

A Case Report on Blister beetle dermatitis and Nairobi eye— An Ayurvedic approach

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Abstract

Nairobi eye is an irritant contact dermatitis, caused by beetles of the genus *Paederus*. It is characterized by the erythematous and oedematous lesions associated with pain, burning sensation, blisters and pustules. The ocular involvement is usually unilateral in nature. The periocular lesion can be either due to the direct contact of the toxin or by accidental transfer through fingers from elsewhere on the skin. The toxin, being a weak base, cannot penetrate the cornea and conjunctiva and hence the damage is limited. These beetles breed in hot and humid conditions and maximum cases are seen during the months of May and June. This can be correlated with Keeta dashtam which is vata and pitta dosha predominant. A 32-year-old male patient approached with Nairobi eye disease. Along with Abhishyanda chikitsa, vishahara and rakta prasada are the treatment principles adopted here. Sweta lodra avagundana, Manjishtadi Kashaya seka, Sigrupallava rasa aschothana and Jalookavacharana were done in op base. By 2nd day of treatment burning sensation and pus discharge subsided but mild pain persisted. On 3rd day conjunctival congestion and pain relieved and by 5th day the patient got relieved from all other symptoms. Nairobi eye can be successfully treated with ayurvedic medicines and the duration of disease progression can be considerably reduced.

Keywords: Nairobi eye ; Keeta dashta ; Abhishyanda

1. Introduction

Nairobi eye is an irritant contact dermatitis, caused by beetles of the genus *Paederus*. It can also cause keratoconjunctivitis. Usually it doesn't bite or sting, these are crushed on the skin, releasing the vesicant paederin. It is characterized by the erythematous and oedematous lesions associated with pain, burning sensation, blisters and pustules. [1][2]

The ocular involvement is usually unilateral in nature [3]. The eyes being an exposed part during sleep, and presence of rugosities, make periorbital area prone to deposition of paederin[4]. The periocular lesion can be either due to the direct contact of the toxin or by accidental transfer through fingers from elsewhere on the skin [5]. The toxin, being a weak base, cannot penetrate the cornea and conjunctiva and hence the damage is limited [3]. Iritis and keratitis may occur secondary to mechanical trauma when a beetle hits the eye with force. The other complications include post-inflammatory hyper pigmentation and temporary blindness. [5][6]. These beetles breed in hot and humid conditions and maximum cases are seen during the months of May and June.[2]. A case report on Nairobi eye with its Ayurvedic management is discussed here.

CASE REPORT

A 32-year-old male patient complaining of swelling and reddish patch over medial aspect of left eye associated with severe pain, burning sensation and difficulty in opening left eye approached for treatment. Two days back he felt burning sensation and pain on the left eye after coming from house yard. On second day morning left eye become oedematous and blisters formed near medial canthus. On the third day the symptoms worsened and approached for treatment.

On examination erythematous pustular lesion near medial canthus associated with periorbital oedema, conjunctival congestion and pus discharge was noticed. Cornea was clear and the visual acuity of the patient was 6/6 bilateral. The patient was advised to take op-based treatment for 5 days.

Treatments done

Internal medications

1. Guguluthikthakam kashayam 15 ml with 45 ml lukewarm water before food bd for 7 days
2. Vilwadi gulika 1-0-1 after food 7 days
3. Guloochyadi kashayam as panakam 7days
4. Avipathy choornam 5 gm with hot water at night for 7 days

Netra kriyakramas done

1. Avagundana (A bolus of drugs tied in a cloth and used for mild swedana over eye lid) with ghritha bhrishta sweta lodra for 3 days
2. Netra sekam with majishtadi kashayam (manjishta, daruharidra, ysashtimadhu, chandana, raktachandana, laksha) in left eye- 3days (2 minutes)
3. Aschothanam with sigrupallava rasa 2 drops thrice daily- 3days
4. Jalookavacharana over left forehead on 1st and 3rd day
5. Netra pichu with manjishtadi kashaya for 10 minutes - 3days



Discussion

Nairobi eye is an aganthuja vyadhi and can be correlated with Keeta dashtam. According to Vagbhata Acharya, generally keeta visha is vata pitta predominant [7]. In this case, analysing the symptoms like pain (todam), burning sensation (daha) and erythematous lesions (raga), predominance of vata and pitta dosha was noticed. Along with Abhishyanda chikitsa, vishahara and rakta prasadana are the treatment principles adopted here. Sweta lodra avagundana is soolahara and will help to relieve the severe pain and periorbital oedema. Manjishtadi Kashaya helps to alleviate rakta and pitta. Sigrupallava rasa is sarvabhishyadahara. Jalookavacharana will help to relieve pain and raktaprasadana. By 2nd day of treatment burning sensation and pus discharge subsided but mild pain persisted. On 3rd day conjunctival congestion and pain relieved and by 5th day the patient got relieved from all other symptoms. Nairobi eye can be successfully treated with ayurvedic medicines and the duration of disease progression can be considerably reduced.

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