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A REVIEW ON HERBAL HAIR OIL

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Abstract:- Pharmacognosy is the branch of pharmacy that deals with herbs. This medicinal plants are utilized for preparing and manufacturing myriads of medicines. Beside this, herbs are used for beautification of body, preparation of cosmetics, flavouring and colouring agent. Hair plays a vital role in personality of human and we use a lots of cosmetics product for the care of hair. The study aims reviewing the importance of herbal oil and their use in the common hair problem such as baldness, hair fall, hair dryness, dandruff etc. Various beauty and cosmetic products are used which contain herbs to give young and charming look. Various herbal ingredients are used in herbal hair formulation; they provide essential nutrients such as vitamins, antioxidant, etc. Herbal hair oil has been widely used for nourishment of hair and for the protection of hair from hair fall and hair damage. Now a day's side effect is a major problem after using any beauty product due to which herbal products are preferred because of having less probability of any types of side effects.

Keywords:- Hair, herbal hair oil, dandruff, hair fall.

Introduction

The term Ayurveda in Sanskrit consists of two words; ayur meaning life, and veda meaning sacred knowledge or science. Thus, Ayurveda is the science of life. In Ayurvedic medicine, herbs are used as an integral part of health care system [1]. Hair is a protein filament that grows from follicles found in the dermis. Hair is one of the defining characteristics of mammals. The prominent problems arises with in cosmetics are Dandruff, hair loss, dry hair, spit ends, frizzy hair, dull hair, heat damaged hair, colour damaged hair, grey hair, etc.

HERBAL OIL-

Herbal oils, also known as oil extracts, are obtained from herbs and plant sources; they possess therapeutic benefits. It is well-known that synergistically a combination of nutrients, bioactive components, antioxidants and bio stimulants proved to be more effective.

HAIR FIBER STRUCTURE :-

The keratinocytes elongate, divide and relocate to the dermis [2]. Dermal fibroblasts then form a dermal papilla beneath the hair germ. This causes stimulation of the basal stem cells to up-regulate their cycle, producing cells that will keratinise and form the hair shaft [3]. The follicles develop from an ectodermal bud which invades the mesenchyme during embryonic development [4]. The mesoderm also condenses during the development creating an outer mesodermal component to the embedded part of the hair.

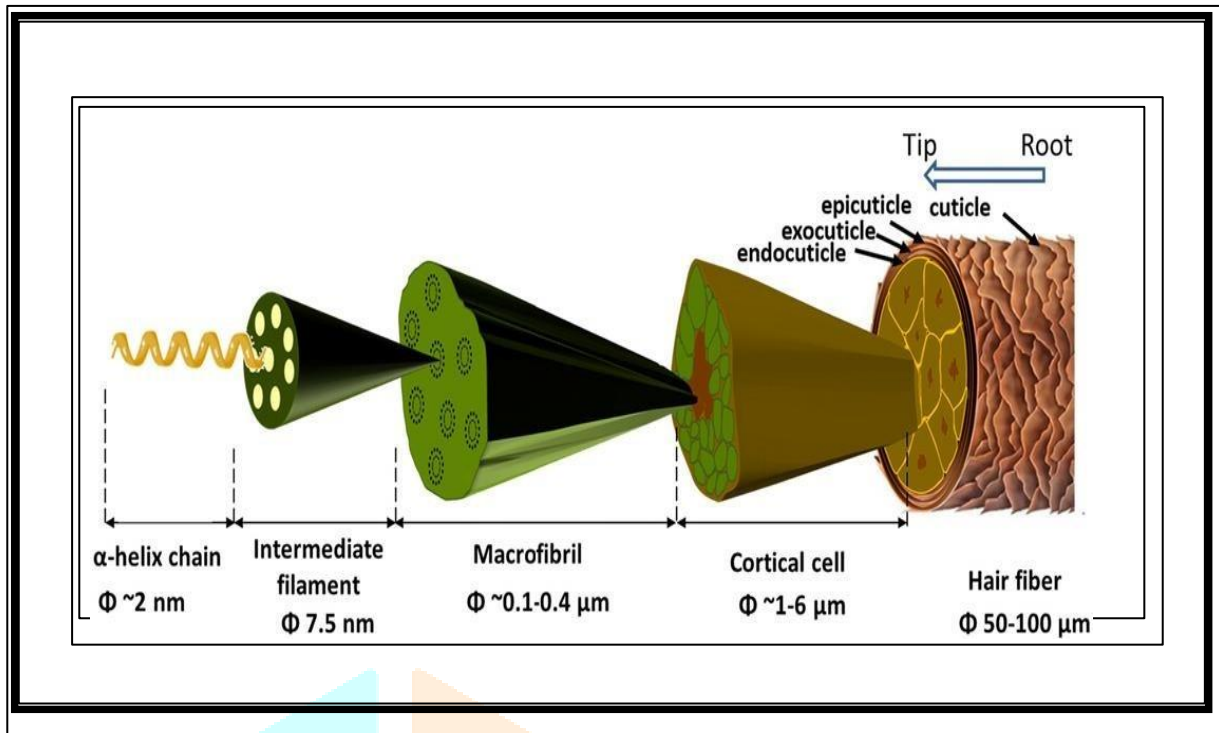


fig. hair fiber structure

HAIR GROWTH CYCLE

The growth of hair is cyclic phase divided into following- anagen (growth), catagen (involution) and telogen (rest) [5]. Pigmentation problems (Fading), dandruff and falling of hair (Shedding) are associated problems with hair [6]. The loss of hair is not life threatening, but has profound impact on social interactions [7]. There are no concord views on hair loss, it is quite controversial issue [8,9].

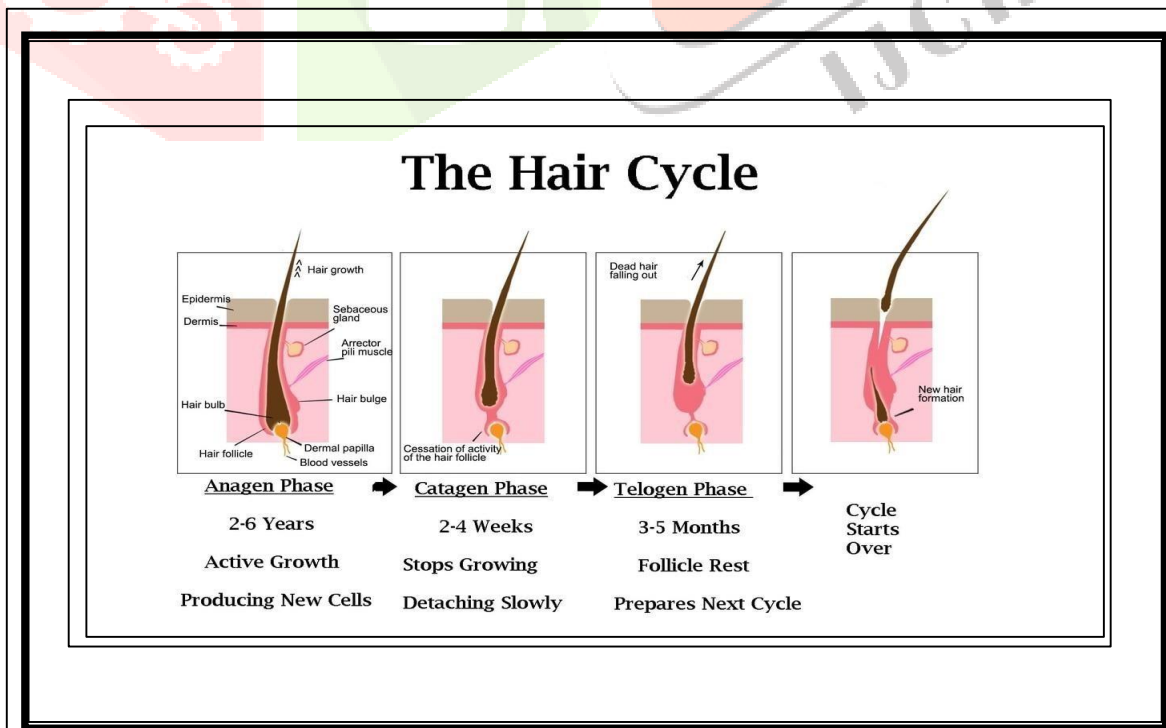


fig.hair cycle

In androgenetic alopecia hair follicle size is reduced and duration of anagen is diminished while an increase in the percentage of hair follicles in telogen [10]. Alopecia areata In alopecia areata the hair is lost from the scalp (alopecia areatotalis) or from the whole body (alopecia areatauniversalis) [11]. Telogen effluvium Telogen effluvium is characterized by the early entrance of a large no of hairs in to telogen phase at one time [12]. Chemotherapy- induced alopecia This type of hair loss is occurred due to the sideeffects of cancer therapy.

Different herbs used are as follows

S.NO	BOTANICAL NAME	COMMON NAME	FAMILY	CHEMICAL CONSTITUENTS
1	Syzygium aromaticum	Clove	Myrtaceae	Volatile oil, tannin (gallotanic acid), resin, chromone, eugenine.
2	Phyllanthus embica	Amla	Phyllanthaceae	vitamin Cellagic acid, chebulinic acid, gallic acid.
3	Murraya Koenigii	Curry Leaves	Rutaceae	Linalool, Elemol, Geranyl acetate, Myrcene
4	Trigonella foenum-graecum	Fenugreek Seeds	Fabaceae	Carbohydrates, Proteins, Lipids, Alkaloids, Flavonoids,
5	Rosa- sinensis	Hibiscus	Malvaceae	Iron thiamine, β -carotene, riboflavin and ascorbic acid.
6	Azadirachta indica	Neem	Meliaceae	Nimbandiol, Nimbolide, Ascorbic acid.
7	Aloe vera	Alovera	Aphodelaceae	Anthraquinones, Chromones, Anthrones, Phenolic compounds
8	Curcuma Longa	Turmeric	Zingiberaceae	Curcuminoids, Zingiberene, Bornoel, Caprylic acid.
9	Glycyrrhiza glabra	Liquorice	Fabaceae	Glabridin, Enoxolone

Plant Profile

Clove:-

1.	Botanical name	Syzygium aromaticum
2.	Kingdom	Plantae
3.	Order	Myrtales
4.	Family	Myrtaceae
5.	Genus	Syzyguim
6.	Species	S.aromaticum



figure:-clove

Cloves contain high levels of antioxidants and nutrients that can add to the growth and strength of your hair. They can be used for protecting the scalp from dandruff, which is actually a major cause of weak and thin hair. Cloves also contain anti-inflammatory agents which further help in hair thickening[13].

Uses :-

- Contain important nutrients.
- High in antioxidants.
- May help protect against cancer.
- Can kill bacteria.
- May improve liver health.
- May help regulate blood sugar.
- May promote bone health.
- May reduce stomach ulcers

Amla

1.	Botanical name	Phyllanthus embica
2.	Kingdom	Plantae
3.	Order	Malpighiales
4.	Family	Phyllanthaceae
5.	Genus	Phyllanthus
6.	Species	P.emblicca



figure-amlamla

Ayurvedic fruit Amla, also known as Indian Gooseberry for hair. Derived from the Amalaki plant, Amla fruit has been used as an essential part of hair care rituals since time immemorial and is considered an elixir for hair. Amla also possesses nourishing properties. One amla contains up to 80 percent moisture making it a great natural skin conditioner[14].

Uses :-

- Antioxidant.
- Strengthen the scalp and hair.
- Stimulate hair growth.
- Reduce premature pigment loss from hair, or greying.
- Reduce hair loss.

Curry Leaves:-

1.	Botanical name	Murraya Koenigii
2.	Kingdom	Plantae
3.	Order	Sapindales
4.	Famlily	Rutaceae
5.	Genus	Murraya
6.	Species	M.Koenigii



figure- curry leaves

Curry leaves are commonly known as 'KadiPatta'. It is one of the most common household ingredients which are easily found in most Indian kitchens.

Curry leaves are loaded with properties that can work wonders for your hair and lead to hair growth. They are rich in antioxidants and proteins, these antioxidants neutralize the free radicals and keep your hair healthy and strong.

It can be your inexpensive method to fight the hair problems that you can prepare at your home. Here are some ways to use curry leaves for hair growth. But before you follow these ways do a patch test for your safety, as your skin might be allergic to curry leaves' paste[15].

Uses :-

- Use to prevent hair loss, hair thinning, premature graying of hair, and hair damage.
- Use to strengthen the hair and retain shine in the hair.
- Use to hair growth
- Anti-hairfall

Fenugreek Seeds:-

1.	Botanical name	Trigonella foenum-graecum
2.	Kingdom	Plantae
3.	Order	Fabales
4.	Family	Fabaceae
5.	Genus	Trigonella
6.	Species	T. foenum-graecum



figure- fenugreek seeds

Various plant compounds in fenugreek may interact with a chemical in the body that is known as DHT (dihydrotestosterone). If DHT attached itself to your hair follicles, the result, sooner or later, would be hair loss. Fenugreek may slow down the ability of DHT to attach to your hair follicles.

An animal study has also shown that a herbal oil mixed with fenugreek seed extract can increase hair thickness and growth.

Although these studies show a relationship between using fenugreek and the ability to stop hair loss, more studies, especially human studies, are needed to determine if and how fenugreek can help grow hair[16].

Uses :-

- Revives Damaged Hair.
- Fights Dandruff.
- Scalp Inflammation.
- Adds Shine And Soft Texture.
- Prevents Premature Grey Hair.

Hibiscus

1.	Botanical name	Rosa-sinensis
2.	Kingdom	Plantae
3.	Order	Malvales
4.	Family	Malvaceae
5.	Genus	Hibiscus



figure-hibiscus

It can help boost your immune system and may help to prevent cell damage caused by free radicals in the body. This can reduce your risk of developing many significant health complications such as heart disease, diabetes, and cancer. Hibiscus tea contains other antioxidants, such as anthocyanins[17].

Uses:

- Stimulate hair growth.
- Prevents baldness .
- Helps in treating dandruff.
- Deep-Condition the hair.
- Prevent premature growth of hair

Neem

1.	Botanical name	Azadirachta indica
2.	Kingdom	Plantae
3.	Order	Sapindales
4.	Family	Meliaceae
5.	Genus	Azadirachta
6.	Species	A.indica



figure-neem

Neem is a natural herb that comes from the neem tree, other names for which include Azadirachta indica and Indian lilac. The extract comes from the seeds of the tree and has many different traditional uses. It is one of two species in the genus Azadirachta, and is native to the Indian subcontinent and most of the countries in Africa. It is typically grown in tropical and semi-tropical regions [18].

Uses:

- condition your scalp.
- promote healthy hair growth.
- temporarily seal hair follicles.
- soothe frizz.
- minimize grays.
- reduce dandruff.
- treat head lice.

Aloe vera

1.	Botanical name	Aloe vera
2.	Kingdom	Plantae
3.	Order	Asparagales
4.	Genus	Aloe
5.	Species	A.vera



figure-aloe vera

The word aloes has originated from an Arabic word viz. aloch meaning a shining bitter substance. Among the different species, vera means true, ferox means wild, spicata means flowers in spikes, and barbadensis and africana refers to habitat of plant. It is also known as aloe babadensis was used along with burnt alum for healing sore eyes[19].

Uses:-

- It contains healthful plant compounds.
- It has antioxidant and antibacterial properties.
- It accelerates wound healing.
- It reduces dental plaque.
- Use to remove dead skin

Turmeric:-

1.	Botanical name	Curcuma Longa
2.	Kingdom	Plantae
3.	Order	Zingiberales
4.	Family	Zingiberaceae
5.	Genus	Curcuma
6.	Species	C.longa



figure-turmeric

Treating the hair with turmeric can keep the scalp healthy, which is a key component in healthy hair and new hair growth.” Controls oil: “Turmeric is great for treating oily hair and scalps due to its anti-inflammatory and anti-microbial properties,” Engelman says[20].

Uses :-

- Use as anti-inflammatory
- Thinning hair,
- It may use as stimulate growth.
- Reducing inflammation, in turn, reduces the impact of pattern hair loss or directly inflammatory hair loss on the scalp and hair follicles.
- Antibacterial benefits

Liquorice

1.	Botanical name	Glycyrrhiza glabra
2.	Kingdom	Plantae
3.	Order	Fabales
4.	Family	Fabaceae
5.	Genus	Glycyrrhiza
6.	Species	G. glabra



figure- liquorice

Many people use liquorice to repair damaged hair. It found that liquorice can be used as a mild moisturizing treatment. The hair care formulas in search of the topic and found out that several women use natural liquorice in their henna treatments to mask the smell, then realized that it also created a silkier texture after rinsing out the henna[21].

Uses :-

- Liquorice is also known for adding moisture to dry scalp and hair.
- It also prevents premature baldness.
- Liquorice is also rich in protein, Vitamin B complex, flavonoids etc which promote healthy scalp and hair

Conclusion

Overall, the formulated herbal oil provides many nourishing value to hair such as vitamins, minerals, and essential oils. The finished product is within the limits. In conclusion, oil is beneficial to prevent hair from damage and loss caused by pollution and dull hair. And provide an alternative source from hazardous chemicals.

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