



REVIEW ON UNDERSTANDING THE EFFECT OF SHIGRU PATRA (MORINGA OLEIFERA) ON MUKHA DUSHIKA (ACNE VULGARIS)

Dr. Rashmi Pujar*¹ and Dr. Pallavi Mulimani²

¹Assistant Professor Department of Roganidana JSS Ayurveda Medical College Mysuru.

²Assistant Professor Department of Rasashastra and Bhaishajyakalpana SJG Ayurveda Medical College Koppal.

***Corresponding Author: Dr. Rashmi Pujar**

Assistant Professor Department of Roganidana JSS Ayurveda Medical College Mysuru.

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ABSTRACT

Mukhadushika is one among skin diseases that affects the face and disturbs physical, social, psychological state of individuals. It is Kapha Vata pradhana disease with rakta as dushya. The symptoms of Mukha dushika may be correlated with Acne vulgaris. According to the Global Burden of Disease (GBD) study, acne affects approximately 85% of young adults with age group ranging from 12–25 years. In India, research studies have reported acne in 50.6% of boys and 38.13% of girls in the age group of 12-17 years. In present day there are many Anti acne products that have come into practice, which contains many chemicals that are hazards to skin and produces many side effect like itching, dryness of skin etc. Shigru is one such herbal drug which contains the components that has property which act effectively on Acne. Therefore here an effort is made to review the on understanding the effect of Shigru patra (Moringa oleifera) on Mukha dushika (Acne Vulgaris).

Shigru, Mukhadushika, Moringa oleifera, Acne Vulgaris.

INTRODUCTION

Mukha dushika is a most common problem faced by teenagers which might affect physical, social, psychological state of a person. Shigru (moringa oleifera) being one such drug, where studies have revealed that the leaves of Moringa oleifera has highest c The MO leaves are also established as a rich source of omega-3 (ω -3) and omega-6 (ω -6) polyunsaturated fatty acids (PUFAs), in the form of α -linolenic acid (C18:3, ω -3, 49–59%), and linoleic acid (C18:2, ω -6, 6–13%). Palmitic acid (C16:0) is recorded in the major saturated fatty acid, accounting for 16–18 % of the total fatty acids in the Moringa leaves of glucosinolate is found in the leaves. The leaf of Moringa oleifera Lam. is used for treatment of diabetes in rural villages of Chuadanga district, Bangladesh (Rahman et al., 2013). Moringa oil has tremendous cosmetic value and is used in body and hair care as a moisturizer and skin conditioner. Moringa.^[1] All the constituents present in the leaves of Moringa shows its effectiveness on Acne vulgaris i.e Palmitic Acid is a highly soothing emollient, often used in skin cleanser.^[2]

α -Linolenic acid (ALA) or alpha linolenic acid is one of two essential fatty acids (EFA) that cannot be produced within the body. For this reason, alpha linolenic acid must be obtained through diet. This polyunsaturated (omega-3) fatty acid can be found in foods and vegetable oils such as linseed.^[3] However, linolenic acid benefits

may also provide a positive effect on skin without necessarily having to be consumed. When applied topically, ample amount of alpha linolenic can integrate and improve the totality of the skin barrier, which can help to enhance the skin's overall appearance. In skin care, alpha linolenic acid benefits can most commonly be found in cosmetic products.^[4]

Unsaturated omega -6 fatty acid found in corn, safflower and sunflower oils and used as an emollient and thickening agent in cosmetics. There is some research showing it to be effective as a skin restorative, an antioxidant and as a skin soothing agent.^[5] As shigru is easily available and has all the constituents that cures Acne vulgaris is present in it here effort is made to compile the.

DISEASE REVIEW

Mukhadushika is one among the kshudra rogas. It is caused due vitiation of Kapha, Vata dosha⁶ and Rakta dushya according to Susrutha acharya and Medas as dushya according to Vagbhata acharya. This disease appears like Shalmali kantaka aakara, medogarbhya, and has saruja pidaka which is Ghana. The lakshana of Mukhadushika may be co-related with Acne vulgaris.

The key components of aetiology are increased sebum production, colonisation of pilosebaceous ducts by Propionibacterium acnes, which in turn causes

inflammation, hypercornification and occlusion of pilosebaceous ducts. Under the influence of local sex-hormone metabolism, androgens stimulate an increase in the size of the sebaceous glands and sebum is produced in a greater degree. Sebaceous glands require androgenic stimulation to produce significant quantities of Sebum. These large glands themselves generate more active androgen metabolites through the activity of type 1, 5 α -reductase; one effect of these metabolites is to further increase the size of the sebaceous glands. Sebum acts in association with bacteria to produce keratinization and as a consequence of this blockage of the pilosebaceous duct and comedo formation take place.

The primary organism responsible for this is *Propionibacterium acnes*. This organism increases in number during sudden outbursts and is key factor in the change from non-inflammatory to inflammatory acne. This bacterium produces many inflammatory substances, such as lipases, proteases, hyaluronidases, and chemotactic factors that play key roles in producing lesions. Sebaceous gland activity is regulated by androgens from the testes and adrenals, which stimulate, and oestrogens, which seem to suppress activity. In the adult male the glands are normally maximally stimulated, leading to more severe in boys than in girls. The skin itself is a major site for androgenic conversion similar to that seen in the prostate gland and in the male genitalia. Dihydrotestosterone, rather than testosterone, may be the end-organ effector and is formed within the target cells where it stimulates lipogenesis as well as mitosis. Eunuchs do not develop acne. Oestrogens reduce the size of sebaceous glands and sebum production is diminished. Both androgens and progestogens increase sebum excretion and oestrogens reduce it, although the hormonal effects may also reflect end-organ sensitivity, as most patients have normal hormone profiles.

A study conducted during the period of September 2010 to March 2011 by Department of Dermatology in Rizgari Teaching Hospital in Erbil city in which 160 acne patients sample (74 male, 86 female) was collected and subjected for isolation and identification of micro-organism and it was found that the most common pathogenic bacteria causing acne were *Staphylococcus epidermidis* and *Propionibacterium acnes*. The most common anaerobic pathogen bacteria species were *Propionibacterium acnes*. Among the fungi, *Candida albicans* was the most common etiological agent. Along with this *Kocuria varians*, *S. hominis*, *Kocuria kristinae*, *S. aureus*, *S. warneri* etc were seen in few cases.

DRUG REVIEW

Moringa oleifera plant is referred to by a number of names such as horseradish tree, drumstick tree, ben oil tree, miracle tree, and "Mother's Best Friend" (Shindano *et al.*, 2008). It is drought-tolerant, fast-growing, multi-purpose and one of most useful tree due to its medicinal and nutritional properties in world and therefore described as a „miracle tree“.

The medicinal uses are numerous and have been long recognized in the Ayurvedic and Unani systems of Medicine (Kumar *et al.*, 2010). Almost all parts of this plant: root, bark, gum, leaf, fruit (pods), flowers, seed and seed oil have been used for treating various ailments such as skin infections, inflammation, swelling, anemia, bronchitis, asthma, diarrhoea, headache, gout, joint pain, rheumatism, hysteria, cholera, heart complaints, fevers, respiratory disorders, digestive disorders, intestinal worms, and diabetes in the indigenous system of medicine (Chopra *et al.*, 1994).

The ancient texts like Rig Veda (4500-1600 BC) and Atharva Veda mentioned the use of several plants as medicine. *Moringa oleifera* leaves, seeds, bark, roots, sap, and flowers are widely used through different processing like juice, powder, decoction etc. in Ayurveda to cure the diseases. Properties of *Moringa oleifera* in Ayurveda (Dravyaguna Vijnana, 2006). Rasa: Katu (Kshariya), Tikta; Guna: Laghu, Ruksha, Tikshna; Virya: Ushna; Vipaka: Katu; Doshakarma: Kaphavatahamaka. The different uses of this plant are applied. Through different kalpanas (processings) which are listed below: In Charak Samhita (1000 BC- 4th Cent. AD) (Charak, 1997). Powder- worm manifestation, headache (C.S.Su. 2/2) Paste is applied locally in edema, piles and skin diseases (Ci. 14/45); edema (Ci. 12/70); ascites (Ci.13/107) Decoction- Hiccough and asthma (C. S.Ci 14/45), deafness, tinnitus in Ear (C. S.Ci. 26/225), worm manifestation, skin diseases (C. S.Si. 3/60) Sushruta Samhita (1000 BC- 5th Cent.AD) (Sushruta, 1997). Decoction- Ascites (S. S. Ci.14/13), calculus (S. S.Ci. 7/24) splenic disorder (S. S.Ci. 16/36). Local application- skin diseases, wound (S. S.Ci. 9/10) and abscess (S. S.Ci. 16/35) As collyrium in Conjunctivitis and itching in eyes (S. S.U. 11/9) oil- Epilepsy (S. S.U. 61/23) Ashtanga Hridaya (7th Cent. AD): (Astanga Hridaya, 2011). Locally- Piles (A.H.Ci. 8/23), goitre, cyst (A.H.U. 30/16) Kvatha- calculus (A.H.Ci. 11/31) oil- Ear ache, deafness, tinnitus in ear (A.H.U. 18/23).

CONCLUSION

Mukhadushika being a major problem faced by teenagers and most of the time it effects the face. At present there are many products in market that constitutes the chemical substance which are hazards to skin when used for long time. Shigru is one such herbal drug which is easily available cost effective and has all the properties that would cure Mukhadushika.

REFERENCES

1. Das Debajyoti, Sahu Dipsundar, Baruah Dinesh, Ray Chandreyee, Rai Sanatan And Hazra Jayram, "Moringa Olifera (Shigru): A Miracle Tree For Its Nutritional, Ethnomedicinal And Therapeutic Importance", International Journal Of Development Research, 2017; 7(11): 16823-16827. 2.
2. Biophysical Chemistry, August, 2010; 1-3: 144-156.
3. Brenna, T. Efficiency Of Conversion Of A-Linolenic Acid To Long Chain N-3 Fatty Acids In

- Man. Current Opinion In Clinical Nutrition & Metabolic Care. 2002; 5.2: 127-132.
4. Harding, C. R. Et Al. Dry Skin, Moisturization And Corneo Desmolysis. International Journal Of Cosmetic Science, 2000; 22.1: 21-52.
 5. Dermatology Research And Practice, 2012; 9231-9234.
 6. Sushruta. Kshudraroga Nidana Adhyaya. Acharya Trikamji Jadavji Vaidya And Narayanaram Acharya Kavya Teertha (Ed). Sushrutasamhita Of Sushruta With The Nibandhasangraha Commentary Of Acharya Dalhana And Nyachandrika Panjika Of Sri Gayadasaacharya On Nidana Stana, 9th Ed. Varanasi: Chaukhambaorientalia, 2007; 323.