



## An Ayurveda Management of Superior Limbic Keratoconjunctivitis -A Case Study

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*(Received: 27 September 2025 Revised: 05 October 2025 Accepted: 10 November 2025)*

### KEYWORDS

Keratoconjunctivitis, limbus, VatajaAbhishyanda, kaya shodhana

### ABSTRACT:

Superior Limbic Keratoconjunctivitis is the inflammation of superior part of bulbar conjunctiva with the involvement of the superior sclerocornial junction ( limbus ),which is also associated with the involvement of epithelial layer of the cornea and upper tarsal conjunctiva resulting in papillary hypertrophy.. The SLK symptoms are foreign body sensation, burning and photophobia.Cause for SLK is unknown. Most common theories suggest that it is related to loosening of superior bulbar conjunctiva.Which leads to friction and inflammation between the eyelid and eyeball. However, the other theories suggest that previous infections, immunologic conditions and allergic status of the health also influence the case of SLK. For Superior limbic keratoconjunctivitis vatapradhanaPittakaphanubandhi Chikitsa which includes Bahya and AbhyantaraDoshavasechana are very effective in the management.

The Combined regimen of Kayashodhana,NetraSeka,Aschottana,MukkadiPurampada, and internal administrations of Pittakaphaharadryvas helps to treat the conditions of Netra Amavastha

**Introduction:** Superior Limbic Keratoconjunctivitis is the inflammation of superior part of bulbar conjunctiva with the involvement of the superior sclerocornial junction ( limbus ),which is also associated with the involvement of epithelial layer of the cornea and upper tarsal conjunctiva resulting in papillary hypertrophy<sup>1</sup>. It is a chronic localised conjunctivitis confined to the superior part of the corneal conjunctiva. It is commonly found in women from 20 to 70 years of age. The common clinical signs and symptoms are burning sensation, redness and irritation for prolonged period.

It has been noticed that the SLK is found in the people of hyperthyroidism and few arthritis patients, defective blinking due to lid retraction, excessive pressure on the superior part of the limbus.

**Clinical features:** The SLK symptoms are foreign body sensation, burning and photophobia.

**Signs:** Papillary hypertrophy of the upper part of tarsal conjunctiva. Hyperaemia of the superior bulbar conjunctiva with engorgement of vertical blood vessels.

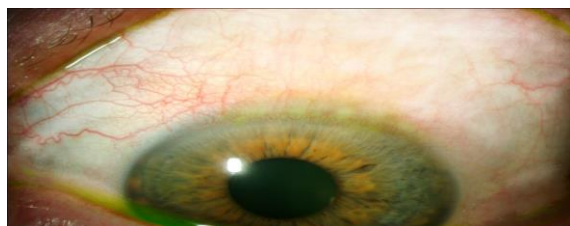
Karitinization of upper part of limbal conjunctiva. Which can be seen by staining with Bengal rose. Epithelial erosions on the cornea.

**Causes:** Cause for SLK is unknown. Most common theories suggest that it is related to loosening of superior bulbar conjunctiva.Which leads to friction and inflammation between the eyelid and eyeball. However, the other theories suggest that previous infections, immunologic conditions and allergic status of the health also influence the case of SLK. The autoimmune diseases like Sjogren Syndrome, Rheumatoid arthritis, Graves Disease are often associated with SLK<sup>2</sup>

**Management:** Medical management of SLK<sup>3</sup> includes topical lubrication solutions, topical steroids. If the person is using contact lenses, advise to discontinue the same for stipulated time.<sup>4</sup>

In Ayurveda Superior Limbic Keratoconjunctivitis may be compared to Vata pradhanaTridoshajaAbhishyanda in which the clinical features of Vataja Abhishyanda<sup>5</sup> which have been exaggerated by vitiated Pitta and





### Post treatment

#### Treatment:

The patient is advised to continue antihypertensive and thyroid medications as advised by the physicians.

- Advised to maintain the strict hygiene of the eye.
- AgnideepanaAmapachana-Agnitundi Vati 1 TID for 3days
- Mruduanulomana-with GandharvahastadiThailam 30ml for 1day-12vegas observed.

- Aschottana- with BrihathPanchamoola and Yastimadhu Kashaya drops,2drops-5times a day for the interval of 2hrs-for 14 days
- Netra Seka-Panchavalkala,Durva<sup>7</sup>and Dashamoola Kashaya daily 2 times-morning and evening for 7days.<sup>6</sup>
- MukkadiPurampada-externally on the eye lids daily1 time for 7 days

#### AbhyantharaPrayoga:

- 1.Amrutottara Kashaya-10ml, BD-for 14days-After food with Sukhoshnajala
- 2.Hamsapadadi Kashaya-10ml,BD-for 1month.After food wothSukhoshnajala
- 3.Tab Triphala Guggulu<sup>8</sup>—1TID-After food-with Sukhoshnajala
- 4.Tab Kamadugha with Mouktik 2 TID,Before food with Sukhoshnajala for 20 days
- 5 TAB Pathyakshadhatryadi DS 1tab,TID,After food-with Sukhoshnajala for 30 days.

Assessment of laksanasw.r.t., VAS scale and biomicroscope findings

| Lakshanas  | 1 <sup>st</sup> Feb,2025 | 7 <sup>th</sup> Feb,2025 | 14 <sup>th</sup> Feb,2025 | 21 <sup>st</sup> Feb,2025 | 28 <sup>th</sup> Feb,2025 | (35 <sup>th</sup> Day) 5 <sup>th</sup> March2025 |
|--|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|--|
| Toda (pricking pain)                               | Grade-3                  | Grade-2                  | Grade-1                   | Grade-1                   | Grade-1                   | Grade-0  |
| Sangarsha (foreign body sensation)                 | Grade-3                  | Grade-2                  | Grade-2                   | Grade-1                   | Grade-1                   | Grade-1  |
| Shishirashruta (watery discharge)                  | Grade-4                  | Grade-3                  | Grade-3                   | Grade-2                   | Grade-2                   | Grade-1  |
| Vishushka bhava (itching sensation)                | Grade-3                  | Grade-2                  | Grade-2                   | Grade-2                   | Grade-1                   | Grade-1  |
| Stamba (Chemosis-stiffness of conjunctival /edema) | Grade-2                  | Grade1-                  | Grade-1                   | Grade-1                   | Grade-1                   | Grade-0  |
| Parushyata (Rough ocular surface with papillae)    | Grade-3                  | Grade-2                  | Grade-2                   | Grade-1                   | Grade-1                   | Grade-0  |
| Swelling of the eyelids (SPREE)                    | Grade 1                  | Grade 1                  | Grade 0                   | Grade 0                   | Grade 0                   | Grade 0  |
| Neovascularisation                                 | Grade 2                  | Grade 2                  | Grade 2                   | Grade 1                   | Grade 1                   | Grade 0  |
| Conjunctival injection                             | +++                      | +++                      | ++                        | +                         | +                         | +  |



| Pericorneal vascular injection            | Moderately present | Moderately present | Mildly present | Mildly present | Mildly present | Not present |
|---|--------------------|--------------------|----------------|----------------|----------------|-------------|
| Superior limbal subepithelial infiltrates | +++                | +++                | +++            | ++             | ++             | +           |

Follow up observations are done for one month, no recurrence of clinical signs and symptoms found.

**Discussion:** For the manifestation of the netrabhishyanda<sup>9</sup> Vata pradhanatridoshas plays a vital role. Depending on the doshik vitiation different types of symptoms can be seen in different age group. Here superior limbic keratoconjunctivitis is a Vata pradhana Pitta Kaphanubandhi Sarvagata roga. The dosha – dushyasammorchana can be seen in the superior part of the Krishna Shukla Sandhi. The vitiated Vata causes Vishushka bhava or itching sensation resulting in the disruption of the normal physiology of the Limbus. Sometimes the formation of the papillae is due to the Mamsa, Rakta and the Rasa dhatu.

The Amayata of the netra depends on the Pitta Kaphanubandhi Vata doshas, hence Netra Seka with Panchavalkala, Doorva and Dashamoola Kashaya which are known for anti inflammatory, analgesic and anti allergic in nature have been indicated which will mitigate the vitiated tridoshas. The topical eyedrops with Brihat Panchamooladikashaya and Yashtimadhukashaya have proven the efficacy in reducing the localised inflammation of the superior limbal part. MukkadiPurampadagulika used for external application over the eyelids has reduced the swelling of the eyelids with its Kapha Pittahara properties.

Amrutottara Kashaya and Hamsapadadyakashaya which have been used as internal administration have helped in Sampraptivighatana in the srotases due to their Pittakaphahara Properties. Triphalaguggulu and Pathyakshadhatryadikashaya have helped in srotasangavilayana in the Urdhvangapradesha. The superior limbic keratoconjunctivitis is compared to Vata pradhanaPittakaphanubandhiAbhishyandaavasthavisheha. Hence the treatment adopted here are agnideepaka, amapachaka, doshavasechana (kaya shodhana) with netrajaKriyakalpas followed by abhyantaraaushadhiprayaga.

The prevalence of this disease is more common in male than female and around 15-20% of the world population

are affected by this condition. The autoimmune diseases like arthritis, thyroid dysfunction patients are more prone to get affected by this condition.

### Conclusion:

The cause for the Superior limbic Keratoconjunctivitis is unknown, Different theories suggests that due to previous infections, localised frictions of the orbital tissues, endogenous or exogenous allergies, or immunological factors are responsible for the manifestation,

For Superior limbic keratoconjunctivitis vatapradhanaPittakaphanubandhi Chikitsa which includes Bahya and AbhyantaraDoshavasechana are very effective in the management.

The Combined regimen of Kayashodhana, NetraSeka, Aschottana, MukkadiPurampada, and internal administrations of Pittakaphaharadravyas helps to treat the conditions of Netra Amavastha.

The timely diagnosis, and treatment of SLK is very important with to prevent the further Complications

Not maintaining the Personal Hygiene, Modern day Non Compatible Food regimen play an important role in manifestations of the Amavikaras.

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