair and scalp to normal function. Our prescription formulation combines key ingredients that significantly slow down the progression of hair loss, reduce shedding, make hair thicker, and stimulate hair growth.

Minoxidil has been studied and known to promote hair growth since the 1970's. It prolongs the duration of the Anagen phase of hair (growth phase), and shortens the Telogen phase (rest phase that leads to hair loss). What this means for the patient is that the hair will be able to grow longer without shedding. In addition, it increases blood flow to the scalp resulting in fuller, thicker, healthier hair strands. We have found the combination of Minoxadil and Tretinoin can double the efficacy of simply using Minoxadil alone.

Apply 2-3 sprays to scalp twice daily. Results can be seen as little as 6-8 weeks, but 3-6 months is typically how long it takes for significant results.

Formula YH Pink 6%



Minoxadil, Retinoic Acid, Estradiol, Fluocinolone, Biotin

Recent studies have shown that the most effective dose of Minoxadil for women is actually 5%. This formulation includes Estradiol, which is effective in reversing female hair loss.

Formula YH Green 10%



Minoxadil, Retinoic Acid, Fluocinolone, Biotin

Recent studies have shown that the most effective dose of Minoxadil for men is actually 10%.

Formula YH Blue 10%



Minoxadil, Retinoic Acid, Fluocinolone, Finasteride, Biotin

This formulation includes Finasteride which is effective in reversing hair loss in menopausal women.

drhalaas.com 13

Gallery



