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# **Concept of Hair Diseases and Herbal** formulation use for Prevention, Treatment & **Management: A Review Article**

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**ABSTRACT**: Hairs can be defined as -"improved epithelial structure formed as a result of keratinization of germinative cells," hairs are the outgrowths from the follicles existing on the skin. Hair is composed of keratin with chemical constituents such as Carbon(C), Nitrogen (N), Sulfur(S), & Oxygen (O). Hair growth varies from person to person but on average hair grows about 15-30 mm/ month. The main unbiased of present study is to treat Alopecia. Alopecia areatatis an unpredictable hair loss - condition. Herbal drug used internally as well as externally used hair growth to prevent premature greyish or hair loss. The claim of better growth of hair and diminution in loss of hair. Alopecia is one of the major problems amongst urban people to subjection to stress environmental problems etc. So, with the help of this review article, we conclude that many herbal drugs having potency for curing alopecia with no side effects. The various types of allopathic drugs to treat hair loss but they have many side effects. Herbs are starting material for any medicine research. Approximately about 80% residents recommended herbal drugs for their beneficial effects along with fewer side effects as compared synthetic drugs.

**Keyword**: Hairs diseases, Types of Hair loss, Herbal drugs and formulation to control Alopecia.

### 1. Introduction of Hair Problems of Diseases.

### A. Gray Hair

Some people consider gray hair as something that makes them look distinguished; for others, it's a reminder that they're getting older. However you feel about it, gray or white hair is pretty much inevitable with age (if you're fortunate enough to still have hair in your later years). Scientists have put a lot of effort into investigating the cause of gray hair, and they believe they've gotten to the root of the problem. Hair gets its color from a pigment called melanin, which is produced by melanocyte cells in the hair follicles. Researchers have discovered that melanocytes endure cumulative damage over the years, which eventually leaves them unable to produce melanin. Studies have cited DNA damage and a buildup of hydrogen peroxide in the follicles as possible causes of this disruption in melanin production. Without melanin, the new hair that grows in has no pigment, which makes it appear gray, white, or silver. Some people start to go gray young -- as early as their teens. When graying begins usually is determined by genes, so if your mother or father became gray early, you may, too.

#### **B.** Hair Loss

Normally, hair goes through a regular growth cycle. During the anagen phase, which lasts two to six years or longer, the hair grows. During the telogen phase, which lasts about three months, the hair rests. At the end of the telogen phase, the hair falls out and is replaced by new hair. The average person loses about 100 hairs each day. Hair loss also can have other causes, including drugs or disease. As they age, men tend to lose the hair on top of their head, which eventually leaves a horseshoe-shaped ring of hair around the sides. This type of hair loss is called male-pattern baldness. It's caused by genes (from both parents -- the idea that men take after their mother's father is a myth) and it's fueled by the male hormone, testosterone. In femalepattern baldness, the hair loss is different -- it thins throughout the top of the scalp, leaving the hair in front intact. A number of disorders can cause the hair to fall out. People who have an autoimmune condition called alopecia areata lose hair on their scalp, as well as on other parts of their body. Other health conditions that can cause excess hair loss include:

- Medications such as antidepressants, retinoids, NSAIDs, blood thinners, birth control pills and other hormonal treatments, high blood pressure medications, chemotherapy, and radiation
- Severe infections
- Major surgery
- Overactive or underactive thyroid
- Other hormonal problems
- Severe stress
- ❖ Autoimmune diseases, such as lupus
- Fungal infections of the scalp
- Pregnancy and childbirth
- ❖ Exposure to chemicals such as thallium, boron and arsenic

Certain hair care practices, such as wearing tight ponytails or weaves, or regularly bleaching or perming the hair, can also lead to hair loss. Some people compulsively pull out their hair. This psychological disorder is called trichotillomania. Learn more about what causes hair loss and the truth behind common hair loss myths. When hair loss is related to a medication, stopping the drug usually prevents further hair loss, and the hair will eventually grow back. Hair also tends to grow back after most illnesses, radiation therapy, or chemotherapy. Wearing a wig or hat can hide the hair loss until the hair returns. Hair transplants are a more permanent hair-replacement solution.

Hair lost to male-pattern and female-pattern baldness won't grow back on its own, but there are medications that can help slow hair loss and even regrow hair. Minoxidil (Rogaine) is a topical medicine that is available over the counter to treat men and women. Finasteride (Propecia) is a pill that is available to men only by prescription. Injectable cortisone may also help regrow hair lost to certain conditions.

Other hair-loss treatments include injections with platelet-rich plasma, low-level light devices (for home use), hormonal replacement therapy (for perimenopausal patients), and neutraceuticals.

### C. Hair Damage

Blow-drying, straightening, highlighting, and perming regularly can wreak havoc on hair, leaving it brittle, broken, and unmanageable. Split ends and dry hair are just two casualties of overstyling.

Excessive styling and heat can cause split ends, which occur when the protective outermost layer of hair (the cuticle) is damaged and peels back. Some treatments for split ends include:

- Brush gently with a soft, flexible hairbrush; don't overbrush.
- Avoid towel-drying. If you do dry your hair with a towel, rub it gently.
- Use a conditioner, and leave on a deep conditioner about once a week.

Hair needs moisture and a certain amount of oil to keep it looking healthy. A number of things can dry out hair, including:

- Washing it too often
- Using a harsh shampoo
- Excessive blow-drying or use of a curling iron or straightening iron
- Exposure to sun, wind, and dry air
- Perms and dyes
- Poor nutrition
- Certain medications

To keep the moisture in your hair, try these tips:

- ❖ Don't wash your hair every day unless you have a scalp condition such as dandruff which needs daily shampooing for control. When you do wash your hair, use a gentle shampoo that's designed to infuse moisture into dry hair. Also, use a conditioner daily.
- Limit blow-drying and use of hot irons, hot rollers, or curling irons.
- ❖ Increase the time between hair treatments, such as dyes and perms.
- Wear a hat on cold, windy days and put on a bathing cap when swimming.

### D. Greasy Hair

The scalp contains natural oil called sebum, which helps keep the skin lubricated. Sebum is produced by the sebaceous glands. Sometimes these glands work overtime and produce too much oil, leading to a greasy scalp. Greasy hair can look dull, limp, and lifeless, and it may be more difficult to manage. To treat greasy hair, try washing with a gentle shampoo that is specially formulated to control sebum.

#### E. Dandruff

Dandruff is little white pieces of dead skin in someone's hair, or fallen from someone's hair. It's apparently caused by a fungus called Malassezia restricta and Globosa malassezia formerly called Pityrosporum may be a yeast causing infection of skins and scalp. It's caused by not brushing hair, allergy, stress, not showering enough etc. There are two types of dandruff.

- **Dry dandruff.** Dry (universal) dandruff known to be caused by Pityri as is simplex and is characterized by excessive development of minute scales of white grayish or ash color accumulate on the scalp area. Scales visible on the scalp are divided cells of keratinised layer whose renewal cycle is pathologically compact. During this sort of dandruff, no excessive hair loss is observed.
- ❖ Oily dandruff. Other sort of dandruff is named oily dandruff or Pityriasis steatoides. It arises on the scalp skin with varied intensity of sebum production. It appears mainly frequently in young men next puberty. Inflammation of various intensity develops on the scalp skin alongside the looks of oily scales of dirty yellow colour which will form lesions. These lesions are often related with pruritis of various intensity. Hairfall is ordinary. It's going to also exacerbate androgenetic alopecia, the foremost common site suffering from this sort of dandruff is scalp but it can arise among eyebrows along the side of nose behind the ears over the breastbone and sometimes within the armpits.

### 2. Defination of Hairs.

Hairs can be defined as -"improved epithelial structure formed as a result of keratinization of germinative cells," hairs are the outgrowths from the follicles present on the skin. Hair is composed of keratin with chemical constituents such as Carbon (C), Nitrogen (N), Sulfur(S), & Oxygen (O). Hair growth varies from person to person but on average hair grows about 15-30 mm/ month. Hair is the one of the vital parts of the body derived from ectoderm of the skin, and is protective appendages on the body. Hairs are two types:

- 1. Vellus hair.
- 2. Terminal hair

Vellus hairs are fine, light colored and straight. Terminal hair are thicker dark and may be curly and on the region of eyelashes and eyebrows. 70-100 hairs loss a day is very common however, dropping over 100 hairs a day lasting longer than a couple of week indicates a serious problem. Alopecia, a dermatological disorder that has been recognized for more than 2000 years is a common problem in cosmetic as well as primary health care practices. It is a common throughout the world and has been estimated to affect between 0.2% and 2% of the world population. Various synthetic medicines

are available for hair loss which does not treat permanently and also shows severe side effects.

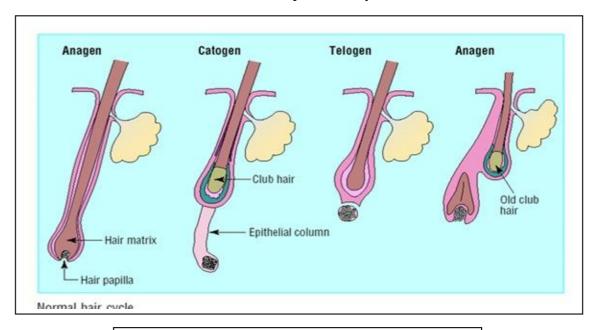


Fig. 1 Normal Hair Cycle for Men and Women

Healthy men and women generally have 80 000 to 120 000 vital terminal hairs on the scalp. Hair is composed of keratin and is produced in the hair follicles. All hair follicles go through repeated cycles of growth and rest. During the growth (anagen) phase, which is 2–6 years long, a hair grows at a rate of about 0.3 mm per day, or 1 cm per month. The maximum attainable hair length depends on the duration of the anagen phase. A brief transitional (catagen) phase follows, and then a rest (telogen) phase lasting 2–4 months, after which the hair falls out. Normally, the ca. 100 000 hairs on a person's head grow independently of one another. Intrinsic or extrinsic factors can synchronize the hair follicles by inducing a premature transition from the anagen to the telogen phase, leading to noticeable hair loss 2–4 months later. These factors include hormones, growth factors, drugs, and the seasons. Each of the ca. 100 000 hairs on the head independently goes through a growth cycle consisting of three phases: anagen (3–6 years), catagen (1–2 weeks), and telogen (2–4 months). Each of the ca. 100 000 hairs on the head independently goes through a growth cycle consisting of three phases: anagen (3–6 years), catagen (1–2 weeks), and telogen (2–4 months).

### 3. TYPES OF HAIR LOSS:

Alopecia Areata (prime stage) - Alopecia areata is a common autoimmune disease that results in the loss of hair on the scalp and else where. It usually starts with one or more small, round, non-scarring smooth patches. Mild Brief Alopecia Areata- Patient with repeated transient alopecia areata but never converts into alopecia totalis or universalis

**Temporary Alopecia Areata -** Patient with Alopecia areata in advanced phase and some of a) them converts into Alopecia totalis/Alopecia universalis.





Fig. 2 complete Hair Loss Men

Fig. 3 Partially Hair Loss in Women

- **b**) Ophiasis Alopecia Areata - Ophiasis type of alopecia areata shows a band like hair loss. It occurs generally in the progressive or the occipital areas of the scalp, and therefore it is more difficult to treat, as most medicines have a delayed action on these areas.
- Alopecia Totalis Loss of hair from whole Scalp. c)
- **d**) **Alopecia Universalis** - Loss of hair from entire body including eyebrows and eyelashes Scar ring Alopecia Any inflammatory process (burns, bacterial infections, ringworm, injury) necessary to cause permanent loss of follicles, affected area known as Scarring alopecia. Trichotillomania -This type of hair loss is known as compulsive pulling or dull self-pulling by a patient Himself or herself.
- **Traction Alopecia** Hair elegance that tie hairs so tight can causes much traction at the root of **e**) hairs, and can develop adhesion alopecia
- f) Chemotherapy and hair loss - Chemotherapy is exclusive behavior for cancer patients but it marks normal cells and hair follicles too. This causes hair loss and known as anagen effluvium type of alopecia.

**Diffuse Alopecia -** Unnecessary Loss of hair all over the scalp without creating a reinforcement. Hair loss due to side effect of the beauty treatments- Any beauty treatments like hair colors, dye, straightening, softening, rebounding, perming etc., which contains harsh chemicals can trigger hair loss for some individuals. Telogen effluvium (TE) and chronic telogen effluvium- (CTE) Dietary lacks, Crash dieting High grade fever, Anemia, Blood loss, Hormonal imbalance and pregnancy etc. can cause telogen effluvium type of hair loss telogen word is known for latent phase of the hair and fluvium means.

### 4. Symptoms of Hair Loss

There are several factors for the hair loss; some of the main factors are given below -

- Acute illness
- Autoimmune disorders
- Chemicals (hair dyes)
- Chemotherapeutic agents/ drugs.
- Diabetes
- Hair loss following childbirth
- Hair styling products
- Hair styling techniques
- High iron deficiency
- Nutritional deficiencies
- Other fungal infections
- Physical trauma to the scalp
- Poisons
- Poor blood circulation
- Poor diet or malnutrition
- Prescription drugs
- Psychological
- Radiation exposure
- Ringworm
- Skin disease

### 5. Hair Growth Cycle and Its Mechanism

The hair growth undergoes a tiresome cycle where the anagen phase followed by the catagen and the telogen phase. In the anagen phase, the hair is actively growing while in the catagen phase it is characterized by the degeneration and resorption of the lower region of the hair follicle. The resting phase, where the hair is inactive, is called telogen phase after this phase the growth of the hair follicle resumes in the scalp, a hair growth cycle has three main phases: Anagen, catagen, and telogen. The anagen phase is the growth cycle typically lasts 3-5 years. On a healthy scalp, there are approximately 1,000,000 hair and 90% of the follicles are continually in the anagen phase of hair growth. The catagen stage follows the end of the growth period when a follicle begins to become dormant. The telogen stage is a dormant or resting period that lasts 3-4 months. When the dormant phase ends, an old hair falls out. A hair follicle then returns to the anagen stage, and a new hair begins to grow. An average rate of hair growth is about half an inch per month depending on hair follicles and age of an individual. On average, 50-60 scalp hairs are lost daily in a normal hair growth cycle and new hairs begin to grow from these follicles. Hair loss begins when less new hair begins the re-growth stage.



### 6. Various Treatment of Alopecia.

### A. Nutritional Support:

Minerals such as calcium, copper, chromium, iodine, zinc, and magnesium are necessary to maintain healthy hair growth. Mineral deficiency will reduce the chance to regulate the blood circulation that promotes healthy hair growth and thyroid hormones that prevent dry hair and hair loss as well as defects in hair color. Too much iron is toxic to your body. Be sure to talk to your doctor before taking any mineral supplement. B vitamins (especially B6, B3, B5 and folic acid), biotin (antioxidant, sources of biotin is: whole grains, egg yolks, liver, rice and milk. Vitamin A is important for over-all good health. It's also beneficial to hair follicles, as it keeps the hair root lubricated. Vitamin E acts as an antioxidant that aids real circulation in the scalp due to increased oxygen uptake in blood, therefore it plays an important role in promoting hair growth and preventing hair loss. Coenzyme Q10 (CQ-10) is an essential vitamin that provides our body with the nutrient needed to grow healthy hair. They also promote overall vitality, and contribute to beautiful skin and strong nails. Yogurt and soy, dark green vegetable, whole grain products, essential fatty acid, nuts and seedier fatty foods which are typically the best sources of vitamin E, an immune enhancing antioxidant and nerve protector. Carrots contain high amounts of vitamin A. It is an antioxidant that helps produce healthy sebum in the scalp. Having too much vitamin A can lead to hair loss. There are many other foods that help promote hair growth and prevent hair loss, such as fruits, egg, spinach, and broccoli. The various herbs providing nutritional support are summarized below in:

#### B. DHT Blockers and 5-α-Reductase blockers.

After knowing the well-established role of DHT in hair loss, it is recommended that the use of herbs that have pronounced DHT or 5-α-Reductase blocking activity can be used for the treatment of Alopecia (especially Androgenetic). There are some herbs that have proved DHT blocking activity like Pygeum africanum, Seneroa repens, Urtica dioica and others with potential 5- α-Reductase inhibiting ability like Camellia sinensis, Panax ginseng etc. The proposed mechanism of action of DHT blockers and 5-α-Reductase blockers





Fig. 4 Minioxidil for Hair Growth in Men and Women

Fig. 5 Aromatherapy for Hair Growth in Men and Women

### C. Aromatherapy:

Aromatherapy can be used as a supplement to treat alopecia. It uses highly concentrated extracts which are derived from the flowers, leaves, bark and the roots of various plants like Arnica montana, Cedrus atlantica, Lavandula agustifolia, Oscimum sanctum, Pilocarpus jabarondi, Rosmarinus officinalis, Thyme vulgaris etc., (table 2). In aromatherapy, the essential oils enter the body through the olfactory system (inhalation) and/or through your skin. As with herbs that are taken orally, the essential oils reach the circulatory system (the blood) where they bind to receptors and change the chemical composition. These oils work not only on a cellular level to strengthen/calm the nervous system, but also on a spiritual one, providing with a sense of wellbeing. Topical herbal therapy stimulates hair follicles and it is proved as safest way to cope up with different type of hair loss (alopecia), however perfect pharmacological actions of these herbs and oils are yet not known.

### D. Topical treatment with minoxidil

Minoxidil, a calcium channel opener, has been approved as a 2% solution for women and a 5% solution or foam for men and can be bought in a pharmacy without a prescription in most parts of the world. A 5% minoxidil foam to be used once daily by women would simplify the treatment and is expected to be approved in Germany in 2016. Minoxidil solution is the only topically applied drug against androgenetic alopecia whose efficacy has been documented by high-level (level 1) evidence. It was found, in large-scale studies, to stop hair loss in 80-90% of persons treated; hair became visibly thicker in about 50%. Its side effects include redness and scaling of the scalp; rarely, contact dermatitis; and hypertrichosis in women—mostly at the temples.

### E. Systemic treatment with finasteride

Finasteride 1 mg po qd can be given to men for the systemic treatment of androgenetic alopecia. Antiandrogens (EL 4) can be helpful for women with hyperandrogenemia. Like minoxidil solution, finasteride at a dose of 1 mg per day stops hair loss in 80-90% of persons treated and visibly thickens hair in about 50%. It is relatively well tolerated, with a mildly elevated rate of reversible loss of libido and erectile dysfunction as well as a mildly elevated incidence of gynecomastia. The notion, which appears in some Internet fora, that finasteride might increase the risk of prostate cancer, breast cancer, or infertility has made patient education about this drug increasingly difficult but is not supported by valid scientific evidence. Finasteride is not approved for use by women, as it can cause developmental genital defects in male fetuses and is ineffective against androgenetic alopecia in postmenopausal women. Dutasteride, a dual inhibitor of 5a-reductase, is currently approved in Germany only for the treatment of benign prostatic hyperplasia. Therefore, we advise against its off-label use to treat alopecia.

### F. Topical or systemic treatment with hormones

There is as yet inadequate evidence for the topical use of natural estrogens, progesterone, or antiandrogens to treat androgenetic alopecia in women who do not have hormonal dysregulation Nor is there adequate evidence to support the use of systemic antiandrogens in women with androgenetic alopecia whose menstrual cycles are normal, other than a proof-of-principle study in which these hormones were given at very high doses. In women who do have hormonal dysregulation, androgenetic alopecia can be treated with antiandrogens such as cyproterone acetate, chlormadinone acetate, or dienogest (level 3 evidence)

#### **G.** Surgical treatment

Autologous hair transplantation is a supplementary treatment for advanced androgenetic alopecia. Hair is removed from the occipital (androgen-insensitive) scalp and transplanted into the affected areas. Hair follicle transplantation can thicken the hair not only in men with androgenetic alopecia, but also in women (level 4 evidence). A further measure—the easiest of all, and one that affected persons can carry out for themselves—is the comb-over, i.e., appropriate hair styling to cover up areas of androgenetic alopecia. If restyling cannot achieve the desired effect, a toupee or wig can be worn.

### 7. Cosmetic aids of Female Pattern Hair Loss.

Since so much of the morbidity of FPHL lies in body image disturbances, cosmetic aids are an integral part of management options. These incorporate hair styling techniques, camouflage products, hair replacements, hair accessories, and additions.

### A. Hairstyling

Different hairstyling options can be canvassed by a woman's individual hair stylist, and it may take 3 or 4 different haircuts before a woman finds her optimal look. Some useful tips applicable in the woman with FPHL include: getting greater hair volume and lift from shorter styles; disguising central

thinness by a side or zigzagging part; adding soft layers at the top to allow pulled back hair to have more style; taking some weight off the top; using wide-toothed combs or brushes to allow thin hair to flow through without breakage; using a friction-free towel that blots hair and absorbs most of the moisture rather than damaging thin hair with towel drying; coloring hair to make hair look thicker and appear to give it more volume; styling with a body wave with soft or tight curls to give hair more bounce and fullness; and using hair sprays and foams that are light and nondrying to give volume and prevent breakage.

### **B.** Camouflaging products

Camouflaging products cover exposed areas on the scalp and hide visible hair loss. They also provide lift at the base of the hair shaft, which adds volume. These products are best suited to those women with mild to moderate hair loss, whereas those with more severe hair loss may not achieve a natural appearance after application. Most camouflaging products do not rub off easily, and are resistant to stresses such as perspiration, exercising, and swimming. Removal can be achieved simply by shampooing. In addition, camouflaging products are compatible with topical minoxidil.

The most commonly used products include hair building fibers, scalp spray thickeners, alopecia masking lotion, and topical shading. Hair building fibers are keratin fibers available in a range of natural hair colors. They come in a jar with a pepper-shaker type top. A gentle shake of this jar onto the thinning areas of the scalp creates density throughout the area, reducing the appearance of thinning hair, which begins to work in about 30 seconds. Scalp spray thickeners cover thinning areas by bonding fibers to hair to create density and add color. Although effective, they can be messy to use, so care needs to be exercised to minimize staining of clothes and fingers. Alopecia masking lotion is a tinted lotion that is dabbed onto thinning areas of the scalp to create the 1 of fuller hair. It is manufactured in a tube with a special applicator. One advantage is that it is not sticky or greasy thus will not stain clothing. One tube usually lasts 3-4 months. Topical shading is a tinted pressed powder that is used to cover the scalp in thinning areas and coat hair strands to create a fuller look. Application involves dabbing the powder onto the scalp by using a sponge-tipped applicator.

Different types of scalp skin respond differentially to different types of camouflaging.

### C. Hair replacement

In addition to measures described above, hair extensions can be useful for women with mild hair loss who simply desire more length and volume. These can be clipped on daily or attached permanently. However, potential damage may occur if they are applied to hair that breaks easily, so selection of appropriate hair is paramount. For those women with moderate to severe hair loss, hair-styling and camouflaging is often not enough. An integration, hairpiece, or wig may be better options. An integration is made of fabric or skin-like material with replacement hair attached to it and gaps through which native hair can be pulled through. By blending integrations with natural hair from thinning areas, increased volume of hair is created, which creates the appearance of a full head of hair. However, if it is worn for extended periods, it can cause scalp irritation, as well as stress to existing hair, resulting in damage and hair breakage. For more extensive hair loss that is too fragile to withstand integrations, hairpieces or wigs may be used. Hairpieces contain skin-like breathable material and hold the attached hair securely in position. They are attached to the scalp by either adhesive tape or alternatively hair clips for ease of removal at the end of the day. They can be matched to existing scalp tone, hair texture, and color providing as natural a look as possible. They are robust and can be worn 24 hours a day. Wigs are for the advanced stages of hair loss. A good quality, well-fitted wig allows unrestricted daily activities, including working out at the gym, swimming, or going out on a windy day

### D. Hair accessories and additions

Fashion accessories can satisfactorily conceal localized or diffuse patches of hair loss and include hats, scarves, bandanas, and turbans. Hair additions and accessories include combs and headbands with hair attached to them, ponytails that easily attach to existing hair, and hair scrunchies.

### 8. Herbal Drugs Used in Treatment of Alopecia.

Herbs has wonderful and effective means to ensure a long-term sustainable hair health. Whether you're blessed with long and healthy hair and your goal is to keep it as so for the years to come, or whether you're dealing with hair issues like hair fall and damaged hair and similar scalp issues, a natural practice which can work well for you and can stay with you for years in the best one. Herbal remedies have proven themselves for thousands of years for Indian hair, and they will work out wonderfully well for your hair too.

#### A. Shikakai.

This herb is often used as a replacement for chemical shampoo products due to its excellent cleaning properties. Commonly found in India, and scientifically known as 'acacia concinna', it is packed with important vitamins such as Vitamin A, K and E which are all beneficial in maintaining hair health.

### Uses of Shikakai.

- Controls and lessens dandruff. Dandruff is often one of the factors for hair loss.
- Cleanses your scalp thoroughly and improves scalp health.
- Strengthens the roots of your hair. Strengthens hair overall.
- Promotes strong hair and hair growth.





Fig. 6 Shikakai used in Treatment of Hair Loss Men and Women

Fig. 7 Henna used in Treatment of Hair Loss Men and Women

Named 'Brahmi', after the God Brahman, this herb has several redeeming qualities for hair health. Scientifically known as 'bacopa monnieri', Brahmi is used as oil or as a paste applied onto the scalp and hair to prevent hair loss and to make hair thicker and healthier.

#### Uses of Brahmi.

- Not only does Brahmi reduce hair fall, it even reduces stress.
- It is beneficial in nourishing the hair scalp.
- It promotes and causes hair to grow healthily, strongly.

### C. Henna.

Scientifically known as 'lawsonia inermis', henna or mehendi as we popularly know it, is widely known for its usage of hair colouring and making beautiful patterns on women's palms, hands and feet. However, it has several beneficial qualities such as antibacterial and astringent properties which make it extremely beneficial for promoting hair health. It prevents clogging of the pores in your scalp by removing any excess oil and is often applied in the form of a paste onto your hair and scalp.

#### Uses of Henna.

- It acts as a natural hair dye, with repeated usage.
- It helps manage or treat oily hair and scalp.
- It aids in restoring the pH level of our scalp.
- It helps in repairing any damage caused to our scalp and hair. Controls hair damage.

### D. Bhringraj.

Alternatively known as a false daisy, bhringraj is a medicinal herb growing primarily in moist areas. Scientifically known as 'Eclipta Alba', when this herb is used in the form of an oil, it has miraculous effects on our hair, skin and bodily health. Mainly, it prevents hair loss and rejuvenates our scalp. It can even aid those who are experiencing greying of some hair strands at a young age. Bhringraj can be used as a natural dye as well.

### Uses of Bhringraj.

- Makes your hair appear lustrous, adds shine to your hair.
- Promotes healthy hair growth.

#### E. Amla.





Fig. 8 Amla used in Treatment of Hair Loss Men and Women

Fig. 9 Neem used in Treatment of **Hair Loss Men and Women** 

Scientifically known as 'Phyllanthus Emblica', Amla is a well-known fruit in the Indian subcontinent whose oil is used widely in India for nourishing and moisturising hair. It is a fruit loaded with Vitamin C and antioxidants which all aid in the production of collagen. Collagen, of course, boosts production of hair and promotes a healthy and strong hair. Amla can be used either as an oil with Coconut oil or a paste with water by combining dry amla powder with water or any carrier oil.

#### Uses of Amla.

- Amla helps reduce greying of hair.
- Promotes strong and healthy hair.
- Help treat dandruff and any other underlying scalp condition.
- Conditions or moisturizes hair well.

### F. Methi.

Popularly known in Indian households as 'methi' and scientifically known as 'trigonella foenumgraecum', is a wonderful natural conditioner. Fenugreek seeds have been traditionally used as a condiment promoting hair health and conditioning. It aids in strengthening hair roots and stimulating hair follicles for hair growth. Thus it prevents hair loss. Due to its moisturising property it also aids in adding sheen to one's hair. It can even aid in fighting against dandruff, a common problem during the months of winter.

#### Uses of Methi.

- Promotes growth of hair.
- Conditions, hydrates the scalp and hair.
- Improves blood circulation in the scalp.
- Keeps hair light, oil free and fragrant.

#### G. Neem.

Neem oil or even Neem paste can prove beneficial for hair with its various medicinal properties. The oil is derived from the seeds of the Neem tree, alternatively known as the Indian lilac, and the paste can be prepared by crushing the Neem leaves and blending it with a little water. While Neem oil increases the growth rate of hair and adds strength and lustre to hair, Neem paste is beneficial for taking care of our scalp by preventing dryness and flaking when used as a nourishing and hydrating hair pack or mask.

### Uses of Neem.

- Neem possesses antibacterial properties. This is beneficial for fighting against any potential infections.
- Neem is beneficial for cleansing and nourishing the scalp.
- It controls dandruff, reducing dandruff.
- Neem even aids in increasing collagen production.

#### H. Ritha.

Soap nuts, or 'ritha', 'aritha', or the myriad other names it is known by, is a popularly utilized herb in ayurveda. Natural, eco-friendly, relatively inexpensive and reusable, soap nuts are a great alternative for hair products from store bought products. Soap nuts are rich in something called saponin, which is great for adding lustre to your hair when used regularly. It increases hair health as well. This is a popular alternative especially for people with a sensitive scalp, or skin.

#### Uses of Ritha.

- Nourishes hair follicles and scalp.
- Promotes healthy growth of hair.
- Cleanses and cools scalp.
- Antibacterial and anti-inflammatory properties help fight infections.

#### I. Tulsi.





Fig. 10 Tulsi used in Treatment of Hair Loss Men and Women

Fig. 11 Ritha used in Treatment of **Hair Loss Men and Women** 

Basil is popularly known in Indian households as 'tulsi'. Tulsi is traditionally known in ayurveda to have several beneficial properties for one's hair and skin. Specifically speaking for hair, it promotes hair growth by stimulating blood circulation in our scalp. Basil oil can help provide for stronger hair follicles. Fresh, light and aromatic, basil oil can be used as a wonderful massage oil as well.

#### Uses of Tulsi.

- Reduces hair fall.
- Provides for or stimulates hair growth.
- Controls and lessens itchiness, dry scalp, dandruff.

#### J. Aloe Vera.

Aloe vera enjoys widespread usage of beauty products due to its antiviral and antibacterial properties. The aloe plant's leaves hold inside a translucent gel which has incredible healing properties. This gel is rich in vitamins and important amino acids. Aloe vera possesses something called proteolytic enzymes which are beneficial in repairing dead cells on the scalp. Aloe vera aids in conditioning, nourishing; reduces itchiness, dandruff, etcetera. Thus aloe vera is great for controlling hair fall.

#### Uses of Aloe Vera.

- Aloe Vera is known as a miraculous plant for its many medicinal properties.
- Possesses antiviral and antibacterial properties.
- Can be used throughout the year, perennially.
- Conditions and nourishes hair.
- Prevents and controls hair fall.

### Conclusion

Alopecia is one of the main problems amongst urban people to domination to stress environmental problems etc. So, with the help of this review article, we conclude that many herbal drugs having potency for curing alopecia with no side effects. The various types of allopathic drugs to treat hair loss but they have many side effects. Herbs are starting material for any medication research. Approximately about 80% residents recommended herbal drugs for their beneficial effects along with fewer side effects as compared synthetic drugs.

Alopecia is a relatively frequent presenting problem in the pediatrician's office and can be due to diverse congenital or acquired conditions. Assessment based on the patient's age, acute or chronic timeline, and scalp examination can provide extensive clinical insight into the etiology of alopecia. Often a referral to a pediatric dermatologist is helpful, as trichoscopy, light microscopy, and biopsy may not be available in the pediatrician's office. Physicians can offer psychosocial support with all hair loss complaints.

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