

A REVIEW ON HERBAL HAIR TONICS.

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ABSTRACT :

This abstract explores the benefits and applications of herbal hair tonics. Herbal hair tonics, derived from plant extracts, have gained popularity for promoting hair health. Rich in natural compounds like vitamins and antioxidants, these tonics aim to nourish the scalp, strengthen the hair follicle and minimize hairfall. The diverse range of herbs used offers a holistic approach to hair care, addressing issues such as dandruff and promoting a healthier, shinier appearance. As consumers seek natural alternatives, herbal hair tonics present a promising option with potential advantages for those looking to enhance their hair's vitality and resilience. Hair tonics are grooming products primarily designed to enhance the health, appearance, and manageability of hair. Modern hair tonics blend scientific advancements with traditional knowledge, incorporating a variety of ingredients such as vitamins, minerals, botanical extracts, and sometimes alcohol or oils. These components work synergistically strengthened and replenish the hair scalp, benefits with hair tonics extend beyond mere aesthetics. They often address issues like dryness, dandruff, and hair loss, offering a holistic approach to hair care. Additionally, some tonics aim to improve circulation to the scalp, ensuring a healthy environment for hair growth. Usage of hair tonics involves applying them directly to the scalp and massaging gently to stimulate absorption. Regular and proper application is key to achieving the desired results, although individual outcomes may vary based on hair type, genetics, and other factors. In conclusion, hair tonics play a multifaceted role in nurturing and maintaining healthy hair and scalp. Their evolution from ancient remedies to modern formulations highlights their enduring relevance in the realm of hair care.

Keywords : *hair care, herbal hair tonics, plant extracts, natural remedies.*

INTRODUCTION :

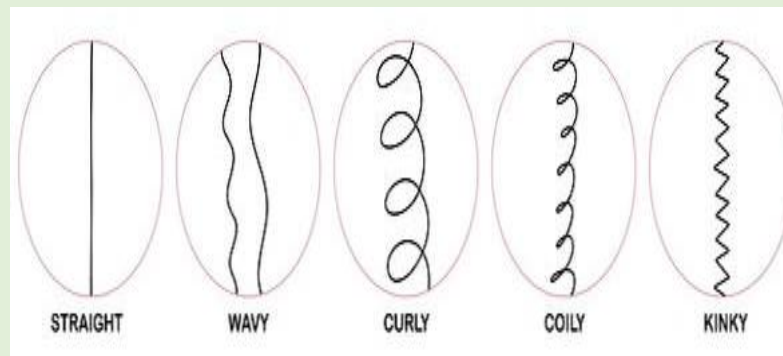
The introduction to a discussion on herbal hair tonics sets the stage for exploring the significance and potential benefits of these natural remedies.

Hair care has been a longstanding aspect of human grooming and self-care practices. With a growing awareness of the impact of synthetic chemicals in conventional hair care products, there has been a resurgence of interest in natural alternatives. Herbal hair tonics, derived from plant extracts, have become a preferred option for individuals looking for a better holistic also sustainable for adapting hair health.

In recent years, there has been a notable shift towards embracing traditional and herbal remedies, driven by a desire for products that are not only effective but also in harmony with nature. This trend extends to the realm of hair care, where consumers are increasingly turning to herbal solutions to address various concerns, from hair loss to maintaining overall hair vitality.^[1]

This introduction aims to provide an overview of the context surrounding herbal hair tonics, touching upon the historical use of herbs in hair care, the contemporary shift towards natural products, and the rising interest in herbal remedies. As we delve deeper into this exploration, we

will uncover the diverse array of herbs employed in these tonics and the potential benefits they offer for scalp health, hair growth, and overall well-being.



, Fig.no.1 Types of hairs

Types of hairs :

Human hair comes in various types, each characterized by different textures structures.

1. Straight Hair:

Characterized by a straight and smooth texture.

Reflects light well, giving it a shiny appearance.

2. Wavy Hair:

Exhibits a gentle wave pattern.

Falls between straight and curly hair in terms of texture.

3. Curly Hair:

Forms spiral or corkscrew-shaped curls.

Can range from loose curls to tight coils.

4. Kinky Hair:

Tightly coiled and often dense.

Commonly found in individuals of African descent.^[2]

5. Fine Hair:

Refers to the diameter of individual hair strands.

Fine hair is thinner and may appear more delicate.

6. Medium Hair:

A middle ground in terms of strand thickness.

7. Coarse Hair:

Has a thicker diameter, making it appear robust.

Often associated with a more textured feel.

8. Thick Hair:

Describes the density of hair follicles on the scalp.

Not to be confused with coarse, which refers to individual strand thickness.

9. Thin Hair:

Indicates lower density of hair follicles.

Each strand may be fine or coarse.

10. Normal Hair:

A balanced combination of strand thickness and density.

Understanding one's hair type is crucial for selecting appropriate hair care products and styling techniques tailored to specific needs and preferences.

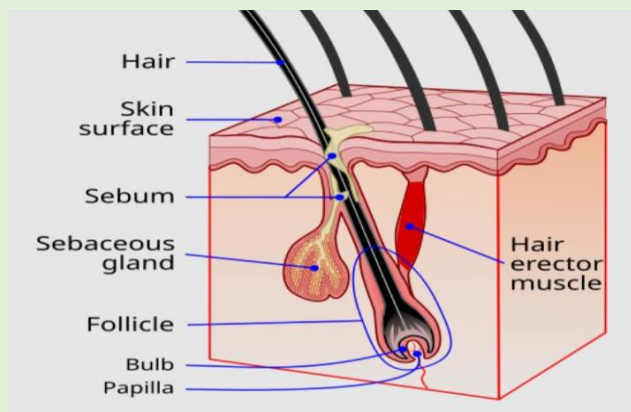


Fig.no.(2)Parts of hair

HAIR GROWTH :

Hair growth occurs in three main phases:

1. Growth phase (Anagen).

For many years this phase remains and hairs are actively producing new.

The hair shaft grows longer during this phase.

The duration of the anagen phase varies among individuals and is influenced by genetics.

2. Involution Phase (Catagen) :

It is short transitional phase that signals as falling off of the hair growth.

Hair root cell get shrinked and hair strand is cut off from its supply of blood.

The stage remains for few weeks.

3. Resting Phase (Telogen):

The follicle contribute to be in rest stage during this phase.

Existing hair is not growing, and a new hair begins to form beneath it. After a few months, the old hair falls out as the new hair pushes it out. This cycle repeats itself throughout a person's life. It's important to note that each hair follicle operates independently, so various hairs on the scalp may be in different phases of the growth cycle at any given time.^[3] Additionally, factors like genetics, age, health, and hormonal changes can affect the length of hair



Fig.no.(3)Hair Growth Cycle

HAIR FOLLICLES :

Follicles of hairs are small, structures resembles that produce and nurture individual hair strands. Key points about hair follicles include:

Location:

Found at the inner lining of the dermis, follicles hair are present across the entire human skin, excepted for palms of the hands and also foot.

Structure:

Each hair follicle consists of a hair bulb, root, and shaft.

The base of the follicle contains the hair bulb, which is where active cell division occurs, producing the hair shaft.

Growth Cycle:

Hair follicles go through the (anagen) cycle of growth,(catagen) transitional phase also (telogen) resting phase.

The growing phase (anagen) is the active growth period, catagen is a transitional phase, and telogen is a resting phase.

Blood Supply:

The skin filament at the bottom of the follicle of hair, provides nourishment to growing hair through blood lining of vessels.

Pigmentation and Texture:

The hair shape of the follicle decides the texture of hair (straight, wavy, curly).

Pigment-producing cells in the follicle contribute to hair colour.

Hair Growth Independence:

Every follicle of hair, works independently allowing them for stages of different cycle of growth simultaneously.

Hormonal Influence:

Changes in hormones, that occur in puberty, pregnancy, shows the activity on the follicles of hair.

Regeneration:

After shedding a hair, the hair follicle has the ability to regenerate and produce a new hair strand.

Genetic Factors:

Hair follicle characteristics, including density and thickness, are often influenced by genetic factors.^[4]

The structures and function understanding for hair follicles is essential to comprehending processes providing hair growth maintenance. Proper care and attention to factors influencing hair follicle health contribute to overall hair well-being.

The cross section of the hair :

The cross-section of a hair shaft reveals its internal structure. Here are the main components :

1. Cuticle:

Hair shaft is at the epidermis of the skin.

Scale-like cells are composed of overlay which protects inner layers.

Contributes to the hair's strength and elasticity.

2. Cortex:

The middle layer beneath the cuticle.

Contains long strands of proteins, mainly keratin, which determine the hair's strength, colour.

Pigment granules responsible for hair colour are found in the cortex.

3. Medulla:

The innermost layer, not always present in all hair types. Composed of loosely packed cells.

Its function is not entirely clear, and its presence or absence does not significantly affect hair characteristics. Understanding the cross-section of hair provides insights into its composition and properties, influencing factors such as strength, flexibility, and colour. Proper care, including moisture retention and protection of the cuticle, is essential for maintaining healthy hair.^[5]



Fig.no.(4)Hair Anatomy

pH of the scalp :

Hair pH usually differs from 4.5 to 5.5, making it slightly not the basic. This acidity is influenced by the natural oils (sebum) produced by the scalp. Maintaining this acidic pH is essential for the health and appearance of the hair. Here's why:

Cuticle Integrity:

The hair cuticle, the hair shafts at the dermis layer shows in overlaying of the cells.

A slightly acidic pH helps to keep the cuticle flat and closed, promoting smoother and shinier hair.

Protein Structure:

Hair is primarily composed of proteins, including keratin.

The acidic pH supports the structure of these proteins, contributing to the strength and elasticity.

Colour Preservation:

For those who colour their hair, an acidic pH helps preserve the longevity and vibrancy of hair colour.

Product Compatibility:

Hair care products with a pH that aligns with the natural pH of the hair are generally more compatible and less likely to cause damage or irritation.

Maintaining the pH balance of both the scalp and hair is crucial for overall hair health. It helps in preventing issues like dryness, frizz, and damage while promoting a healthy and vibrant appearance.^[6]



Fig.no.(5) Hair pH scale

Loss of Hair :

Men and women both face the Alopecia that is also called as hairfall. Several factors contribute to hair loss, and it can manifest in various ways.

1. Normal Cycle of Hair Growth:

The growth of hair is a organic cycle, anagen, catagen and telogen phases.

On average, individuals lose 50 to 100 hairs a day as part of this normal cycle.

2. Reasons for Hairfall:

(Androgenetic Alopecia): Hereditary factors resulted into men and women baldness. Changes in hormones: Pregnancy, childbirth, menopause, and thyroid disorders can influence hairfall. Medical Reasons: Certain illnesses and health issues (chemotherapy, radiation) leads hairfall. Nutritional Deficiencies: Lack of essential nutrients, such as iron or vitamin D, may contribute to hair.

3. Treatment Options:

Treatments may include medications like minoxidil or finasteride, which promote hair growth. In some cases, addressing the underlying cause, such as managing a medical condition or nutritional deficiency, can help.

4. Preventive Measures:

Lifestyle for health: Maintaining a proper meal benefits, daily exercising managing stress which can lead for well-being, including hair types of hair loss is essential to implementing strategies manage or defines condition. Seeking professional guidance can provide personalized insights and recommendations based on individual circumstances.

Hair Loss problems :

Various hair problems or disorders can affect the scalp and hair. Here are some common names of hair problems:

1. Alopecia Androgenetic:

It is both gender baldness.

2. Alopecia Areata:

An autoimmune condition resulting in patchy hair loss.

3. Telogen Effluvium:

Characterized by excessive shedding due to a disruption in the hair growth cycle.

4. Alopecia Traction:

It is the hairfall due to tension and due to pulling the hair.

5. Scarring Alopecia:

Hair loss accompanied by scarring of the scalp tissue.

6. Trichotillomania:

A psychological disorder involving compulsive hair pulling.

7. Dandruff (Seborrheic Dermatitis):

A common scalp condition causing flaking and itching.

8. Psoriasis of the Scalp:

An autoimmune disorder leading to red, scaly patches on the scalp.

9. Folliculitis:

Inflammation of hair follicles, often caused by infection.

10. Hirsutism:

Excessive and unwanted hair growth in women, often in a male pattern.

11. Split Ends (Trichoptilosis):

Splitting or fraying of hair ends due to damage.

12. Dry or Damaged Hair:

Hair lacks moisture or has undergone damage from styling or environmental factors.

13. Greasy or Oily Hair:

Excessive oil production on the scalp, leading to a greasy appearance.

14. Hair Thinning:

Generalized reduction in hair density, often associated with aging.

15. Allergic Reactions (Contact Dermatitis):

Irritation or inflammation of the scalp due to contact with certain hair care products or allergens.

Identifying the specific hair problem is crucial for implementing appropriate treatments or management strategies. Consulting with a dermatologist or healthcare professional can provide accurate diagnosis and guidance for addressing specific hair concerns^[8]

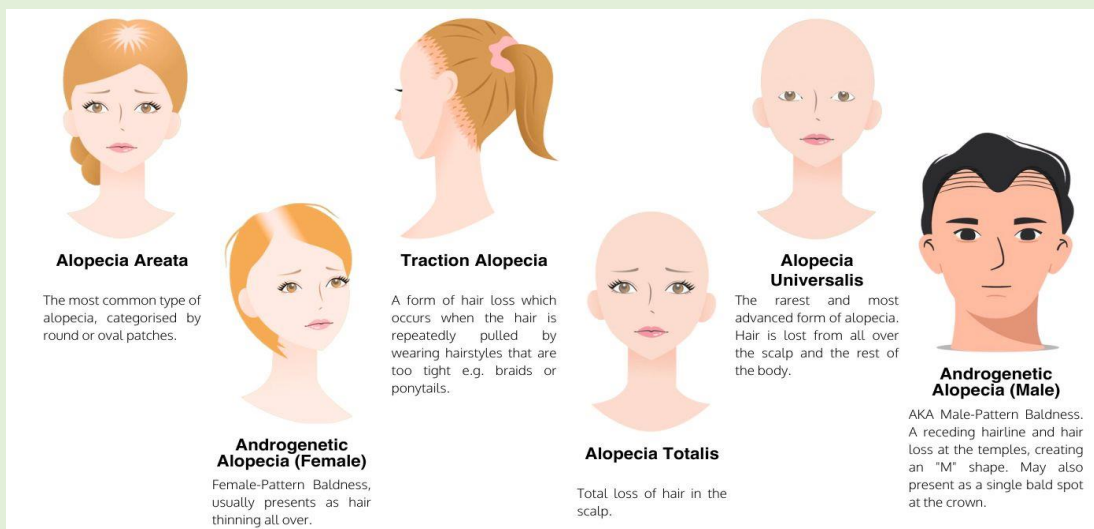


Fig.no.(6) Types of hair loss

Causes of hair loss :

Genetics

Hormonal Imbalance

Medical Conditions

Various hair treatments

Nutritional Deficiencies

Physical and emotional stress

Poor hair care practices

Age

Fungal infections

Environmental factors

Symptoms of hair loss :

1. Gradual thinning of hair.
2. Bald patches, either circular or oval in shape.
3. Sudden increase in hair shedding.
4. Receding hairline, especially in men.
5. Itching or irritation of the scalp.
6. Tightness or discomfort in affected areas.
7. Broken or damaged hair.
8. Changes in hair texture, such as increased brittleness.
9. Visible hair loss in the shower or on pillow.
10. Emotional distress and changes in self-esteem.
11. Patches of "exclamation mark" hairs in alopecia areata.
12. Changes in hair density or coverage

Seeking advice from a healthcare professional or dermatologist is recommended for accurate diagnosis and appropriate.^[9]

Home remedies for Hair loss :

1. Scalp Massage:

Massaging the scalp improves blood flow thereby supplying nutrients and potentially stimulating hair growth.

2. Aloe Vera :

Aloe has smoothen activity which promotes healthy hairsalp. Applying fresh aloe vera gel may provide hydration and reduce inflammation.

3. Oiling with coconut:

Oil of coconut is rich has contains fatty acids that permeates the hair root and promotes moisture and impacts hair health.

4. Juice of Onion:

It has sulfur, which boosts collagen production, encourage hair growth. It is applied to the scalp for a specified duration before washing.

5. Egg Mask:

They are a primers of protein, that is crucial for healthy hair. An egg mask can nourish the hair and promote strength and shine.

6. Green Tea Rinse:

Green tea is rich in antioxidants that may help stimulate hair follicles. Using green tea as a rinse can provide a potential boost hair health.

7. Organic Oils (Rosemary/Lavender):

Organic oils of rosemary and lavender are believed to have properties that support hair growth. They are often diluted in a carrier oil and applied to the scalp.

8. Healthy Diet:

A well-balanced diet with sufficient vitamins and minerals, such as iron, zinc, biotin, supports overall health, including hair health.

9. Avoiding Tight Hairstyles:

Wearing tight hairstyles can lead to traction alopecia, a form of hair loss. Opting for looser styles reduces stress on the hair.

10. Reducing heating tools:

Always using the heating styling can adversely affect hair. Limiting their use helps prevent hair breakage and loss.^[10]

It's essentially to know that these remedies are commonly used, individual responses can vary. If experiencing significant or everlasting hairfall, consulting with a healthcare dermatologist and professionals is advisable for a more accurate diagnosis and personal guidance.

Marketed Herbal Hair Tonics are listed below :

Sr.no.	Name of Brand	Main Constituent
1.	The EnQ ultimate Hair Care Tonic.	Amla, Brahmi, Bhringraj.
2.	Blue Nectar Hair Tonic.	Hibiscus, Bhringraj, Rosemary, Aloe Vera.
3.	Greenberry Organic Hair Tonic Oil.	Oil of jojoba, Oil of Murumura.
4.	Man matters.	Redensyl.
5.	Ohria Ayurveda Banyan Root Hair Tonic.	Banyan root, Hibiscus, Neem, Green tea, Amla, Arnica, Aloe Vera, Brahmi.

Table No. 1 Marketed Products

Ingredients role that are used in Herbal Hair Tonic.

Oil of Tulsi :

Scientific name : Ocimum tenuiflorum, Holy Basil.

Chemical Constituent : Oleanolic acid, Eugenol, Linalol.

Uses : Help prevent hairfall, minimize the grey hair, helps in thickness and also to remain black, breakage avoided.



Fig.no.(7) Tulsi

Coconut Oil :

Scientific name : *Cocos Nucifera*.

Chemical Constituent : Palmitic acid, Oleic acid, Linoleic acid.

Uses : Moisturize hair, reduce breakage, protect from protein loss, protect from wind, sun, smoke.



Fig.no.(8) Coconut

Henna :

Scientific name : *Hibiscus Rsasineris* Linn.

Chemical Constituent : Flavonoids, Anthocyanins.

Uses : Hair boom promoting and antigreying properties.



Fig.no.(9) Henna

Ziziphus jujube :

Scientific name : *Ziziphus Jujube* Linn.

Chemical Constituent : Jujube B.

Uses : Its leaf has antibacterial activity against dandruff.



Fig.no.(10) Jujube

Amla :

Scientific name : *Emblica Officinalis*.

Chemical Constituent : Gallic acid, Ellagic acid.

Uses : Moisturizes hair, makes hairs softer, shiner, voluminous hair.



Fig.no.(11) Amla

Hibiscus :

Scientific name : *Hibiscus Rsasineris* Linn.

Chemical Constituent : Flavonoids, Anthocyanins.

Uses : Promotes hair booming and antigreying properties.



Fig.no.(12) Hibiscus

Rosemary Oil :

Scientific name : Rosmarinus Officinalis.

Chemical Constituent : Linalool, Thymol, Eucalyptol.

Uses : Hairs get gentle and vibrant and fasten the hair growth.



Fig.no.(13) Rosemary

Aloe Vera :

Scientific name : Aloe Barbadenis.

Chemical Constituent : Enzymes, Vitamins, Minerals, Saponin, Salicylic acid.

Uses : Moisturizes hair and nourishes hair growth.

Fig.no.(14) Aloe Vera

Fenugreek :

Scientific name : Trigonella Foenum – graecum.

Chemical Constituent : Carbohydrates, Protein, Lipid, Alkaloids.

Uses: Used for hair thinning and condition such as dandruff and dry itchy scalp.



Fig.no.(15) Fenugreek

Bhringraj :

Scientific name : *Eclipta prostrate*.

Chemical Constituent : Wedelo lacetone, wedelic acid.

Uses : Fights hair fall and premature greying.



Fig.no.(16) Bhringraj

Wolfsbane :

Scientific name : *Arnica Montana*.

Chemical Constituent : Lactone, Helenalin.

Uses : Promotes hair growth and its strength.





Fig.no.(17) Wolfsbane

Gotu Kola :

Scientific name : Centella asiatica.

Chemical Constituent : Pentacyclic, triterpenoid, Brahmic acid.

Uses : Promotes antidandruff properties, stimulates growth of hair^[11]

Fig.no.(18) Gotu Kola

Medicinal properties of Herbal Hair Tonics :

Herbal hair tonics often incorporate plant-derived ingredients known for their potential medicinal properties. While the effectiveness can vary among individuals.

It's essential to know that these ingredients have historical uses and may provide benefits to some individuals, scientific evidence supporting their efficacy in hair tonics can vary. Additionally, individual responses can differ, and results may depend on factors such as the underlying cause of hair issues and overall health.

Herbal hair tonics have gained popularity as natural alternatives to traditional hair care products. These tonics harness the medicinal properties of various plant-derived ingredients to promote scalp health, nourish hair follicles, and potentially address common hair concerns.^[12]

In the quest for healthy, lustrous locks, many individuals turn to herbal hair tonics as a natural and holistic approach to hair care. These tonics, infused with the medicinal properties of diverse plant-derived ingredients, represent a fusion of ancient wisdom and modern hair care practices. As the demand for sustainable and natural solutions rises, understanding the therapeutic qualities of these herbal formulations becomes essential. This exploration delves into the rich tapestry of medicinal properties offered by key herbal components in these tonics, shedding light on their potential to nurture the scalp, invigorate hair follicles, and address a myriad of hair concerns.

Aloe Vera :

Medicinal Properties: Soothing, moisturizing, anti-inflammatory. Aloe vera

can provide relief to the scalp and hair.

Rosemary Oil :

Medicinal Properties: Stimulating, antioxidant. Rosemary oil may improve circulation in the scalp and provide antioxidant properties.

Hibiscus :

Medicinal Properties: Nourishing, strengthening. Hibiscus extract is rich in vitamins and amino acids, promoting hair health.

Bhringraj :

Medicinal Properties: Hair tonic has anti-inflammatory properties.^[13]

CONCLUSION :

In conclusion, herbal hair tonics represent a harmonious fusion of nature's bounty and the quest for optimal hair health. These formulations, enriched with diverse plant-derived ingredients, showcase a commitment to holistic hair care by addressing various concerns naturally. From aloe vera's soothing touch to ginseng's stimulating embrace, each herb contributes its unique set of medicinal properties, fostering an environment conducive to vibrant and healthy hair.

The significance of herbal hair tonics extends beyond mere aesthetics; it embodies a commitment to scalp health and overall well-being. The inclusion of antifungal properties in some tonics underscores a nuanced approach, recognizing the impact of fungi on scalp health and hair vitality. This botanical remedy stands at the forefront of the growing trend toward sustainable and plant-based alternatives in the beauty industry.

As consumers increasingly seek personalized and natural solutions, herbal hair tonics emerge as a promising choice, drawing from the ancient wisdom of herbal

remedies. The adaptability of these tonics to diverse hair types and concerns demonstrates their versatility and accessibility in the realm of hair care.

While individual responses may vary, and scientific evidence supporting herbal remedies continues to evolve, the herbal hair tonic represents a bridge between tradition and contemporary hair care practices. As we look to the future of hair care, these tonics symbolize a commitment to embracing nature's gifts for healthier, more radiant hair. The journey to vibrant and nourished hair unfolds in the refreshing embrace of herbal hair tonics, inviting individuals to embark on a natural and personalized approach to their hair care rituals.^[14]

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