



REVIEW ON USE OF ASHWAGANDHA AS A HAIR TONIC

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ABSTRACT Ashwagandha is a plant utilized in medicine from the time of Ayurveda, an ancient system of Indian medication. this review article is presented to compile all the updated information on its hair growth stimulant activities, which were performed by widely different methods. Ashwagandha benefits hair because of its various medicinal uses like antistress, antidepressant, antioxidant, stimulation of DHEA (Dehydroepiandrosterone), and most importantly by maintaining body tridoshas (vata, pitta, kapha). There are many formulations of ashwagandha in the market proving best results for hair growth. Animal models have been studied to evaluate hair growth stimulation properties of Ashwagandha.

KEYWORDS : Ashwagandha, hair growth, antioxidant, antistress.

Introduction:

Hair loss (alopecia) can influence simply your scalp or your whole body, and it tends to be temporary or permanent. It tends to be the consequence of heredity, hormonal changes, ailments or may be due to ageing. Anybody can lose hair on their head. [3] Some amount of hair fall is completely normal. In women, it is about 80-100 strands and in men, about 50-70 strands. It is serious when hair fall increases or your scalp starts to become visible.

There are different conditions of hair loss like Androgenic alopecia, Telogen Effluvium, Alopecia Areata. Different causes of hair fall have identified with researches, it may be family history, hormonal changes, medications and their side effects, radiation therapy, vitamin and iron deficiency, stress, age, certain weight loss, environmental factors, internal health, and finally hairstyle and treatments. [4]

Certain individuals like to let their hair loss run, its course untreated and unhidden. Others might cover it up with hairdos, cosmetics, caps or scarves. Yet others pick one of the medicines accessible to prevent further hair loss or reestablish hair growth. [3]

Allopathy Vs Ayurveda: Allopathy and Ayurveda both are used widely in the treatment of hair loss treatments, but approach is quite different. Allopathy consider it as hair loss as a result of hormonal imbalance, stress, illnesses, vitamin deficiency and genes. While Ayurveda says that hair loss is result of internal health issues such as digestion, sleep, metabolism, lack of nourishment to follicles among others. Ayurveda treats hair fall by removing its root cause and reduces hair loss, ex: Shatavari, Ashwagandha, Guduchi, Pelargonium graveolens, Amalaki and Bhringraj. [16] Whereas, allopathy works directly by blocking hormones responsible, reversing the effect of DHT on follicles and elongating the growth phase of the hair cycle using clinically approved treatments, ex: Minoxidil, Finasteride, Redensyl [4]

Herbs have forever been the chief type of medication in India. Restorative plants have remedial properties due to the presence of different complex. Synthetic substances of various piece, which are found as auxiliary plant metabolites in at least one piece of these plants. Herbs and home grown drugs have made interest among individuals by its clinically demonstrated impacts like Hair loss. Too the abuse of engineered drugs, which brings about higher frequency of adverse drug reaction, has roused people to restore nature of safe cures [5]

Ashwagandha as choice of drug for hair disorders:

Over the decades, many scientific studies have been conducted to prove if there is justification of traditional uses of Ashwagandha. The results of these studies show that Ashwagandha benefits a variety of systems and disease — ranging from musculoskeletal conditions to supporting healthy thyroid function; from supporting healthy antioxidant and inflammation levels; and from supporting a healthy immune system to decreasing anxiety and chronic stress. [6] Ashwagandha is termed as the 'Queen of herbs' in Ayurveda. You

may include this herb in your everyday hair care routine. [2]

**Taxonomical classification**

Kingdom : Plantae
Subkingdom : Tracheobionta, Vascular plants
Super division : Spermatophyta, Seed plants
Division : Angiosperma
Class : Dicotyledons
Order : Tubiflorae
Family : Solanaceae
Genus : Withania
Species : somnifera Dunal

Chemical Constituents: The biologically active chemical constituents are Alkaloids like isopelletierine, anferine, steroidal lactones like withanolides, withaferins, saponins containing an additional acyl group such as sitoindoside VII and VIII, and withanolides with a glucose at carbon 27 ex: sitonidoside XI and X. *Withania somnifera* is additionally wealthy in iron. Quite a bit of *Ashwagandha's* pharmacological action has been ascribed to two fundamental withanolides, withaferin A and withanolide D. [19]

Description: It grows as a short shrub (35–75 cm) with a central stem and from it extend radially in a star pattern (stellate) and covered with a dense mat of woolly hairs (tomentose). The flowers are small I and green, ripe fruit is orange-red and has milk-coagulating properties. The roots are long, brown, tuberous. [20]

Advantages of Ashwagandha for hair :

1. Assuages you from hair Loss: High levels of cortisol (stress hormone) in the hair follicles is known to impact the hair growth cycle and decrease synthesis while increasing the breakdown of important components in the skin. An expansion in stress hormone, for example, cortisol influences the legitimate working of your hair follicles, in the end prompting hair loss. Ashwagandha can be a moment answer for deal with the cortisol levels in your body and consequently control follicle harm and hair loss. The spice has normal mood bosting properties that limit your balding by keeping your anxiety and stress under control.

"Likewise, ashwagandha is most popular for controlling post pregnancy hair fall brought about by hormonal awkward nature in ladies" "Likewise, ashwagandha is most popular for controlling post pregnancy hair fall brought about by hormonal awkward nature in ladies"

2. Reinforces your hair : Ashwagandha invigorates the development of DHEA (Dehydroepiandrosterone), a hormone in your body that is a good antioxidant agent. In this way, ashwagandha assists you with combatting free radicals from your scalp and hair follicles, subsequently advancing sound hair development.

3. Upgrades your scalp and hair nourishment : The flavonoids of ashwagandha are a rich wellspring of protein, L-ascorbic acid, iron, glucose, tannins, potassium, and nitrate, which are fundamental parts for solid hair development.

"Ashwagandha further develops blood flow in your scalp which thus upholds the conveyance of the supplements to your follicles.

4. Conditioning of your scalp and hair : The recreation of DHEA (Dehydroepiandrosterone) brought about by ashwagandha can expand the production of collagen and sebum on your scalp. This keeps your scalp and hair surface molded while fixing your dry and fragile hair. Likewise, the collagen and sebum forestall sun harm to your scalp and hair.

5. Reduces your scalp irritation : Due to anti inflammatory properties, ashwagandha works on the general soundness of your hair follicles. It RE illnesses like dandruff, tingling, psoriasis, dermatitis, and different sensitivities brought about by irritation and inflammation.

6. Turns around premature graying of hair : An amino acid present in ashwagandha called "Tyrosine", that aids in invigorating the melanin balance in your hair follicles and untimely reduces your hair turning gray.[2]

Marketed products of Ashwagandha for hair problems

Sr No.	Product name	Manufacturer	Details
1	Patanjali ashvashila capsule 20 gm	Patanjali	New Dehli
2	Kapiva hair care juice 1L	Veloce Herbals Private Limited	
3	Ashwagandha powder	Natural and Herbal products	Gwalior, Madhya Pradesh
4	Wiserm, Biotin & Ashwagandha	Vcos Cosmetics	India
5	Ashwagandha oil 30 ml	Moksha Lifestyle	New Dehli.

Experimental study on animals

In-vivo study for evaluation of hair growth conducted by Mukesh Pandey and coauthors, on male Wistar rats have shown significant results supported by histological study. Gel formulation of Ashwagandha was prepared using Aloe Vera gel as a base. animal study were conducted for 30 days to evaluate hair growth against standard (Minoxidil 10%). Histological studies using stereo microscope were performed in order to determine follicular growth. Also TPC (total phenolic content), TFC (total flavonoid content), Hydrogen peroxide (H₂O₂) scavenging activity and DPPH free radical scavenging activities were determined to prove its antioxidant nature supporting hair growth. The TPC and TFC provided a gross but close prediction of a plant's biological activity. The research showed that concentrates of products of Withania WSU and WSR have critical antioxidant agent as well as the possibility to invigorate the hair development with further developed hair follicular advancement in the creatures treated with the extract. The movement of Withania from high elevation area (WSU) was viewed as better. In this way, the research presumed that definition of organic product concentrate of Withania somnifera (WSU) can have a remedial application as a characteristic and safe natural solution for treatment of alopecia.[6]

Another study by V. P. Borkar, P. N. Dhabale was conducted on rats to formulate and evaluate herbo mineral cream for alopecia after hair loss from scalp and from other part of body or entire part of body, baldness, hormonal imbalance. Herbo mineral cream was prepared using extract of Withania somnifera, Emblica Officialis, eclipta alba and extract of

Glycyrrhiza glabra, and along with zinc supplement (Yashad bhasma). Yashad (Jasad) Bhasma is an ayurvedic mineral-based and immunomodulatory medicine. Rats were selected and tested for skin irritation test after which study was conducted for 30 days and observed for hair follicle growth. various physicochemical parameters were evaluated like colour, Ph, homogeneity, consistency. Based on discoveries of present research we may infer that the created herbomineral formulation of dried concentrate of Emblica Officialis, Withania somnifera, Eclipta alba, Glycyrrhiza glabra, and Yashad bhasma better detailing for zinc lack by adjusting hormonal lopsidedness and expands the pace of hair development which help to relieving alopecia, balding (sparseness) and hair related issues. Anyway further examination is expected to study their action clinically and to concentrate on their exact component of activity and viability on long haul use as zinc supplement to redress the zinc inadequacy. [7]

CONCLUSION:

Though number of allopathic products available in the market for treatment of alopecia, ayurvedic products are always first choice due to minimum side effects. Ashwagandha is found to be effective herb in the treatment of hair disorders, as it acts by root cause elimination. Various pharmacological properties of Ashwagandha has made a drug of choice as herbal cosmetic. Studies have been proved that Ashwagandha can effectively cure hair problems and can be serve as best hair cosmetic. In future it is possible that many new plants extract of Ashwagandha of commercial significance will be identified. Further clinical studies must be carried out in order to determine its safety for human use.

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