



# An ayurvedic approach to management of Keratitis (*Savrana Shukra*): -A case report

<sup>1</sup>Dr. Nisha vachhani, <sup>2</sup>Dr. R.S. Unadkat, <sup>3</sup>Dr. Ameesha shrigod

<sup>1</sup> 3<sup>rd</sup> year M.S. scholar, Shalakya tantra department, I.T.R.A., Jamnagar, India

<sup>2</sup> Reader, Shalakya tantra department, I.T.R.A., Jamnagar, India

<sup>3</sup> 2<sup>nd</sup> year Ph.D. scholar, Shalakya tantra department, I.T.R.A., Jamnagar, India

Email.: - <sup>1</sup>nishavachhani548@gmail.com, <sup>2</sup>rsunadkat@itra.edu.in <sup>3</sup>ameeshahsrigod2110@gmail.com

**Abstract:** **Introduction:** *Savrana Shukra*, or keratitis, poses a significant threat to vision and is a leading cause of irreversible blindness. **Clinical findings:** A 20-year-old female patient sought medical attention at the outpatient department due severe photophobia, lacrimation and blurred vision in his right eye over a three-day period. She had pen injury in the same eye about 3 days earlier. she opted for Ayurvedic treatment after two days, because she had not willing to do modern medical approaches. **Intervention:** Undergoing a regimen of *Aschyotana* (~instillation of drugs in form of drops), *Pindi* (~poultice) and internal medications. **Outcome:** The patient experienced complete relief from symptoms. Post-treatment, nebular opacity over the temporal cornea resolved. Her visual acuity, which was 6/9 before treatment, improved to 6/6 after three days of Ayurvedic intervention. **Conclusion:** This case underscores the potential efficacy of Ayurvedic management in addressing keratitis.

**Key Words:** Ayurveda, *Aschyotana*, Case report, *Pindi*, *Savrana Shukra*, keratitis.

## 1. INTRODUCTION:

In Ayurveda, *Acharya Sushruta* and *Acharya Vagbhatta* meticulously describe *Svrana Shukra*, or *Kshata Shukra*, as part of *Krishnagata Roga*, a category encompassing corneal diseases. *Svrana Shukra* is characterized by distinct symptoms: a cornea resembling immersion in water (~loss of transparency or oedema), perforation by a needle, corneal ulceration with profuse warm discharge, and intense pain.<sup>[1]</sup> These descriptions highlight four primary indicators: transparency loss, corneal ulceration, excessive discharge, and severe pain. *Acharya Vagbhatta* specifically identifies *Kshata Shukra*, indicating a traumatic origin, accompanied by symptoms such as *Toda* (~pricking sensation), *Raga* (~conjunctival congestion), and *Pakwajambunibhama* (~severe congestion).<sup>[2]</sup> These manifestations align with ulcerative keratitis<sup>[3]</sup> an inflammatory condition of the cornea, which poses a significant risk to vision and is a common cause of irreversible blindness. Treatment typically begins with medication and may progress to surgical interventions such as amniotic membrane transplantation and keratoplasty when conservative approaches fail. In this case report, she developed *Kshata Shukra* (~ulcerative keratitis) as a result of pen injury in right eye. As patient was not willing for allopathic treatment and so She opted for Ayurvedic management.

## 2. MATERIALS AND METHOD :

### Patient information

A 20-year-old female patient visited *Shalakya Tantra* (Eye) outpatient department with chief complaints of photophobia, lacrimation, and blurred vision in her right eye, three days after sustaining a pen injury. Patient opted for Ayurvedic treatment over modern medical intervention.

### Medical history

Nil



### Family history

No systemic illness

### 3. FINDINGS:

#### Clinical findings

The patient was afebrile. Pulse was 78 beats/min. Blood pressure was 120/86 mmHg. No abnormality was noticed in the functioning of respiratory, circulatory and digestive systems.

#### Timeline

Table 1 represent the timeline of recurrence of diseases, therapeutic intervention and follow up.

Duration	Event
2 February,2024	Epithelial loss seen in fluorescein staining, Severe photophobia, severe watering and mild pain in right eye.
3 February,2024	Moderate relief in photophobia and watering from right eye. No pain present.
4 February,2024	Complete relief in pain, photophobia and lacrimation. On slit lamp examination, fluorescein stain shows negative stain.
8 February,2024	On slit lamp examination, no opacity seen in cornea and no fluorescein stain.

#### Diagnostic assessment

Table 2 represents slit lamp examination of both eyes as shown.

Structures	Findings	
	R. E	L.E
Eye lids	Normal	Normal
Eye lashes	Normal	Normal
Conjunctiva	Normal	Normal
Cornea	Nebular Opacity	Normal
Pupil	Dilated pupil and reactive	Normal shape and reactive
Lens	Normal	Normal
Fluorescence Stain	Stain positive	Negative

#### Ayurvedic assessment scale

The scores of the Ayurvedic assessment scale are given in Table 3.

Sr. no.	Symptoms	Scoring
<b>Pain (Vedana)</b>		
1.	No pain	0
2.	Mild and occasionally	1
3.	Frequently present and moderate- not disturbing routine work	2
4.	Present all the time and severe- disturbing routine activity	3
<b>Photophobia (Prakashasahatva)</b>		
1.	No photophobia	0
2.	Photophobia during sunlight exposure	1



3.	Continuous photophobia during day and nighttime	2
4.	Continuous photophobia during day and nighttime with disturbing routine	3
<b>Watery Discharge (Netrastrava)</b>		
1.	No Discharge	0
2.	Mild and occasionally need to wipe	1
3.	Moderate and need to wipe frequently	2
4.	Severe and need to wipe almost all the time	3

#### Lab investigations

Hb was 11.3 gm/dl, total W.B.C was 8220/cu mm, E.S.R. was 13mm and F.B.S was 85mg/dl. Urine examination was non-significant.

#### Dashvidha Pareeksha (~tenfold examination)

The *Shareera* Prakriti (~nature of body) patient was *Pitta Kaphaja*. *Vikriti* (~morbidity) was *Pitta Kaphaja*. *Satwa* (~psyche), *Sara* (~excellence of tissues), *Samhanana* (~compactness of organs), *Ahara Shakti* (~digestive power), *Vyayama Shakti* (~capacity of exercise), *Satmaya* (~suitability) and *Pramana* (~body proportion) of the patient were of *Madhyama* (~average) level.

#### Sroto Pareeksha (~examination of body channels)

*Rasavaha* (~nutrition channels in eyes) and *Raktvaha Srotas* (~blood circulating channels) were involved in the current manifestation.

Therapeutic interventions [Table 4]

Treatment	Name of drug used	Dose	Route of administration	Days
1. <i>Aschyotana</i>	<i>Yashtimadhu Churna</i> with <i>Ghrita</i>	5gms	Locally, 12 drops, 2 times a day	3 days
2. <i>Pindi</i>	<i>Yashtimadhu</i> and <i>Lodhra Churna</i>	5gms	Locally, 2 times a day for 20 minutes	3 days
3. Internal medications	<i>Triphala Guggulu</i>	2 T.D.S.	Internally	3 days

## 4. RESULT:

#### Follow-up and outcomes

Before starting the treatment, the severity grade of clinical symptoms as shown in table no 5.

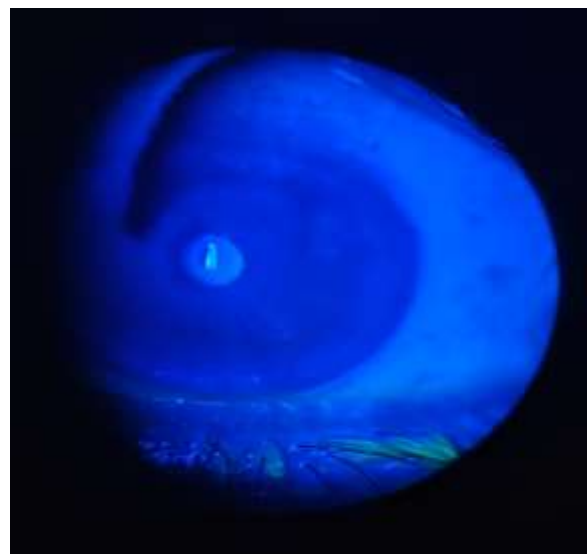
At the time of 1st day of treatment, the patient has mild pain, severe watery discharge and photophobia and on slit lamp examination, fluorescence stain shows positive stain i.e.; epithelial loss- presence of wound at the site of trauma. On the second day, after treatment the patient has no pain, moderate photophobia and watery discharge. It indicates marked relief in symptoms of the patient. On the third day of treatment, patient got complete improvement in pain, photophobia and mild relief watery discharge and on slit lamp examination, fluorescence stain shows negative staining i.e.; healed wound. In follow up, 7<sup>th</sup> day, patient had complete relief in all the three symptoms. On follow up, no opacity seen in cornea; no further complaint found.

#### Treatment outcome [Table 5]

Sr. no	Symptoms	1 <sup>st</sup> day	2 <sup>nd</sup> day	3 <sup>rd</sup> day	Follow up -7 <sup>th</sup> day
1.	Pain	2	0	0	0
2.	photophobia	4	3	0	0
3.	Watery discharge	4	3	1	0



**Figure 1: Fluorescence Stain positive**



**Figure 2: Fluorescence Stain negative**

## 5. DISCUSSION:

In a clinical study focused on Ayurvedic treatment modalities, patient had *Vrana* (~wound) due to *Kshata* (~traumatic injury) in right eye before 3 days. So, *Triphala Gugglu* [4] as given orally with luke warm water after food. *Triphala Gugglu* having properties like *Tridoshashamak* (~balancing all three doshas), *Shothahara* (~reducing inflammation) and *Vrana Ropaka Karma* (~promoting wound healing). According to *Acharya Sushruta*, *Aschyotana* (~eye drops) is first line of treatment in eye diseases among *Kriyakalpa*. [5] Complemented by *Ropana Aschyotana* is indicated in *Pitta-Ashruga-Vrana-Vata* condition [6] *Yashtimadhu* (~powder of *Glycyrrhiza glabra*) having properties such as *Madhur Rasa* (~sweet taste), *Guru Snigdha Guna* (~heavy and unctuous qualities), *Madhur Vipaka* (~sweet post-digestive effect), *Sheeta Virya* (~cooling potency), *Vata-Pittahara* (benefits in pacifying *Vata* and *Pitta dosha*), *Chaksushya* (~promoting eye health), *Vrana-Shothahara* (~wound healing and anti- inflammatory) and *Rasayana* (~rejuvenation) [7] mixed with *Go-Ghrita* (~cow's ghee) was instilled 12 drops into the right eye at noon. *Acharya Bhavprakash* had mentioned *Pindi* (~a paste of medicines wrapped in cloth) [8] in *Netra Roga Chikitsa* (~treatment) as *Abhishyanda* (~conjunctivitis) and *Vrananashini* (~helps in woun healing). [9] A paste of *Yashtimadhu* and *Lodhra Churna* (~powder of *Symplocos racemosa*) [10] applied over the closed right eye. *Lodhra* having properties like *Kashaya* and *Tikta* (~astringent taste) *Rasa*, *Laghu Ruksha Guna* (~light and dry qualities), *Sheeta Virya* (~cooling potency), *Katu Vipaka* (~pungent post-digestive effect), *Sandhaneeya* (~promote healing), *Pitta Shaman* (~ability to pacify *Pitta*) and *Chaksushya* (~benefit the eyes). So, when applied over the affected area promotes wound healing in right eye.

## 6. CONCLUSION:

The potential of ayurveda in the management of keratitis has to be explored by conducting clinical trials with large samples so that the utility of medicines can be proved scientifically.

## REFERENCES:

1. Ambika Datta shastri, Sushruta Samhita Uttartantra 5/4, Part I, By Sushruta with Ayurveda Tatvasandipika commentary, Varanasi, Chaukhamba Sanskrita Sansthana, 2012, p-29.
2. Kaviraj Atridev Gupta, Ashtanga Hridaya, Uttartantra 11/22 by Vagbhatta, Varanasi, Chaukhamba Sanskrita Sansthana, 2012, p-660.
3. A K Khurana, comprehensive ophthalmology, Jaypee brothers' medical publishers, 2022, p-92.
4. Dr. Brahmananda Tripathi, Sharangadhra Samhita, madhyakhanda 7/82-83, Varanasi, Chaukhamba Sanskrita Sansthana, 2012, p.137.



5. Ambika Datta shastri, Sushruta Samhita, Uttartantra 18/47, By Sushruta with Ayurveda Tatvasandipika commentary, Varanasi, Chaukhamba Saskrita Sansthana, 2012, p-97.
6. Ambika Datta shastri, Sushruta Samhita, Uttartantra 18/22, By Sushruta with Ayurveda Tatvasandipika commentary, Varanasi, Chaukhamba Saskrita Sansthana, 2012, p-95.
7. Padmshri Prof. K C Chunekar, bhavaprakasa Nighantu, haritakyadi varga, varnasi, Chaukhambha Bharati academy, reprint 2018, p.62.
8. Dr. Brahmananda Tripathi, Sharangadhra Samhita, uttarakhanda 13/21-24, Varanasi, Chaukhamba Sanskrita Sansthana, 2012, p.280.
9. Padmshri Prof. K C Chunekar, bhavaprakasa Nighantu, haritakyadi varga, varnasi, Chaukhambha Bharati academy, reprint 2018, p.124.
10. bhavamishra, bhavaprakash, uttarardha, vidhyotini teeka, chikitsaparakarnam vol.2, sri bramhashankara Mishra sastri, Chaukhamba Sanskrita bhavan, madhyam khand, 63/153 netrarogadhikara, 11<sup>th</sup> edition reprint - 2009, p.657.