An Expeditious Recovery from Stye – A Case Study

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Abstract

Stye is an inflammation of the glands of the lids, with a suppurative inflammation of the Zeis gland. In Ayurvedic science, based on clinical signs and symptoms, stye is correlated to Anjananamika where the symptoms include the pidaka (swelling/boil) in the middle or end of the lids, associated with ruja (mild to moderate pain) and daha (burning sensation). A 28 year old male patient approached the Shalakya Tantra OPD (Eye OPD) of our Centre with the complaints of swelling in the left lids since 3 days with mild to moderate pain, mild photophobia and watering of eyes. On examination, the whole edge of the eyelid was oedematous, along with the presence of an abscess in the left inner canthus. With these signs and symptoms, the patient was diagnosed as a case of stye and advised Bidalaka (local application of thin paste of medicaments over the lids) and Aschyotana (eye drops), the local ocular therapeutics of Ayurveda, along with tablet Triphala guggulu and tablet Chitrakadi internally for 3 days. The patient got quick relief from the above symptoms immediately after starting the treatment and got completely cured without any complications.

Introduction

Ayurveda, the eternal science of life, has a unique holistic approach in treating every disease. The growth of knowledge of Ayurvedic medicine attained such proportions that it has to be classified into ashtangas (eight specialities). Shalakya Tantra (branch of Ayurveda deals with diseases of EYE & ENT) is one among the ashtangas of Ayurveda, where Acharya Sushruta, the ancient surgeon has contributed to a maximum extent in the field of Ophthalmology.

Stye, or External hordeolum is an acute suppurative inflammation of the lash follicle and its associated glands of Zeis or Moll which is common in children and young adults.1 It presents as a tender swelling in the lid margin pointing anteriorly through the skin, usually with a lash at its apex. Multiple lesions may be present and occasionally abscesses may involve the entire lid margin.2 The predisposing factors include habitual rubbing of the eyes, chronic blepharitis diabetes mellitus, chronic debility, excessive intake of carbohydrates and alcohol. The commonly involved causative organism is Staphylococcus aureus. The symptoms include acute pain, associated with swelling of the lid, mild watering of eyes and photophobia. Signs can be categorised under stage of cellulitis and stage of abscess formation. In the stage of cellulitis, there is a localised, firm, red, tender swelling at the lid margin associated with marked oedema. Usually there is one stye, occasionally there may be multiple. In the stage of abscess formation, there is a visible pus point on the lid margin in relation to the affected cilia. The treatment includes hot compresses in the stage of cellulitis, evacuation of the pus, rarely surgical excision, antibiotics eye drops, eye ointment, systemic anti-inflammatory and analgesics to relieve pain and reduce oedema.3

According to Acharya Sushruta, Anjana namika (stye) is a disease in which a pidaka (swelling/boil) occurs in the lid margin which is tamra varna (coppery red) in colour and characterised is by ruja (mild to moderate pain) and daha (burning sensation).4 The line of treatment of disease Anjana namika (stye) includes Swedana (hot compress), Nishpidana (pressure applying to drain out pus), Bhedana (incision), Pratisarana (rubbing of medicaments over the lids), Anjana (collyrium). If it ruptures spontaneously, it should be well pressed and the pus should be drained out carefully. After removing the pus, a mixture containing Manashila (realgar), Ela (Elettaria cardamomum), Tagara (Valeriana wallichii) and Saindhava lavana (rock salt) and Madhu (honey) should be used for Pratisarana. If it does not rupture on its own, the eye lids should be rubbed using Rasanjana (aqueous extract of Berberis aristata) and Madhu (honey), then bhedana karma (incision) should be done. Seka (ocular irrigation- one of the ocular therapeutics of Ayurveda) using haridra (Curcuma longa), madhuka (Glycyrrhiza glabra), patola (Luffa acutangula), lodhra (Symplocos racemosa) and madhu (honey) is advised by Acharya Vagbhata. Anjananamika is considered as a disease caused due to the vitiation of rakta dosha (one of the fundamental units of body as per Ayurveda-blood) and hence, Acharya Yogaratnakara has advised raktamokshana (blood letting) using Jalouka (leech).5

Case History

A male patient aged 28 years approached the Eye OPD of our Centre complaining of swelling in the left upper lid since 3 days with mild to moderate pain associated with mild photophobia and watering of eyes. On examination, the entire lid margin was oedematous along with the presence of an abscess in left inner canthus. Visual acuicy was found to be 6/6 in right eye and 6/9 in left eye. The Conjunctiva, cornea, iris, pupil, anterior chamber were found to be normal. With these signs and symptoms, the patient was diagnosed as a case of stye and treated accordingly.
Treatment
Bidalaka (local application of thin paste of medicaments over the eye lids for 25 minutes) was done with Triphala powder (Haritaki-Terminalia chebula, Vibhitaki-Terminalia bellirica, Amalaki-Emblica officinalis), Yashtimadhu (Glycyrrhiza glabra) and Shunti (Zingiber officinalis) for 3 days. Aschyotana (eye drops) with Ophthocare eye drops, 2 drops thrice daily were prescribed. Internally, Tablet Chitrakadi, 2 tablets BID, before food and tablet Triphala Guggulu 1 tablet TID, after food for 3 days was given.

Observation and Results

| Signs and symptoms      | Before treatment | After treatment |
|-------------------------|------------------|-----------------|
| Pain                    | Present          | Absent          |
| Lid swelling            | Present          | Absent          |
| Photophobia             | Present          | Absent          |
| Watering of eyes        | Present          | Absent          |
| Visual acuity (left eye)| 6/9              | 6/6             |

Discussion
The signs and symptoms of stye correlate well with the disease Anjananamika in Ayurvedic literature. Pain, lid swelling with an abscess formation on in the later stages is the main clinical picture in a case of stye. The present case has a similar presentation and was treated using different modalities of kriyakalpas (local ocular therapeutics of Ayurveda) which are commonly employed in our day to day clinical practice and giving promising results.

In Ayurvedic classics, for any disease to be manifested, improper digestive metabolism constitutes the prime cause. To maintain normal metabolism, tablet Chitrakadi- 2 tablets BID was given internally. Tablet Chitrakadi contains Chitraka (Plumbago zeylanica), Pippali (Piper longum), Yava kshara (hordeum vulgare), Swarjika kshara, Sauvarchala lavana, Saindhava lavana, Vida lavana, Samudra lavana, Audbhida lavana, Shunti (Zingiber officinalis), Maricha (Piper nigrum), Pippali (Piper longum), Hingu (Ferula asafoetida), Ajamoda (Trachyspermum roxburghianum), Chavya (Piper chaba), Matulunga swarasa (Citrus medica).

Kriyakalpas (local ocular therapeutics of Ayurveda) are the contributions of the Ayurvedic scientist to treatment of ocular diseases. It includes Tarpana and Putapaka (ocular nourishing therapies), Seka (ocular irrigation), Aschyotana (eye drops), Bidalaka (local application of thin paste of medicaments over the eye lids) and Pindi (medicated paste to be tied over the eyelids).

Application of appropriate medicaments based on the disease in the form of thin paste over the lid margin excluding eye lashes constitutes Bidalaka. Acharyas have clearly explained that a wide range of initial symptoms of eye diseases can be controlled and treated only with Bidalaka (local application of thin paste of medicaments over the eye lids). Based on the doshic (fundamental unit of body as per Ayurveda) involvement, the drugs are selected and employed. Skin is
one of the routes of drug administration. The drugs used in Bidalaka readily penetrate the eyelids which helps to increase cutaneous blood flow thereby enhancing better absorption and reduces inflammation. In this case, Bidalaka was done using Amalaki (Emblica officinalis), Haritaki (Terminalia chebula), Vibhitaki (Terminalia bellirica), Yashtimadhu (Glycyrrhiza glabra) and Shunti (Zingiber officinalis). Amalaki (Emblica officinalis) has antimicrobial, anti-inflammatory actions. Haritaki (Terminalia chebula) has antimicrobial and antibacterial actions. Vibhitaki (Terminalia bellirica) has antibacterial action. Yashtimadhu (Glycyrrhiza glabra) has anti-inflammatory action. Shunti (Zingiber officinalis) has antiseptic, antibiotic, anti-inflammatory actions.6,9,10

Instillation of medicated eye drops is known as Aschyotana kriyakalpa. In any disease of eye, where there is redness, swelling and pain, immediate instillation of the eye drops prepared out of combination of medicaments will certainly gives instant relief. In this case Ophthocare eye drops was given. The ingredients are madhu (honey), amalaki (Emblica officinalis), haridra (Curcuma longa), tulasi (Ocimum sanctum), shatapatri (Rosa damascene), vibhitaki (Terminalia bellirica) and yawani (Carum copticum). Tablet Triphala guggulu contains haritaki (Terminalia chebula), vibhitaki (Terminalia bellirica), amalaki (Emblica officinalis), pippali (Piper longum), guggulu (Commiphora mukul). Recent researches has concluded that Triphala guggulu acts a potent anti-inflammatory along with wound cleansing and wound healing.11

**Conclusion**

Complications of sty includes spread to other eyelash follicles, leading to multiple stytes, hence immediate treatment should be given at the initial stages itself. Aiming at treating the disease using the ancient approach has given promising results whereas the new ocular drug delivery system, applied on the eyelid skin, supports the same. An applied drug must traverse the several layers of the skin encountering lipophilic and hydrophilic domains on the way to the dermis where absorption into systemic circulation is rapid due to the large capillary bed. Hydrophilic compounds can reach the dermis via shunt pathways such as hair follicles, sweat glands, nerve endings and blood and lymph vessels. It acts as the systemic absorption site for drugs.12 In the present study also, it was proven that the local application of the medicament in the form of Bidalaka (local application of thin paste of medicaments over the eye lids) along with Aschyotana (eye drops) has improved the local bioavailability of the drugs administered. The combination of the drugs which are antiseptic, antimicrobial, antibacterial along with its anti-inflammatory actions has given good results by reaching the target tissue thereby giving an expeditious recovery.

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