

Effect of Katphala Aschyotana in the Management of Shuktika W.S.R. Conjunctival Xerosis – A Review

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ABSTRACT

The Xerosis of conjunctiva is a symptomatic condition in which conjunctiva becomes dry, lustreless and non wettable. These patches almost always involve the interpalpebral area of the temporal quadrants and often nasal quadrants as well. Typical xerosis may be associated with conjunctival thickening, wrinkling and pigmentation.

Xerosis is correlated with Shuktika as per Ayurvedic reference. In this disease, a small elevated blackish spot resembling shell appears in Shukla mandala. There are various non invasive as well as safe treatment modalities told in Ayurvedic classics for the treatment of Shuktika.

Katphala Aschyotana is one of the medicines mentioned in Sushruta Samhita in the management of Shuktika. Hence an attempt has been made in this regard to review the role of this drug i.e. topical instillation of Katphala eye drops in Shuktika.

Ashchyotana is one among the seven Netra Kriyakalpa. Katphala are found useful in treating Shuktika i.e. Conjunctival xerosis. As per Sushruta Samhita, the causative dosha in Shuktika is Pitta and hence treatment involves in mitigating the Pitta dosha. It is told in Sushruta Samhita that the causative dosha should be eliminated. Katphala Ashchyotana is having properties to eliminate Pitta dosha. The medicine mentioned in the present review is Pittahara and is considered best for the eyes. Katphala Ashchyotana is cost effective, safe and easy procedure which can be done by the patient himself in their own homes.

Keywords: Xerosis, Shuktika, Shukla Mandala, Katphala, Aschyotana, Netra Kriyakalpa

I. INTRODUCTION

The word Ayurveda is a combination of two words: 'Ayus' and 'Veda'. Veda is derived from the Sanskrit root 'Vid' meaning 'Jnane'. Therefore, Ayurveda is the knowledge or science of Ayus. Charaka has comprehensively defined 'Ayu' as a unified state of physical body – Sarira, cognitive organs – Indriyas, mind – Manas and soul – Atma and therefore signifies a living human being.

Shalaky is an important branch of Ayurveda which deals with disease manifesting above the clavicular region. Acharya Nimi is considered as the supreme authority in Shalaky tantra but it was Acharya Susruta who explained the subject in a systematic manner in Uttaratantra of Sushruta samhitha.

The Xerosis of conjunctiva is a symptomatic condition in which conjunctiva becomes dry, lustreless and non wettable. These patches almost always involve the inter-palpebral area of the temporal quadrants and often nasal quadrants as well. Typical xerosis may be associated with conjunctival thickening, wrinkling and pigmentation^[1]. It occurs in two groups of cases: (i) as a sequel of a local ocular affection and (ii) associated with general disease. The first type is cicatricial degeneration of the conjunctival epithelium and glands following trachoma, burns, diphtheria, etc. commencing in isolated spots, ultimately involving the whole conjunctiva and cornea. Prolonged exposure due to ectropion or proptosis, where in the eye is not properly covered by lids, also in a dry eye.^[2]

Based on a deficient serum retinol, there are more than 125 million preschool ages children with Vitamin A deficiency among whom close to 4 million have an ocular manifestation of some kind, termed broadly as Xerophthalmia. Management as

per modern medical science includes oral and intramuscular supplementation of Vitamin A^[3].

In children being treated for Vitamin A deficiency according to the protocols, transient bulging of fontanels occurs in 2% of infants and transient nausea, vomiting and head ache occur in 5% of preschoolers. Acute toxicity of Vitamin A can result in increased intracranial pressure, vertigo, diplopia, bulging fontanels in children, seizures and exfoliative dermatitis, it may result in death^[3].

Xerosis is correlated with Shuktika as per Ayurvedic reference. In this disease, a small elevated blackish spot resembling shell appears in shukla mandala⁴. There are various non invasive as well as safe treatment modalities told in Ayurvedic classics for the treatment of Shuktika. These can be done on O.P.D. level and as well as by the patient himself and are cheap and convenient. Katphala aschyotana is one of the medicines mentioned in Susruta Samhitha in the management of Shuktika^[4].

II. MATERIALS & METHODS

1. Aschyotana

Medicines can be applied in seven different ways to the eyes called Netra Kriyakalpa i.e. the therapeutic procedure adopted to cleanse the doshas accumulated in the eyes. Ashchyotana is one among these seven procedures, which play an important role in the treatment of eye diseases in general.

The patient should be comfortably lying down in supine position, in Kriyakalpa theatre. The eye is opened by stretching and pressing apanga pradesa (lateral end) by left hand. In the right hand, medicine is instilled to the open eye. These drugs can be held either in a conch shell, small vessels or in a piece of cotton.^[5]

Ashchyotana is to be done in day time only but not at nights, with the eye open, with drops of medicine being instilled from a height of two angulis.^[6]

Eight drops for lekhana action, ten drops for snehana action and twelve drops for ropana action are the indicated doses. The medicine should be made warm during cold seasons and cold during hot season. This rule apply always.^[7]

In disorders of vata, the medicine should be bitter and oily. In pitta disorders, it should be sweet and cold, and in kapha disorders, warm and dry (viscid).^[8]

Ashchyotana is to be retained for a period of one hundred syllables; the time required for one winking of the eye lids, the head going round the

knee once or uttering a long consonant is the unit called as one vakmatra^[9]

2. Shuktika

श्यावाः स्युः पिशितनिभाश्च बिन्दुवो ये शुक्त्याभाः सितनयने स शुक्तिसंज्ञः ॥ (SS Utt 4/7)

Bindu (dot/spot) which are multiple, resemble muscles or sukta (oyster shell), developing on the sclera are known as shuktika^[10].

Pitta increased produces in the sclera, small dots (spots) of black blue or yellow color; the entire sclera appearing like a mirror covered by dirt and has burning sensation and pain. This disease is known as Shuktika, is accompanied with diarrhoea, thirst and fever^[11].

Shuktika is correlated to Conjunctival Xerosis. The symptoms are raised, silvery white, foamy, triangular patch of the keratinized epithelium, situated on the bulbar conjunctiva in the interpalpebral area^[12]. Multiple spots/dots resembling oyster shell (Shukti) on sclera^[13]. Burning sensation in eyes, Pain in eyes, Diarrhea, Thirst, Fever^[14].

3. Drug Review

3.1 Katphala (Fr.)^[15]

Katphala consists of dried fruit of Myrica esculenta Buch.- Ham. ex D. Don Syn. M. nagi Hook.f. (Fam. Myricaceae); a dioecious, evergreen, small or moderate sized tree, 3-15 m high, found in sub-tropical Himalayas from Ravi eastwards to Assam, and in Khasi, Jaintia, Naga and Lushai hills a elevation of 900-2100m.

3.2 Synonyms^[15]

Sanskrit: Mahavalka

Assam: Ajooree, Vdulbark

Bengali: Kayachhal, Katphal, Kayphal

English: Box Myrtle, Bay Berry

Gujrati: Kayphal

Hindi: Kayphajl

Kannada: Kadujai Kai, Katphala, Kirisivari, Kirishivane

Malayalam: Marut

Marathi: Kaayphal

Punjabi: Kanphal, Kayphal

Tamil: Marudam, Marudampatai

Telugu: Kaidaryamu

Urdu: Kaiphall

3.3 Constituents^[15]

Waxy Material

3.4 Properties And Action^[15]

Rasa: Katu, Tikta, Kashaya

Guna: Laghu, Tikshana

Virya: Ushna

Vipaka: Katu

Karma: Kaphavatapittahara, Ruchya, Dahahara,

Mukharogashamaka,

Dhatuvikarajit

3.5 Dose^[15] - 3-5 g

III. DISCUSSION

Discussion on mode of action of Ashchyotana

In Ashchyotana, medicines are allowed to flow. This should be used in the initial stages and can be used in acute conditions. The medicine is poured in the required dosage at the inner canthus. The medicine thus used flows through the conjunctival sac and passes to the nose. The volume of the conjunctival sac is 7 µml and the volume of 1 drop is 50 µml. Obviously, the medicine is either wasted or reaches the nose for the transnasal absorption.

Acharyas have described dharanakala of ashchyotana. These are 200 matras for snehana, 100 matras for lekhana, and 300 matras for Ropana. Eye drops cannot be retained, so this dharanakala means instilling appropriate. Now, if we consider 100 matra is equal to 1½ min as mentioned by Kasturishastri, the Lekhana drop should be used every 10–15 s into 8 times. In the same way, each drop every 18 s for 10 times for Snehana and each drop every 22–24s for Ropana is used.

Basically, the idea behind this procedure is to use medicine by the use of fat- and water-soluble extracts from the herbs and other ingredients and keep them in contact with the epithelium of conjunctiva and cornea, thereby transferring essential elements to them.

Discussion on action of medicine

As per Sushruta Samhita, the causative dosha in Shuktika is Pitta, and hence, the treatment involves mitigating this Pitta dosha. It is mentioned in Sushruta Samhita that the causative dosha should be eliminated. Katphala Ashchyotana has properties to eliminate Pitta dosha. The medicines mentioned in the present review are Pittahara and are considered best for the eyes.

Katphala Ashchyotana are used in the treatment of eye diseases. Katphala is a drug which is Dahahara, Mukharogashamaka, Dhatuvikarajit and used in treatment of eye diseases.

IV. CONCLUSION

Shuktika can be compared to conjunctival xerosis in which the conjunctiva becomes dry, lusterless, and non wettable. These patches almost always involve the interpalpabral area of the temporal quadrants and often nasal quadrants as well. Typical xerosis may be associated with conjunctival thickening, wrinkling, and pigmentation accompanied by pain in the eyes, burning sensation in the eyes, diarrhea, thirst, and fever. Most common etiology of Shuktika is improper ahara and vihara causing chaya followed by prakopa and sthana samsraya of pitta dosha in the eyes. Etiological factors concerned with conjunctival xerosis are Vitamin A deficiency. In the present study, Shuktika was found to be more prevalent in preschool aged children, students, women in reproductive age, and alcoholics. Katphala Ashchyotana is cost-effective, safe, and easy procedures which can be done by the patient himself/herself in their own homes.

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