



A Review: The non allopathic treatment used to reduce hairfall and permote new hair growth.

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Abstract: A highly ingrained aspect of culture and identity is hair. This series' most recent articles have concentrated on fresh discoveries into the pathophysiology and mechanism of hair loss as well as scientific data pertaining to hair growth. This article examines the possibilities of herbal medications as safer and more efficient substitutes while highlighting advancements in hair regeneration techniques. The usage of certain natural products to promote hair growth is also covered in this review, along with a brief explanation of the main application, plant parts utilized, the active ingredient that produces the effect, and the advantages of the product.

Key words: herbal medications, baldness, alopecia, hair growth, and hair loss.

Introduction:

Along with sebaceous glands, sweat glands, and nails, hair is an essential component of the body. It is formed from the ectoderm of the skin and serves as a protective appendage. Since they start in the epidermis during embryonic development, they are also referred to as epidermal derivatives. Hair has a significant role in the overall attractiveness of the human body. For almost two millennia, alopecia has been recognized as a dermatological condition. It is synonymous with baldness and refers to the loss or absence of hair, particularly on the head. According to estimates, it affects between 0.2% and 2% of the global population and is widespread throughout the world. Alopecia has also been noted as a significant adverse effect of immunosuppressants, anticancer medications, and numerous other therapeutic regimens. Other known causes of alopecia include mental shock, emotional strain, localized infection, errors of refraction, endocrine disturbance, neurocirculation instability, and genetic predisposition. The three terms listed below are how Ayurveda defines hair disease.

Khalitya : Means loss of hairs

Palitya : Means prematured hair graying

Indralupta : Mean alopecia areata, totalis, universalis

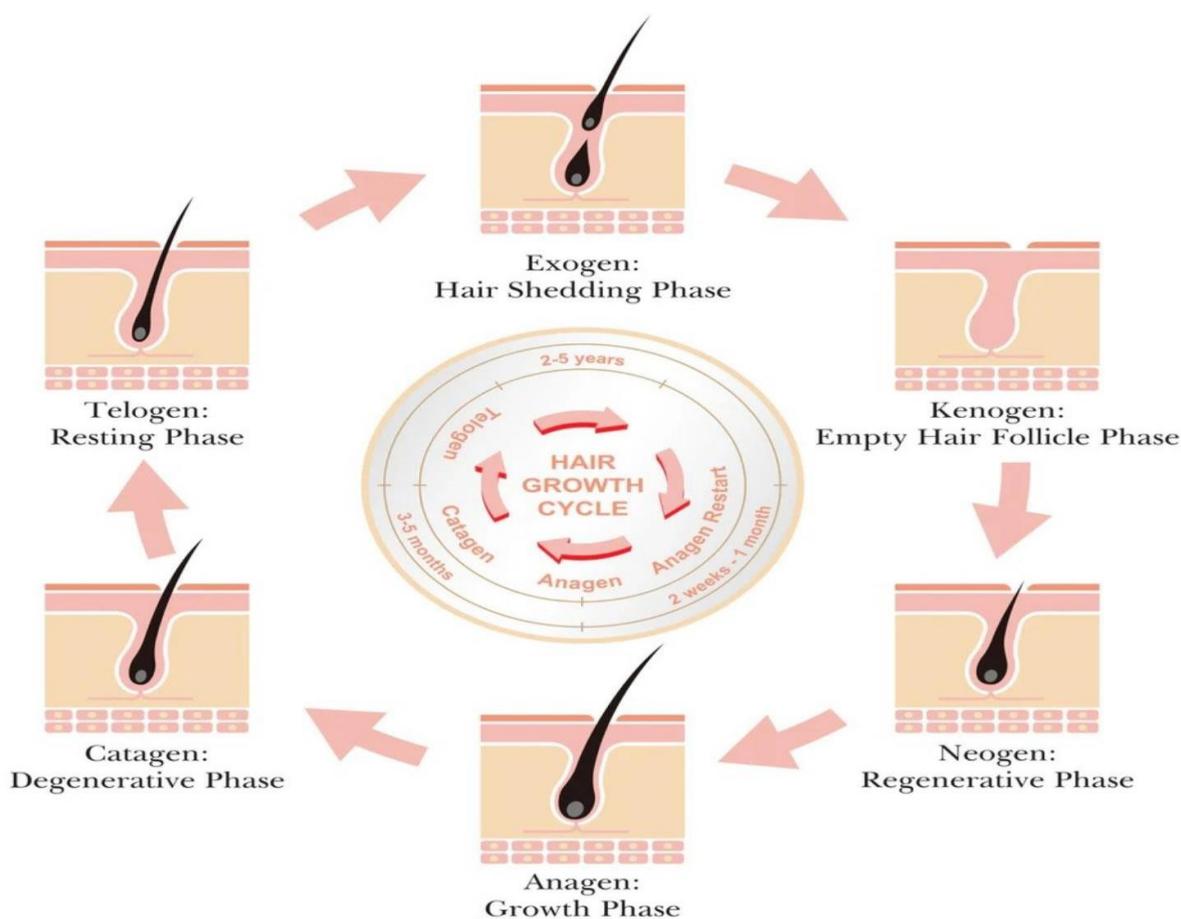
Few synthetic pharmaceuticals are produced as a result of the hunt for a cure, but it is impossible to overlook the negative effects of these medications. Herbal medications or their preparations are a good substitute for synthetic medications. For millennia, alopecia has been treated with natural therapies. Numerous plant and herbal formulations are used in traditional Indian medicine to promote hair development and enhance the condition of existing hair. There are over 100 hair growth solutions on the market that are made by combining one or more herbal medications. Table 1 lists a few of the hair growth products that are currently on the market. This article's objective is to give a summary of the many hair loss and hair growth therapy options. After giving a quick overview of the hair development cycle and the many reasons of hair loss, the article focuses on the

numerous kinds of medications that are available to treat alopecia. The article examines numerous studies that demonstrate the effectiveness of both modern and herbal medications in promoting hair growth.

Hair growth cycle:

Within a hair follicle, a coordinated process of cellular proliferation and differentiation results in the cumulative, physical formation of hair. Specialized dermal fibroblasts operating on bipotential epithelial stem cells induce the formation of hair follicles, which are pidermally derived appendages. After committing to a hair follicle fate, the stem cells go through a phase of rapid multiplication that ends with the development of a mature hair follicle. Cell differentiation, epithelial–mesenchymal interactions, stem cell augmentation, pattern development, apoptosis (programmed cell death), cell and organ growth cycles, and pigmentation are all involved in the intricate process of the hair follicle cycle. The fact that the hair follicle is a renewing system is the primary justification for researching its cycling. The follicle exhibits the unique capacity to fully rejuvenate itself by moving through the cycle's phases (growth, regression, resting, shedding, and then growth again). A normal hair follicle's life cycle consists of four stages: anagen (growth), catagen (degenerative), telogen (rest), and exogen (shedding). The life cycle of scalp hairs is somewhat lengthy: the anagen stage lasts between two and five years, the catagen stage lasts between a few days and a few weeks, and the telogen stage lasts roughly three months. Visible hair growth is significantly impacted by disruptions in the hair cycle. The affected skin area will subsequently sport primarily catagen and/or telogen follicles, whose loosely anchored club hairs are eventually shed (i.e., the normal anagen/telogen rate on the scalp [roughly 4:1] changes in favor of telogen). If anagen is prematurely terminated and catagen occurs too early, this must result in effluvium and alopecia. This is exactly what occurs, for instance, when inflammatory cells attack the anagen hair bulb in alopecia areata or when drugs cause harm to the proliferating cells of the anagen hair bulb, as in drug-induced telogen effluvium.

Thus, one of the main challenges in managing hair loss is the therapeutic regulation of hair follicle cycle. In decreasing order of significance, the following are effective treatment approaches for hair loss: Catagen formation is inhibited in order to prolong anagen. Anagen induction in telogen follicles. an exogenous inhibition.



Hair loss and alopecia:

Although shedding hair is a normal everyday occurrence, it cannot be the primary cause of hair loss. The growth, stability, aging, and shedding cycles of every hair on a human head are genetically predetermined. A human head typically sheds between 50 and 125 hairs every day, depending on the sex, but the majority of

them return after the resting phase because the follicle itself is not destroyed. When regrowth is poor and unhealthy or when loss outweighs regrowth, trouble starts. A daily hair loss of 100 can be regarded as "normal" rather than pathological. However, more than 100 hairs falling out every day is considered a pathological effluvium.

One of the dermatological problems that general practitioners and dermatologists deal with the most frequently is androgenetic alopecia (AGA). Up to 30% of males under 30 and over 50% of men over 30 suffer from the disorder. Older than fifty. Although the phenotypic is distinct and the clinical indications are typically milder, women can also be affected by AGA, despite the common misconception that it primarily affects males. Scalp hairs and their follicles gradually shrink as the illness worsens, and the terminal hair that typically appears on the adult scalp is replaced by

shorter, finer, and nonpigmented vellus hairs. At the same time, the percentage of hairs in the telogen (resting phase) rises and the average amount of time spent by hairs in the anagen (growing phase) falls. Alopecia or baldness can be categorized as follows: Alopecia areata, an autoimmune disease that causes small, patchy circular bald patches in various sections of the scalp, alopecia totalis, or complete loss of scalp hair, alopecia universalis, or complete loss of body hair, in addition to male and female pattern baldness. Alopecia, or hair loss, can also be categorized based on the causes of the condition. According to medical terminology, there are two forms of hair loss:

Internally administered drugs, such as chemotherapeutic agents, excessive vitamin A dosages, or some hypertensive medications, might result in anagen effluvium. A greater number of hair follicles going into the latent, or rather dead, stage is the cause of telogen effluvium. Telogen effluvium's most frequent causes Thyroid or other hormonal abnormalities, as well as emotional and physical stress, can cause alopecia.



Cause of hair loss :

Telogen effluvium (TE), AA, and AGA are common forms of hair loss. The most common of them is AGA, sometimes referred to as seborrheic alopecia, male baldness, or premature baldness. Androgens are the source of androgenic baldness, a polygenic genetic disease. Baldness is the result of hair follicles on the top of the head being more susceptible to androgens, which causes a prolonged telogen phase, a shortened growth phase, and eventually hair shrinkage. A receding hairline that progressively reaches the top of the head, decreased hair density, and hair thinning beginning in the frontal corners on both sides of the forehead are typical signs. Localized patchy alopecia appears suddenly in AA, an autoimmune hair loss disorder that is psychogenic in nature.

It is a complicated illness that can affect any part of the body and is brought on by a combination of environmental and hereditary factors. There is no visible scarring, scaling, or inflammation on the afflicted skin. Although AA can strike anyone at any age, it is more prevalent in young and middle-aged people and does not significantly differ by sex. The abrupt onset of circular or oval patches of hair loss with distinct

borders and variable numbers are typical symptoms. This condition is brought on by the disturbance of the HF V

Malnutrition, vitamin deficiencies, chronic illnesses, emergencies, and mental stress can all have an impact on the development cycle of HFs. However, because each HF's cycle is not synchronized, normal people's daily hair loss usually continues. Increased hair loss may occur if the HF cycle is disturbed.

FACTORS AFFECTING HAIR GROWTH :

- a. Rest and sleep
- b. Climate also effect the hair growth
- c. Exercise, stress, genes
- d. Vitamins and minerals effect the hair growth
- e. Moderate exercise regime help stimulate
- f. Habits those are beneficial for the tresses

Natural products:

Numerous herbal medicines from China and the ancient Indian medical system, known as Ayurveda, have been shown to be effective in promoting hair growth. According to reports, natural products work better than synthetic medications for hair growth therapy. Many bioactive plant chemicals have been investigated for possible use in medicine. Table III contains a list of several natural items linked to hair growth activities. In the past several decades, numerous investigations on herbal medications have been conducted in an effort to find a safe and efficient alternative treatment for hair loss.

By specifically blocking 5-alpha reductase activity, epigallocatechin-3-gallate, a significant polyphenolic component of green tea, may help prevent or treat androgenetic alopecia. The main phytoconstituents of green tea that give it its hair-growth properties are its catechins and polyphenolic components (such epigallocatechin-3-gallate). Using both in vitro and in vivo techniques, Adhirajan et al. (2003) assessed the petroleum ether extract of *Hibiscus rosasinensis* leaves and flowers for its capacity to promote hair development. The study's findings indicate that the leaf extract, has a stronger effect on hair development than the floral extract. A blend of petroleum ether extracts of *Eclipta alba* Hassk. (compositiae), *Citrullus colocynthis* Schrad. (cucurbitaceae), and *Tridax procumbens* Linn. (compositeae) in different concentrations were examined by Adhirajan et al. (2001) in the form of herbal cream and herbal oil. Excellent hair growth activity was demonstrated by the 3:1:2 ratio of E. Alba, C. Colocynthis, and T. Procumbens, which resulted in 35% more anagen hair follicles than 20% with a typical medication (2% ethanolic solution of minoxidil).

Natural herbs for hair growth:

ALOE VERA:

Regular application of aloe vera gel will help to maintain the pH balance of the hair. Additionally, it will facilitate the release of clogged scalp pores and promote the growth of hair follicles.



LAVENDER:

One of the most well-known herbs for decreasing baldness and encouraging hair growth is lavender. Oil from *Lavandula angustifolia* contains antibacterial, antimicrobial, and anti-inflammatory qualities. Lavender oil boosts new hair growth, increases scalp circulation, and helps control the natural oil production of the scalp.

Additionally, lavender oil works well against disease-carrying parasites like fleas, ticks, mosquitoes, and head lice since it is a natural insect repellent.



HIBISCUS:

Rich in vitamins and antioxidants, hibiscus helps to promote the general well-being of the scalp and hair. Additionally, it works wonders for dandruff, which can impede the growth of healthy hair.



Some yoga asana for hair growth:

Relationship Between Yoga and Hair Growth: By lowering stress levels, yoga indirectly helps healthy hair growth while also enhancing general well-being. Known as the greatest yoga for hair development, some poses focus on the scalp, increase blood flow, and feed hair follicles. Yoga also aids in hormonal balance restoration, which promotes luscious, gorgeous hair. By implementing these techniques into our daily routine, we establish the ideal conditions for hair growth. Yoga provides a comprehensive strategy for maintaining healthier, more vivid hair by reducing stress, stimulating the scalp, enhancing circulation, and balancing hormones.

List of 8 Yoga For Hair Growth:

- 1. Adho Mukha Svanasana (Downward-Facing Dog Pose)*
- 2. Ustrasana (Camel Pose)*
- 3. Sarvangasana (Shoulder Stand)*
- 4. Uttanasana (Standing Forward Bend)*
- 5. Vajrasana (Diamond Pose)*
- 6. Sasangasana (Rabbit Pose)*

7. Kapalabhati Pranayama (Skull Shining Breath)

8. Balayam Yoga (Rubbing Nails Technique)

1. Adho Mukha Svanasana (Downward-Facing Dog Pose):

Begin on your hands and knees, then lift your hips toward the ceiling, forming an inverted V shape. In this pose, the blood flow to the scalp is stimulated, promoting hair growth and reducing hair fall. As you gently stretch your spine and lengthen your neck, you create space for improved circulation to reach the hair follicles, nourishing them from within. This asana also helps to relieve stress and tension, which can contribute to healthier hair growth. Remember to breathe deeply and hold the pose for a few breaths to maximize its benefits.



2. Ustrasana (Camel Pose):

Kneel with your knees hip-distance apart and slowly arch backward, placing your hands on your heels. The camel pose is known for its ability to increase blood circulation to the scalp, providing vital nutrients to the hair follicles. As you open your chest and stretch



your throat, you also stimulate the thyroid gland, which plays a crucial role in regulating hair growth. By practicing Ustrasana regularly, you can enhance the health of your scalp and promote stronger, more resilient hair.

3. Sarvangasana (Shoulder Stand):

Lie on your back, lift your legs, and support your lower back with your hands. This inverted pose has a profound effect on the blood flow to the scalp, revitalizing the hair follicles and promoting healthy hair growth. By reversing the gravitational pull, Sarvangasana helps to bring nutrient-rich blood to the scalp, improving the supply of oxygen and nourishment to the hair roots. Additionally, this asana can balance hormonal levels, which is essential for maintaining optimal hair health. Take your time to master this pose, and enjoy the benefits it brings to your hair and overall well-being.



4 . Uttanasana (Standing Forward Bend):

Stand with your feet hip-width apart and fold forward, reaching for your toes. Uttanasana is an excellent asana for improving blood circulation to the scalp, strengthening the hair roots, and reducing hair loss. As you fold forward, the blood



rushes to your head, promoting a fresh supply of nutrients to the scalp and hair follicles. This pose also helps to relieve stress and anxiety, which can hurt hair growth. With regular practice, Uttanasana can contribute to healthier, fuller hair.

5 . Vajrasana (Diamond Pose):

Kneel and sit on your heels, keeping your spine straight. Vajrasana is a simple yet powerful asana that promotes digestion and reduces stress, both of which are vital for healthy hair growth. By improving digestion, Vajrasana ensures that the nutrients from your food are efficiently absorbed and utilized by the body, including the hair follicles. This pose also calms the mind and relaxes the nervous system, reducing stress levels and preventing hair fall caused by stress-induced conditions. Practice Vajrasana after meals to reap its full benefits for your hair and overall well-being.



6 . Sasangasana (Rabbit Pose):

Sit on your heels, lean forward, and place the crown of your head on the mat. The rabbit pose is particularly effective in stimulating the hair follicles, enhancing blood flow to the



scalp, and nourishing the hair roots. As you gently stretch the scalp and increase the blood supply, the hair follicles receive an improved nutrient delivery, promoting healthier hair growth. Sasangasana also helps to relieve tension in the neck and upper back, areas that can contribute to hair loss when under stress. Practice this pose mindfully and gradually to experience its rejuvenating effects on your hair.

7 . Kapalabhati Pranayama (Skull Shining Breath):

Sit comfortably with a straight spine and take quick, forceful exhales through your nose while allowing passive inhalations. Kapalabhati Pranayama, also known as the Skull Shining Breath, is a powerful breathing exercise that improves oxygenation to the scalp, invigorating hair growth. This energizing pranayama technique helps to cleanse the respiratory system, increase blood circulation, and stimulate metabolism. As the oxygen-rich blood reaches the hair follicles, they receive the nourishment needed for healthy hair growth. Regular practice of Kapalabhati Pranayama can promote not only vibrant hair but also overall vitality and well-being.



8. Balayam Yoga (Rubbing Nails Technique):

Curl your fingers inward and rub your nails against each other vigorously. Balayam yoga is a simple yet effective technique believed to stimulate hair growth by increasing blood flow to the scalp. The acupressure points on the nails are believed to have a direct connection to the hair follicles, and by rubbing the nails together, you stimulate these points, promoting healthier hair growth. This practice is easy to incorporate into your daily routine, whether during meditation or any quiet moment. Dedicate a few minutes each day to Balayam yoga, and you may experience the positive effects it can have on your hair health.



Research Through Innovation

Remember, consistency is key when practicing these yoga asanas for hair growth. Combine them with a healthy lifestyle, proper nutrition, and a positive mindset to maximize their benefits. Enjoy your yoga practice, nurture your hair, and embrace the journey toward vibrant, healthy lock.

Additional Tips for Healthy Hair Growth:

In addition to incorporating yoga for hair growth and thickness into your routine, here are some extra tips to promote optimal hair health and growth:

Maintain a balanced diet rich in vitamins, minerals, and protein.

Practice regular scalp massages to stimulate blood flow and nourish hair follicles.

Minimize heat styling and chemical treatments that can damage hair.

Opt for natural hair care products that are gentle on your scalp and hair.

Stay hydrated and manage stress through relaxation techniques like meditation or deep breathing exercises.



The best hair oil for you depends on your hair's porosity:

1 = Low porosity

Use lightweight oils that can penetrate the hair cuticles without making your hair greasy.

Some good options include:



HOW TO WORK OUT HAIR POROSITY

FILL A CUP WITH ROOM TEMPERATURE WATER, AND PLACE A STRAND OF CLEAN HAIR INTO IT. WATCH THE STRAND FOR JUST UNDER 5 MINUTES.

If the hair immediately sinks, your hair is...



HIGH POROSITY

Holes and gaps in the cuticle allow moisture to be absorbed easily but also lost. More products are required to lock moisture in. This hair type will frizz in humid weather.

If the strand gradually sinks, your hair is...



NORMAL POROSITY

The cuticle layer is loose but has no holes and gaps, so just enough moisture enters without it leaving again. Needs little maintenance.

If the strand is floating, your hair is...



LOW POROSITY

Your hair repels water so requires more time to get fully saturated. Products are not easily absorbed so tend to sit on the hair and build up.

(a). Jojoba oil: A liquid crystalline wax that absorbs easily into the hair and skin. It can make hair shine.

(b). Argan oil: Known for its hydrating properties.

(c). Grapeseed oil: Absorbs quickly and provides moisture without leaving a heavy residue.

(d). Almond oil: Increase moisture and help soothe irritation or dandruff on your scalp

(e). Avocado oil: Reducing dandruff, Preventing breakage, Detangling hair

2 = Normal porosity

Use oils that provide a balance of moisture and nourishment. Some good options include:

- (a). Sweet almond oil: Shields hair against damage, adds shine, and relieves an irritated scalp.
- (b) Black seed oil: Promoting hair health , Reducing hair loss , easing acne ,and lowering blood sugar levels
- (c):Neem oil: Clean the scalp, make hair shiny , antioxidant present in neem oil which shield your hair from various hair damage

3 = High porosity

Use heavier oils that help seal the cuticles, lock in moisture, and reduce frizz. Some good options include:

- (a). Olive oil: Provides deep conditioning and helps to soften and strengthen hair.
- (b). Avocado oil: Rich in vitamins and fatty acids, it nourishes and moisturizes hair.
- (c). Castor oil: Helps seal the cuticles, lock in moisture, and reduce frizz
- (d). Coconut oil: Help in moisturize and repair damage hair , Antidandruff.



How to make hair tonic which promotes hair growth:

- 1 leaf Aloe vera
- 2 Amla
- 1 tbs methi Dana seed

Boil them together until water become half Spary this toner once a week.

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