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MANAGEMENT OF ACUTE DACRYOCYSTITIS AS POOYALASA– A CASE REPORT

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ABSTRACT

Inflammation of lacrimal sac is called dacryocystitis. Acute dacryocystitis may present as a lacrimal abscess which may burst spontaneously and if not intervened in time, it can result in a fistula and other severe complications like osteomyelitis and brain abscess. The disease *Pooyalasa* described in Ayurveda has features similar to that of acute dacryocystitis. *Pooyalasa* is a *pilla roga* which can develop into a chronic recurrent pathology. Management of acute diseases is often considered to be outside the purview of Ayurveda and hence such cases do not often reach Ayurveda doctors for management. This case demonstrates the management of a serious acute pathology using the fundamental principles of Ayurveda. **Objectives:** To analyze acute dacryocystitis in terms of *pooyalasa* and its management using Ayurveda treatment protocols. **Case report:** A 31 year old male patient, a diagnosed case of Steven Johnson syndrome for the past 15 years, developed sudden onset pain, swelling and redness of left eyelids and upper part of cheek with fever and positive regurgitation test. Diagnosed as acute dacryocystitis or *pooyalasa*, he was treated along the lines of *vranasopha chikitsa* with internal medications and *kriyakramas*. On bursting of abscess, *vrana sodhana* and *ropana* line of management was adopted. After the ulcer healed, *Agnikarma* was done to prevent recurrence. **Result:** Complaints resolved in three weeks. **Conclusion:** The disease *Pooyalasa* is thus clinically similar to acute dacryocystitis and the treatment principles described for its management can be successfully used to treat such cases.

KEYWORDS: Dacryocystitis, *Pooyalasa*, *Ayurveda.*

INTRODUCTION

Dacryocystitis is the inflammation of lacrimal sac, usually secondary to the obstruction of nasolacrimal duct. In adults, it can occur in acute or chronic form. In acute dacryocystitis, there is suppurative inflammation of lacrimal sac. It occurs as an exacerbation of chronic dacryocystitis or due to spread of acute infection from surrounding structures like paranasal sinuses. It has three stages- stage of cellulitis, stage of lacrimal abscess and stage of fistula formation. The stage of lacrimal abscess may burst spontaneously and if not intervened in time, it can result in a fistula and other complications like osteomyelitis of lacrimal bone, orbital cellulitis etc. *Pooyalasa* is a *sannipatika sandhi roga* occurring in the *kanina sandhi*. It is defined as "A suppurated swelling at medial canthus with heavy foul smelling purulent discharge".[1] The description of this disease in *Ashtanga Sangraha Indu vyakhya*, delineates two stages.[2] The stage of inflammatory swelling or *vrana sopha* which may burst own its own to give rise to the stage of a *vrana* or ulcer., If the *vrana sopha* is not drained, it will result in a *nadi vrana*, a fistulous tract. *Pooyalasa* is chronic recurrent pathology that can progress to *pilla roga* if left unattended.[3] Thus it can be seen that acute dacryocystitis bears striking similarities to *pooyalasa*. Such acute diseases do not often approach Ayurveda doctors as acute pathology that needs emergency intervention are often considered to be beyond the scope of Ayurveda. Hence this case in which acute dacryocystitis was managed successfully based on Ayurveda treatment principles is being reported.

CASE STUDY

31 year old male patient, presented with complaints of fever and head ache since 2 days and red painful swelling over left eyelids, side of nose near medial canthus and cheek since 1 day. He developed sudden onset continuous fever with headache since 2 days with minimal swelling of left lower lid and side of nose while he was admitted as IP in hospital. The body temperature was 101^0 F, P.R- 90/min, B.P-130/80 mmHg. He was given *Amrutharishtam* in the dose 30 ml tds, *T.Sudarasanam* 2 tds, *Panchathiktakam kashayam* 90 ml tds, and *Rasnajambeeralepa* over forehead. By the next morning, along with fever he had developed painful periorbital edema involving left cheek and left side of nose with redness of overlying skin.

In relevant past history he was a diagnosed case of SJS with vision being HM, near total corneal opacification, symblepharon, entropion and trichiasis, dry eye, recurrent meibomitis in both eyes that affected him when he was 16 years old after taking carbamazepine for

epilepsy. He had consulted in various modern and ayurvedic hospitals for the past 15 years with no significant improvement in the condition of his eyes. He was under treatment in Govt Ayurveda college hospital for the past 1 1/2 yrs. Patient also had a history of nasal obstruction due to inferior turbinate hypertrophy in left nostril and h/o recurrent CSOM in left ear.

Clinical observations and therapeutic interventions

Table 1: Day wise clinical findings and therapeutic interventions.

Day	Clinical findings	Internal medicines	*Kriyakramas*
1-2	• Erythema and hot firm tender swelling in region of lacrimal sac • Redness and edema of both left eyelids and cheek • Positive regurgitation test • Persisting fever with temp 101^0F • Clinical diagnosis of *pooyalasa* made	• *Amrutharishtam* 30 ml tds • *T.sudarasanam* 2 tds • *Panchathiktakam kashayam* 90 ml tds, • *Rasnajambeeralepa* over forehead	• *Krishnadi gulika lepam* over the swelling • *Vidalaka* with mukkadi gulika • *Lodhra darvi kashaya seka* • *Gandoosham* with *triphala kwatha.*
3	• Lacrimal abscess pointing below to outer side of sac • Fever with temperature 100^0F. • Persisting symptoms.	• *Amrutharishtam* 30 ml tds • *T.Sudarasanam* 2 tds • *Panchathiktakam kashayam* 90 ml tds, • *Rasnajambeeralepa* over forehead	• *Jalookavacharana* around the swelling in addition to previous interventions.
4	• Abscess burst to discharge yellowish pus. • Fever down to 99^0 F • Reduction in pain and tenderness over sac area	• *Padoladi ghritha* 10 g bd • *Kanchanara guggulu*- 2 tds • *T.Sudarasanam* 2 tds • *Panchathiktakam kashayam* 90 ml tds.	• Massage in the area of lacrimal sac • Mild *peedana* of abscess • Cleaning of the ulcer and dressing with *Jatyadi ghritha*
5	• Fever subsided • Ulcer discharging pus • Reduced pain, swelling and redness of lids and cheek	• *Padoladi ghritha* 10 g bd • *Kanchanara guggulu*- 2 tds	• Massage in the area of lacrimal sac • Mild *peedana* of abscess • Cleaning of the ulcer and dressing with *Jatyadi ghritha*
2^{nd} week	• Reduction in pus discharge • Healing ulcer	• *Padoladi ghritham* 10 g bd • *Kanchanara guggulu*- 2 tds	• Cleaning and dressing with *Durvadi ghritha* for 10 days
3^{rd} week	• Completely healed ulcer	• *Padoladi ghritham* 10 g bd • *Kanchanara guggulu*- 2 tds	• *Agnikarma* done with electric cautery to prevent recurrence

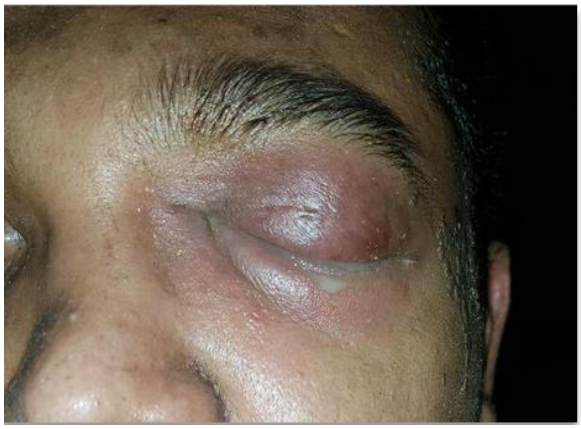

Fig 1. Day 1

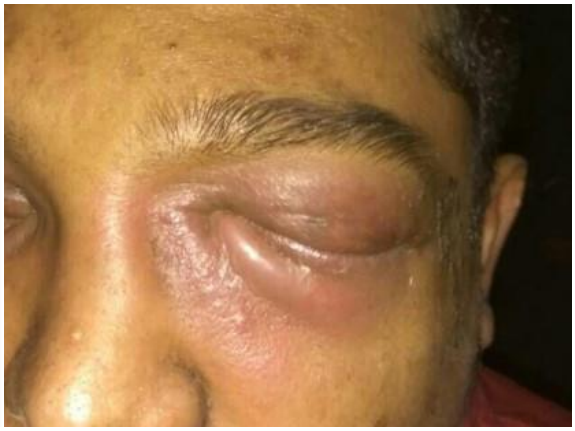

Fig 2. Day 3

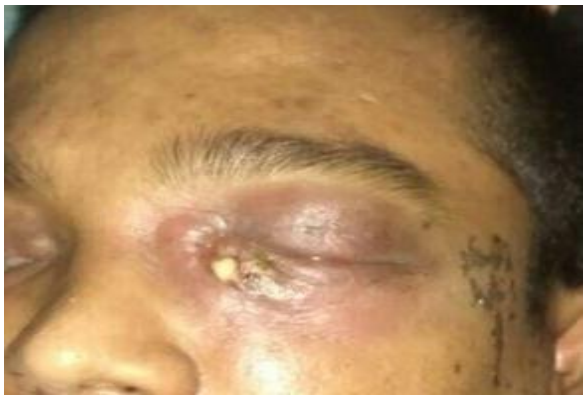

Fig 3. Day 4

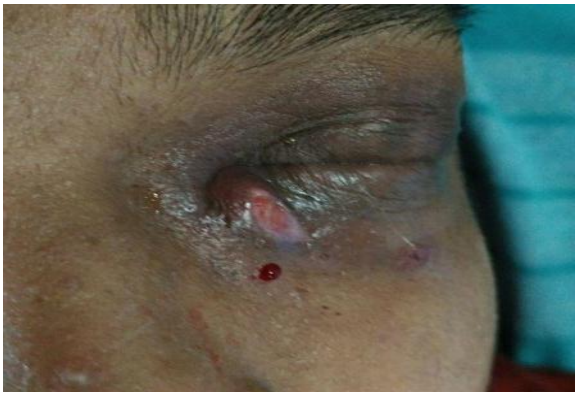

Fig 4. 2nd Week

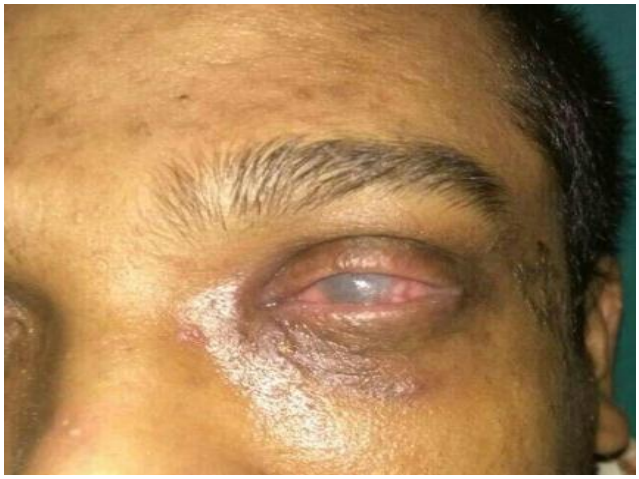

Fig. 5: 3rd Week.

DISCUSSION

Acute dacryocystitis has many predisposing factors.[4] In this case, the patient was a diagnosed case of Steven Johnson syndrome and had a history of nasal obstruction due to inferior turbinate hypertrophy in left nostril and h/o recurrent CSOM in left ear. From the comparison of the stages of *pooyalasa* to that of acute dacryocystitis, it is clear that they may be one and the same pathology. Hence adoption of the treatment modalities of *pooyalasa* to

acute dacryocystitis is effective. Classically, the treatment principle of *pooyalsa* includes *raktamoksha, upanaha, sodhana*[5] and in case of no evident response, *agnikarma* is advised.[6] These treatment options can be divided into three according to the stage of disease in which they are used. In *Amavastha* of *vranasopha, upanaha* i.e, *bandhana or alepa* with *vranasodhaka* and *chakshushya dravya* processed drugs, *jalookavacharana* for *raktamoksha* and *mridu sweda* is needed. *Lepas* with suitable drugs prevent suppuration in early stages and in case the inflammation has settled in, they can be used to promote the process of suppuration. In this case, *Mukkadi Gulika* and *Krishnadi Gulika* were used. *Jalookavacharana* is the ideal method for *raktamoksha* as the area is delicate and the patient is also *sukumara. Jalookavacharana* and *mridu sweda* also provide analgesia. The saliva of leech contains many active substances like analgesics, vasodilators, bacteriostatics, anti-inflammatories, anti-edematous, and anti-coagulants. *Jalookavacharana* increases blood flow and causes vasodilation, changes in local vascular permeability and drains the area of inflammatory material thereby reducing pain and inflammation. *Mridu sweda* to the inflamed area will dilate the blood vessels, promote blood flow, and the improved circulation helps eliminate the build-up of inflammatory materials.[7,8] Moreover the drugs chosen *are jwarahara, amapachana, tiktarasa pradhana, kaphapitta hara*. After the swelling burst to discharge pus, in *vranavastha*, mild *peedana* was done to promote pus discharge. Cleaning and dressing the ulcer with *Jatyadi ghritha* which is both *sodhana* and *ropana* promotes pus discharge and at the same time initiates healing.[9] *Durvadi ghritha* which is *vrana ropana* was used for dressing to promote wound healing after discharge of pus subsided.[10] Once the ulcer had healed completely, *Agnikarma* was done at the site of ulcer prevent recurrence.

CONCLUSIONS

The disease *Pooyalasa* is thus clinically similar to acute dacryocystitis .Timely management along the lines of classical treatment principles, kriyakramas along with internal medicines prevents complications and enhance healing.

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