

INTRO

Hair loss is a condition affecting both men and women. Alopecia areata, also known as spot baldness is a very common autoimmune skin disease that causes hair loss on the scalp, face and sometimes on other areas of the body. Autoimmune means that hair loss is due to a mistaken attack of the immune system of hair follicles. It's yet not perfectly understood what lead to baldness. Medical research suggests that for some reason, follicles stop producing visible hair which results in smooth bald patches that can appear overnight. It is scientifically proven that Alopecia and baldness can cause mild to severe psychological stress, individuals with it may experience social phobia, anxiety and depression.

There are many hereditary factors which play a role in hair loss but there could be other factors that trigger alopecia like:

- Age
- The Environment
- Drugs and medications
- Nutritional deficiencies
- Thyroid dysfunction
- Extreme stress
- Pregnancy
- Skin diseases
- Fungal infections

TYPES AND SYMPTOMS OF ALOPECIA

- Male pattern hair loss: Thinning or complete hair loss at the hairline and top of the head.
- Female diffuse hair loss: Gradually hair loss especially on the top of the head. The hairline usually stays the same. But hair keep getting progressively thinner and volume decreases over time.
- Alopecia areata: Broken hair or hair easily removed; one or more round or oval patch.

Hair Loss and Ayurveda

In Ayurveda, hair is considered to be a byproduct of bone formation. The tissues responsible for building bones are also responsible for the growth of hair.

Ayurveda doctors believe that early hair loss is related to body type and the balance of the mind-body constitution (doshas) and those who have excess pitta in their system, are likely to lose their hair early in life or have prematurely thin or gray hair.

Excess pitta in the sebaceous gland, at the root of the hair, or folliculitis can make the person start to lose hair and develop Alopecia.

Other than outright Alopecia, there could be a lot of other problems which can affect one's hair causing psychological distress and worry like - Weakening and Thinning of hair, Dandruff, Dry hair, or even frequent lice infestations. We recognize all these agonising conditions and are working to find the best possible solutions for everyone based on their specific needs.

There are several different herbs that are recognized in Ayurveda for their ability to Strengthen hair roots, Increase hair growth and cure Alopecia. Because this field of study is vast, and no one medicine or herb can act as a wonder cure for everyone, We have spent a lot of time doing vigorous research into the Ayurvedic texts and the latest scientific literature, to formulate the best combinations and the ratios of herbs needed to combat this problem. In this process we have produced new and effective therapies for hair growth which comprehensively attack the disease, fixing both the body and the mind. For a problem like hair loss, where treatment is difficult, the therapies need to be elaborate. Multiple herbal extracts need to be deployed to find optimal results hence our treatment methods are extensive and expand over 4 different products -

1. Capsules
2. Oil
3. Shampoo
4. Powder

At Mahima Ayurveda, Hair loss is treated in with a combination of many different herbs which are studied and praised for their effectiveness by both ayurvedic as well as medical doctors. Our combinations of herbs have proven beneficial for all factors of hair

and scalp health like thickness, volume, strength, color, and shine of the hair along with scalp aspects like dryness, itchiness, dandruff, and even lice. Our products are made out of the best selected raw materials and great focus is given on preserving the potency of the raw material during the manufacturing and the shipping process. All our treatments are 100% natural, Ayurveda inspired and holistic which have absolutely no side effects or overdosage problems, unlike allopathic alternatives.

OUR INGREDIENTS-

Hair capsules -

Eclipta Elba

Eclipta Elba, also called Bringha, is a native plant found in India and some parts of China. It is an important herb in Ayurveda and in Chinese medicine where it is prized for its hair restoring properties. Let us explain how Eclipta Elba (Bringha) supports hair regrowth.

Contrary to what most people think, hair follicles don't die off completely, rather they just shrink. This is why a bald person has almost the same amount of hair follicles but the hair they produce are very thin and we cannot see them. Stem cells are the fundamental cells that have the ability to transform and make other types of cells. To reactivate the hair follicles we need to accelerate the activation of stem cells so that they can replace the old shrunken follicles. Eclipta Elba, by balancing the kapha and vata doshas of the body, has been clinically proven to do just that.

A 2008 research study in the Department of Pharmaceutical Sciences, Dr HS Gour University, Sagar, MP, India(1) was directly targeted to study the efficacy of Eclipta alba for hair loss and compare it to the allopathic treatment methods. The time (in days) required for hair growth initiation as well as completion of the hair growth cycle was recorded. It was found that the hair growth initiation time was significantly reduced to half on treatment with the extracts of Eclipta Elba, as compared to the control. The time required for complete hair growth was also significantly reduced. The result of

treatment with 2 and 5% extracts were found to be better than the minoxidil 2% treatment which is the common allopathic medicine of choice.

The amazing hair growing potentials of Eclipta Elba were also championed in a 22-page long report in the 'The International Scholarly Research Notices website'. (2)

A 2009 study(3) in the Journal of ethnopharmacology, definitely proved how Eclipta Elba could reverse hair loss and protect hair. The methanol extract of the whole plant when tested for hair growth-promoting potential, exhibited dose-dependent activity in the subjects. The activity was assessed by studying the melanogenesis in resected skin, follicle count in the subcutis, skin thickness and surrogate markers in-vehicle control and extract-treated animals.

These findings conclusively suggested that extracts of Eclipta alba have definite and proven potential as a hair growth promoter.

Sesamum Indicum -

Products of the sesame plant are rich in omega-3 and omega-6 fatty acids. Omega-3 and Omega-6 are important and essential nutrients for our bodies. Scientific studies (4) tell us that a deficiency of these fatty acids has a direct impact on your hair growth potential hence, getting more of these essential fats is necessary for our patients. Along with fatty acids, sesame plant products are a storehouse of many nutrients that provide the herb with its antibacterial, antiviral and anti-inflammatory properties which impart us the following benefits -

1. Prevention of Premature Hair Graying
2. Hair Growth due to the presence of Phytosterols
3. Protects Hair From Harmful UV Rays

Dihydrotestosterone (DHT) is the hormone that's most commonly associated with male pattern baldness. Sesame plant contains phytosterols, which are compounds that effectively prevent the synthesis of baldness causing DHT hormone. An enzyme called the 5- α -Reductase is required to synthesize DHT. phytosterols, which are found in the sesame plant have the ability to lower the amount of 5- α -Reductase in the body by up to 44 percent.

This study from the Chai Mai institute of science isolated, identified and investigated for antioxidative activities (including DPPH radical scavenging, lipid peroxidation inhibition and metal ion chelating activities), 5 α -reductase inhibition in DU-145 and melanogenesis activities on B16F10 melanomas of the sesame plant. They concluded that the plant exhibited all investigated activities, and the traditional use of sesame seeds containing sesamin for hair cosmetics was confirmed. Its results were comparable to medicines like Minoxidil which is the allopathic medication. They concluded that the plant can definitely be beneficial for the further development as anti-hair loss and anti-cancer products.

Centella Asiatica

Centella asiatica acts as a fortifying agent that nourishes the hair follicles and scalp and primes it for healthy hair growth. This helps other herbs that directly grow hair and enhances their effects. Centella asiatica improves blood circulation, which allows the proper flow of oxygen and nutrients to the scalp.

Department of Surgical Sciences and Integrated Diagnostics, University of Genoa, Genoa, Italy study showed that Centella asiatica is an effective and well tolerated in the treatment of alopecia, resulting in improved hair strengthening and decreased hair loss. Moreover, triterpenes upregulate laminin-5, responsible for hair growth, due to their action in cells differentiation, migration, adhesion and phenotypes expressions.(5)

Dermal papilla (DP) is a pivotal part of the hair follicle, If the Dermal papilla shrinks, hair loss is imminent. Centella asiatica directly heals and increases inductive properties in derma papilla cells. This was found by a team of researchers in Konkuk University , Seoul in the year 2017 (6)

In this study, the researchers investigated the effect of titrated extract of Centella asiatica (TECA) on hair growth inductive property on 3D spheroid cultured human DP cells (HDP cells). Significantly increased effect of TECA on cell viability was only shown in 3D spheroid HDP cells. Also, TECA treatment increased the sphere size of HDP cells. The luciferase activity of STAT reporter genes and the expression of STAT-targeted genes, SOCS1 and SOCS3, were significantly decreased. Also, TECA treatment increased the expression of the hair growth-related signature genes in 3D spheroid HDP cells. Furthermore, TECA led to the downregulation of the level of phosphorylated STAT proteins in 3D spheroid HDP cells. Overall, the titrated extract of Centella asiatica (TECA) activated the potential of hair inductive capacity in HDP cells.

Withania Somnifera (Ashwagandha)

Stress is a huge factor responsible for hair loss. In the modern world, the everlasting stress , causes overly increased cortisol levels in the body which cause hormonal imbalances and hence hair loss.

Ashwagandha translates to ‘horse’s smell’ in Sanskrit (Ashwa – horse and gandha means smell). It is said to impart horse-like attributes of physical strength and endurance to the consumer. This herb is so potent and has so many benefits that Ayurveda considers it to be a Rasayana therapy on its own. It is great for stress related hair loss as it able to directly to reduce stress hormone levels by 30% and stress-related symptoms by up to 44% . (7) it helps in the production of melanin which helps in sleep and brings down stress levels.

This humble herb enhances the function of the brain and nervous system and helps the body to cope with daily stress along with improving memory. Ashwagandha has

excellent antioxidant properties that seek and destroy the free radicals—a major cause of early aging and illness. It also improves hair growth, reduces grey hair, gets rid of fine lines and keeps your skin looking young and healthy. Ashwagandha is also said to preserve our natural hair colour. The powerful antioxidants in ashwagandha fight the free radicals that are usually responsible for hair greying.

HAIR OIL

TerminaliaChebula - Haritaki

TerminaliaChebula has dark greenish yellow coloured fruits, which drives away diseases. The widely acclaimed Ayurvedic drug for its benefits to hair and scalp. Haritaki also enjoys wide patronage in Tibetan medicine. They call it the king of medicinal herbs. Prevent hair loss and dandruff. The international journal of ayurvedic sciences lists several formulations with Terminalia that produce beneficial effects for scalp and hair along with other organ systems. Even in Iranian traditional medicine this is used as a hair tonic that improves paleness, decreases greying of the hair and thinning of hair. (8)

Lawsonialnervis - henna

Our products contain some amounts of henna which provide colour and several other benefits for our patients. Henna

1. Vastly Improves Scalp Health.

It reduces itching with its cooling and antimicrobial properties. It removes excess grease and dirt from your scalp and leaves it feeling smooth and silky, acting as a sort of natural conditioner. henna also seals the hair cuticles so that it retains moisture.

2. Repairs Damaged Hair And Strengthen them.

Henna is extremely nourishing which repairs the already done damage to the hair shafts. Hair elasticity and strength is increased which keeps hair from breaking off.

3. Balances pH And Oil Production

One of the unique features of Henna is that It can calm down overactive oil-producing glands in the scalp. This maintains the optimal scalp Ph for hair growth.

Embillica Officinalis (INDIAN GOOSEBERRY or Amla) -

Amla, also called Indian gooseberry, is an effective natural treatment for a number of hair issues. Not only can the herbal supplement reverse graying hair, amla supplementation also stops hair loss and can restore lusture to dull hair. Amla is a potent rejuvenator and is useful in slowing down degenerative and senescence processes like thinning and graying of hair. Ayurvedic claims about Amla's hair rejuvenating effects were confired by Preclinical and Clinical Studies in 2017 which Demonstrated That the Proprietary Herbal Extracts cotaining embillica officinalis Effectively Stimulates Hair Growth and Promotes Hair Health.(9)

In the clinical study, scientists detected a statistically significant increase in the efficacy of Herbal extracts after 16 weeks compared with the groups treated with placebo. In conclusion, Herbal extracts promoted hair growth and enhanced hair health. Researchers declared that Embillica offfinalis containg medicines could be considered an effective option for treating hair loss.

Cassiatora -

Cassiatora is added to our products for its following attributes -

1. Moisture retention
2. Excellent conditioner
3. Anti-bacterial
4. Anti-fungal

Cassia is a plant with a yellow dye that strengthens the hair shaft, adds richness, texture and luster to light color hair. The yellow color comes from its active component, chrysophanic acid, also called chrysophanol. This compound has antimicrobial and anti-inflammatory properties.

Prunus Amygdalus -

Prunus Amygdalus Dulcis (Sweet Almond) Oil acts as an excellent natural oil for the body and scalp. It contains all kinds of healthy ingredients for hair like Omega-3 fatty acids, phospholipids, vitamins like vitamin E, and magnesium. Using almond oil nourishes and strengthens your hair, and is optimal for treating hair loss and damaged hair. It also adds shine and silkiness to the hair while nourishing the scalp

Citrus bergamia essential oil

Clinical studies on the therapeutic applications of BEO exclusively focus on the field of aromatherapy, suggesting that its use can be useful for reducing anxiety and stress. This ingredient in our products has a calming and relaxing effect on our body which is essential for hair regrowth.

POWDER

Sapindus Trifoliatum (Reetha)(Soapnut)

Sapindus Trifoliatum is called Reetha in ayurvedic medicine and soapnut in the medical literature. Its dried fruit is used as the shampooing agent in our products. Sapindus Trifoliatum is an important Ayurvedic medicinal herb that is used for strengthening of hair and a fair complexion. Since, ancient times, reetha has been used for hair treatment. Due to the side effects of chemical shampoos, We avoid using chemicals in our products hence Reetha is our agent of choice. Washing with reetha provides shining and silky hair.

Acacia Concinna(Shikakai) -

Shikakai scientifically known as *Acacia concinna* is a shrub like tree that grows in central India. It is being used since ancient times as a cleanser for hair and body. It is rich in vitamins A, D, E, C and K and other antioxidants which are very essential for healthy and quick growth of hair naturally. These vitamins are necessary micro-nutrients for the hair follicles. This nourishes the hair and allows them to grow fast and healthy. Along with all these benefits, This cleanser naturally stops the growth of hair lice and helps deal with this hair concern as well.

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Semecarpus Anacardium -

Semecarpus Anacardium is a very celebrated herb in Ayurveda for its various medicinal properties. The fruit and nut extract shows various activities like being antiatherogenic, anti-inflammatory, antioxidant, antimicrobial, anti-reproductive, CNS stimulant, hypoglycemic, anticarcinogenic and a hair growth promoter.

Azadirachta Indica (neem) -

Neem, known for its medicinal properties is an effective herb to treat hair loss. Due to its antibacterial, antifungal and anti-inflammatory properties, neem is an excellent way to curb dandruff. It helps the hair follicles to become stronger and also encourages hair growth. It

- promote healthy hair growth
- temporarily seal hair follicles
- soothe frizz
- minimize grays
- reduce dandruff

- treat head lice

Neem is one of the best agents to find hair lice. Researchers in a 2011 study (10) found that neem seed extract successfully killed head lice larvae after 5 minutes of treatment and adult head lice after 10 minutes of treatment. This is due to the oil's azadirachtin content. Azadirachtin can make it difficult for insects to grow and lay eggs by interfering with their hormones.

Abrus Precatorius

Abrus Precatorius is commonly known as jequirity bean or rosary pea. It is given great significance in ayurvedic literature for its detoxifying properties. It detoxifies the body providing a clean ground for the other herbs to work their magic.

This study in 2013 published in the Journal of Ayurveda and Integrative Medicine (11) concluded that Abrus Precatorius was an excellent plant for the detoxification of the body and stimulating hair growth. The results obtained for hair growth activity Abrus extracts were significant. They they concluded that the shodhana process described in Ayurveda helps in removing the toxin, while retaining the efficacy at the same time.

Psoralea Corylifolia (Kushtanashini)-

Also known as Babchi or Bakuchi in Sanskrit is a renowned herb used to combat all manner of skin diseases in Ayurveda - hence its name "Kushta nashini" (destroyer of Kushta or itchy skin diseases).

Besides being useful as a Kushta hara ingredient, Bakuchi is announced to be a “Keshya” (hair improving) and a “Twachya” (skin improving) ingredient in ancient ayurvedic scriptures. Bakuchi is an important herb for hair loss treatments as it is an internal medication given to purify blood and treat skin disorders from within. This heals and treats the scalp completely leading to healthier hair. This herb have been the basis of many traditional medicines especialy for cancer, and hair loss.

A study done in 2010 (12) , detailed many benefits of the plant, especially the hair growth ones. It concluded that It is a good hair tonic and hence should be used to treat alopecia areata and hair loss.

Conclusion-

Even though our medications are great products that fully allow the body to heal, the mind to real and hair to grow, The patient can make some positive lifestyle changes that can go a long way in fixing and curing alopecia for good.

Experts recommend that following Ayurvedic concepts such as Dinacharya and Ritucharya can go a long way in ensuring a host of health benefits. making lifestyle changes in accordance with cycles of Nature can go a long way in fixing current ailments and preventing future problems. Dinacharya routine including waking up early, exercising regularly, drinking lots of water, having healthy meals and yoga exercises like Pranayama will have a significant impact. They produce an energetic body and a stress-free mind that produces the optimal conditions for fixing hair problems.

The knowledge gifted to us by Ayurveda asks us to look deep within and find the Sadguru, the teacher within; to spiritualize our circumstances and to learn from them. With Mahima Ayurveda’s expertly crafted products and support network, we wish to transform ill fortunate circumstances and diseases like Alopecia into spiritual teachers And help more and more people lead healthy fulfilling lives.

- (1)(<https://www.ncbi.nlm.nih.gov/pubmed/18478241>)
2. (<http://dx.doi.org/10.1155/2014/385969>)
3.
(3)(https://www.researchgate.net/publication/222556645_Eclipta_alba_extract_with_potential_for_hair_growth_promoting_activity)
- (4) (4)(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5315033/>)
- (5)(<https://www.minervamedica.it/en/journals/esperienze-dermatologiche/article.php?cod=R50Y2018S01A0027>)
- (6) . <https://www.ncbi.nlm.nih.gov/pubmed/29032741>
- (7)
(<https://authorzilla.com/xeOw7/scientific-basis-for-the-therapeutic-use-of-withania-somnifera-ashwagandha-a-review.html>)
- (8) (<https://www.sciencedirect.com/science/article/pii/S0254627216300358>)
- (9) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5429933/>
- (10) (<https://www.ncbi.nlm.nih.gov/pubmed/21484346>)
- (11) (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3737451/>)
- (12) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249905/>