



A PRAGMATIC AYURVEDIC APPROACH TO SUPERFICIAL PUNCTATE KERATITIS- AN OBSERVATIONAL CASE REPORT

Dr. S M Pasha

Associate Professor and HOD, Dept. Of PG Studies In Shalakyta Tantra, Government Ayurveda Medical College, Bengaluru

Dr. Vidhyasri M*

Final year PG scholar Dept of PG studies in Shalakyta Tantra, GAMC, Bengaluru
*Corresponding Author

ABSTRACT

Introduction: Relapsing superficial punctate keratitis is a condition in which the eyes are usually painful, watery, sensitive to bright light, and vision may be slightly blurred. Often there is a burning, gritty feeling or a feeling as if a foreign object is trapped in the eye. For more than a half-century, topical corticosteroids have been the treatment of choice for SPK. In some cases, this therapeutic maneuver may be associated with recurrent disease, addressing the same as Savrana Sukra in correlation to Inflammatory conditions of Cornea management principles are aimed as per Ayurveda which can be an effective and safer approach to this condition which is sight threatening, non-healing and is associated with high recurrent rates.

Methods: Source of the data: 40 year old female patient who reported to OPD Bengaluru with c/o bilateral photophobia, foreign body sensation, and tearing that is worse in the right eye. she reports a year-long history of similar relapsing and remitting symptoms in both eyes. These episodes have always responded well to topical steroids or cyclosporine drops;

Study design: targeted with treatment protocols which was multidimensional- subjective assessment- showed improvement by 80%, objective assessment— showed 60% improved with no replese in symptoms for consecutive 2 follow-ups.

Discussion: To benefit the patient a thorough understanding of Nidana, Samprapti, internal and external treatment with the probable objectives are indispensable. The successful treatment for recurrent and chronic inflammatory conditions can be achieved through suitable application of Shodhana, Shamana and Kriyakalpas.

Kriyakalpas- the special set of Sthanika Chikitsa mentioned in our science definitely be able to reduce the squeal of the disease and complications. By the observations documented understanding inflammatory conditions of cornea under the focus of savrana sukra could be a definitive answer to effectively treat conditions like superficial punctate keratitis.

KEYWORDS : Thygeson's superficial punctate keratitis, Savrana Sukra , Kriyakalpas.

INTRODUCTION :

Any inflammatory pathology in cornea affecting the deeper layers will give a permanent scar or removal of globe when a complication occurs. Our Acharyas have narrated such conditions under Krishna Mandala Rogas' with management, which helps to avoid complications and recurrences.

The explanation of the diseases along with treatment principles are similar in the Modern Ophthalmology even today.

The Patalas wise clinical features of Savranasukra explained by Vagbhata prove to be reasonable with features of layer wise pathology where Prathamapatalacan be considered to be Epithelium and Bowman's membrane, Dwiteeyapatala to Stroma and Tritiyapatala to Descemet's membrane and Endothelium.

Cornea being exposed to air and dust always have a tendency to develop infection, some of which are also considered in Ayurveda under causative factors in general for Eye diseases. Even minor injuries which damages epithelium, dry up the tear film can also contribute as predisposing factors.

Understanding the present clinical case under the focus of savarana sukra Chikitsa sutra was implemented to reduce and treat remitting symptoms of SPK.

MATERIALS AND METHODS:

STUDY DESIGN: BLACK BOX DESIGN

Case presentation:

Chief Complaint

Photophobia- BE

History of Present Illness

A 40-year- female presents with bilateral photophobia, foreign body sensation, and tearing that is worse in the right eye. she reports a year-long history of similar relapsing and remitting symptoms in both eyes, although not necessarily at the same time. The episodes are associated with minimal or no redness and without discharge. Exacerbating factors are use of eye cosmetics & alleviating factors are discontinuing the same, she does not use contact lenses. These episodes have always responded well to topical steroids or cyclosporine drops.

Past Ocular History

Negative with the exception of the present illness

Past Medical History

Non-contributory

Family History

Non-contributory

Social History

Non-contributory

Ocular Examination

Visual Acuity

Right eye (OD): 6/9

Left eye (OS): 6/6p

Intraocular pressure

OD: 14 mmHg

OS: 13 mmHg

Pachymetry

OD: 615 microns

OS: 609 microns

External Examination

No discharge

Slit Lamp Examination

OD

Lids/Lashes: Mild meibomian gland inspissation

Conjunctiva: White and quiet; 1+ upper and lower tarsal conjunctival papilla; no follicles

Cornea: Clear and compact; good pre-corneal tear film with normal break-up time; no fluorescein staining

Anterior Chamber: normal depth and quiet

Iris: Normal architecture

Lens: SIMC+
Vitreous-Normal,
Schimmers – 8mm

OS
Lids/Lashes: Mild meibomian gland inspissation

Conjunctiva: White and quiet; 1+ upper tarsal conjunctiva papilla; no follicles

Cornea: good pre-corneal tear film with normal tear film break-up time; no fluorescein staining in areas without opacities; clear and compact stroma

Anterior Chamber: normal depth and quiet

Iris: Normal architecture

Vitreous: Normal
Schimmers – 8mm

Fundus examination
Normal, both eyes

Diagnosis: Savrana Sukra – Krishnagata Netra Roga
Thygeson's Superficial Punctate Keratitis⁹

Clinical Course

This patient was treated with topical catapred 1% four times daily (QID), followed by a slow taper that was facilitated by the introduction of cyclosporine 0.12%. Tacrolimus was prescribed as 0.03% eye ointment that is instilled in the inferior fornix, nanotears 0.05% was advised for BE, It has not been possible to completely discontinue topical steroids or cyclosporine due to recurrent disease.

AIMS AND OBJECTIVES

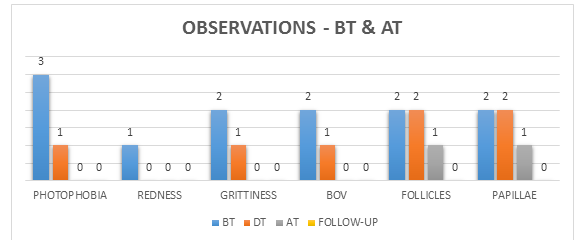
- To study the Pradhanika Doshaja Samprapti involved in superficial punctate keratitis.
- To evaluate the stage of the disease under the special focus of Savrana Sukra
- To evaluate the efficacy of the chikitsa administered in reducing the remitting symptoms.

Samprapti vighatana

Roga prakruti	Pradhanika dosha samprapti	Samprapti vighatana
Dosha	Rakta (Su), Pitta (Va) ^{3,3} .	Virechana
Dushya	Rakta	Darvi, yasti, lodhra netra seka
Agni	Mandya	Improved by deepana , pachana
Srotas	Raktavaha – in netra bhaga	Netra seka
Sroto dusti	Atipravrutti – vimargagamana- follicles, papillae, congestion	Jaloukavacharana
Udbhava sthana	krishna mandala (vata)	Kriya kalpa
Vyaktasthana netra patala	Tejolaashrita-RasaRakta (Dalhana, Vijayarakshita)	Kriya kalpa
Roga	Savrana sukra	Virechana, shodana nasya, netra tarpana
Upadrava	1.Suchyevaviddam ⁴ - Punctate epithelial erosions as seen in viral ulcer 2.Toda (Pricking sensation) 3.Raga(conjunctival congestion) , 4.Ruk- Painful red eye, photophobia, continuous discharge are the cardinal symptoms of corneal involvement of inflammatory process which are clearly defined by our ancient seers.	Treatment protocol followed 1.Virechana 2.Shodhana nasya 3.Jaloukavacharana 4.Netra tarpana – patoladi gritha 5.Netra seka – darvi, yasti, lodhra 6.Netra bidalaka – darvi, yasti, lodhra 7.Ushiradi anjana – for 30 days 8.Shamana – Haridra kanda + amrita satva Itsp BD

Sadhya –asadhyata	Sadhya As the lakshanas are- 1.Drishtisamepenabhavethu ⁵ -Ulceration away from central part of cornea viz. peripheral ulcer 2. Na Cha Avaghadam - Superficial ulcer (involving only the epithelial layer of cornea) 3.Na Samsravedh - Non discharging ulcer (Absence of secondary infection) 4.Avedana - Painless Ulcer 5.Na Cha Yugma Sukram - Solitary ulcer	There is no remission of symptoms in consecutive follow-up which was done monthly once
-------------------	--	--

RESULTS:



DISCUSSION:

- The Ayurvedic treatments explained in different texts when analyzed are meant for immunization of Shotha (oedema),relieve Shoola (pain)and Gharsha (discomfort), reduce Raga (congestion), debridement, promote Ropana (epithelisation).
- To benefit the patient a thorough understanding of Nidana,Samprapti,internal and external treatment with the probable objectives are indispensable. The successful treatment for recurrent and chronic inflammatory conditions can be achieved through suitable application Chikitsa sutra⁶⁻⁸- Shodhana,Shamana and Kriyakalpas.
- Kriyakalpas- the special set of Sthanika Chikitsa mentioned in our science definitely be able to reduce the squeal of the disease and complications.
- By the observations documented understanding inflammatory conditions of cornea under the focus of savrana sukra could be a definitive answer to effectively treat conditions like superficial punctate keratitis.

CONCLUSION

Many congruent features can be justified between Krishna Mandala and inflammatory disorders of Cornea to Savrana Shukra. Acharyas have clearly explained the Lakshanas and Chikitsa of Savrana Rogas which are very apt to understand the different types of keratitis existing at present. The cascade of complications has close proximity with Ayurvedic opinion of the diseases as a paradigm inference. The overall description available in Ayurvedic literature of Savrana Sukra can be systematically correlated with complicated corneal ulcer as per as outlined supra.

The remission of the disease is in variable episodes and is high in spite of treatment and hence requires crucial attention as explained by both the sciences.

In such diseases where immunity is aetiological factor, our science definitely has an upper hand in treatment. The successful treatment for recurrent and chronic inflammatory conditions can be achieved through suitable application of Shodhana, Shamana and Kriyakalpas.

Competing interests: None declared.

Patient consent: Obtained.

Provenance and peer review: Not commissioned; externally peer reviewed.

REFERENCES :

- Sushruta,SushrutaSamhita Uttaratantra, Dalhana tika by Vaidya Jadavji

1. Trikarnjiacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint-2014;p.618
2. Sushruta, Sushruta Samhita Uttarantra, Dalhanatika by Vaidyavadavji Trikarnjiacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint-2014;p.602
3. Vagbhata, Vagbhata's Ashtanga Hridaya Sutrasthana- edited by Pr. Hari Sadasivasastri Paradkara Bhisagacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint-2014;p.811
4. Sushruta, Sushruta Samhita Uttarantra, Dalhanatika by Vaidyavadavji Trikarnjiacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint-2014;p.602
5. Sushruta, Sushruta Samhita Uttarantra, Dalhanatika by Vaidyavadavji Trikarnjiacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint, 2014;p.602
6. Sushruta, Sushruta Samhita Uttarantra, Dalhanatika by Vaidyavadavji Trikarnjiacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint, 2014;p.61811.
7. Vagbhata, Vagbhata's Ashtanga Hridaya Sutrasthana- edited by Pr. Hari Sadasivasastri Paradkara Bhisagacharya, Chowkhamba Surbharati Prakashan, Varanasi, reprint-2014;p.814
8. Vagbhata, Ashtanga Sangraha - 3, English translation, Pro.K.R. Shrik anthamu rthy, Chowkhamba Orientalia, Varanasi, reprint, 2012;p.699
6. Thygeson P. Superficial punctate keratitis. J Am Med Assoc. 1950; 144(18):1544-1549.