

# INTERNATIONAL AYURVEDIC MEDICAL JOURNAL





**Impact Factor: 6.719** 



Review Article ISSN: 2320-5091

# A CONCEPTUAL REVIEW OF KAPHAJA ABHISHYANDA / VERNALKERATO CONJUNCTIVITIS

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https://doi.org/10.46607/iamj11p5042021

(Published online: May 2021)

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Article Received: 28/04/2021 - Peer Reviewed: 06/05/2021 - Accepted for Publication: 07/05/2021



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# **ABSTRACT**

Kaphaja Netra Abhishyanda is defined in Ayurveda as the disease affecting all parts of the eye characterized by Guruta (heaviness of lids), Kandu (itching), Muhurmuhursrava (repeated lacrimation), photophobia and burning sensation in eyes etc. On reviewing the clinical presentation from modern texts, it is found that Vernalkerato conjunctivitis resembles with Kaphaja Netra Abhishyanda (conjunctivitis). Vernal keratoconjunctivitis is a type of allergic conjunctivitis which is a disease of early age group and becoming more important cause of corneal visual impairment and blindness. Vernalkerato conjunctivitis is the inflammation of conjunctiva caused by a wide range of allergens like pollens, dust and smoke, animal dander, mites or other allergy causing substance and is characterized by itching, hyperaemia and mild papillary reaction. This is also known as Spring Catarrh. 'Spring catarrh' nomenclature is indicative of season Vasant Ritu (spring season) which is the Kapha Prakopa period of the year as per the Ayurvedic principles and also the Kapha Prakopaka period of childhood age group.

Keywords: Abhishyanda, Guruta, Kandu, photophobia, Muhurmuhursrava.

#### INTRODUCTION

Netra Abhishyanda is one of the Sarvagata Roga (disease) as described by Acharva Sushruta<sup>1</sup>. All the Netra Rogas are mainly caused by Abhishyanda. According to Ayurvedic text, it is an "Aupsargic" (communicable Vyadhi disease) caused Contamination of discharge<sup>2</sup>. Netrabhishyanda is classified into four types according to Doshic predominance viz. Vataj, Pittaj, Kaphaj and Raktaj Abhishyanda<sup>3</sup>. In Kaphaja Abhishyanda, Kapha is a predominant Dosha and Rasa and Rakta (blood) are the *Dushyas*<sup>4</sup>. In this condition the *Netra Srotas* (channel) are vitiated by Kapha, Snigdha (smooth), Sheeta (cold), Guru, Pichchila (slimy), gunas (quality) are increased and the fluid system of the eye becomes denser and heavier. This affects intraocular circulation and the drainage slows down.

Vernalkerato conjunctivitis / spring catarrh is a variety of exogenous allergic conjunctivitis, which is a very troublesome ocular disease of childhood and in the adolescent age group<sup>5</sup>. The child suffers from intense itching, grittiness, discharge, redness, lacrimation, photophobia, and so on, thereby, decreasing his learning hours. The troublesome features aggravated in the spring season / hot climate that lasts for years together and rarely persists after adolescence<sup>6</sup>. The signs and symptoms mainly are itching, heaviness of the eye, watering, edema of lids, dense white slimy discharges, photophobia, burning sensation and conjunctival congestion. Heredity is one of the major distinguishing factors. As scientific research has found, the risk of developing allergies increases by approximately 30% if one of the parents is allergic. If both the parents have allergies, offspring's risk is greater than 60%<sup>7</sup>.

In Ayurveda hereditary disorders are explained under Janmabala Pravrutta Roga (hereditary disorders) in addition to inherited tendencies, whether a person experiences an allergic reaction or not for that several other key factors are there which determine it, and how severe that will react. These include the strength of the individual's digestive fire known as Agni (heat), the quantity and strength of allergen that enters the body, and a person's current state of balance or imbalance of

Doshas in the body. Fortunately, there are techniques to strengthen our *Agni* and avoid allergen exposure means, and improve state of *Doshic* balance. This article compiles conceptual study of vernal keratoconjunctivitis and *Kaphaja Abhishyanda* and it bridges between them.

# AIM AND OBJECTIVES-

To understand the concept of *Kaphaja Abhishyanda* in relation with vernalkerato conjunctivitis according to ayurvedic and modern sciences.

#### MATERIALS AND METHODS-

Various texts including *Ayurvedic* literature, *Sanskrit* literature and other modern literatures were studied and all the related points were considered regarding this study.

# Etymology of *Abhishyanda*<sup>8</sup>:

The word *Abhishyanda* is derived from the root "*Syanda*" which is *Upasarga* (prefix) by "*Abhi*" and *Pratyaya* (suffix) by *Ghan*". It means "*Ativridhdhi*" (increase in quality) and "*Sraavana*" (discharge)

### ABHI + SYANDA + GHAN = Abhishyanda

*Abhi* - The term *Abhi* denotes intensity or *Ativriddhi Syanda* –*Srava* / discharge/ oozing.

#### SYNONYMS-

Abhisyanda, Abhisyanna, Syanda, Akshikopa Abhisyanda is characterized by excessive discharge or tears (Syanda) from all sides of eye (Abhi). Abhisyanda is defined as a disease in which there is Sroto Syandana in all channels of head and neck.

Acharya Indu has given two meanings for Syandana-

- 1. Excessive flow<sup>9</sup>
- 2. A solid converting into liquid state <sup>10</sup>

Aacharya Chandranandan has described Abhishyanda as Bhaspikaran (producing Bashpa). The word Bashpa indicates excessive tears according to Dalhana. As if steam is coming out of the eye.

Aacharya Adhamalla has defined Abhishyanda Roga as a disease characterized by Samrambha (swelling) and Paka (suppuration) of eye. Considering all the above, we can infer that Abhishyanda is a disease altering the fluids of the eye, with excessive discharge, swelling and may endup with suppuration.

# IMPORTANCE OF ABHISYANDA11-

Uncontrolled *Abhishyanda can* lead to serious disease like *Adhimantha* which is characterized by acute pain.

# Types of Abhishyanda<sup>12</sup>-

- 1) Vataj Abhishyanda
- 2) Pittaj Abhishyanda
- 3) Kaphaj Abhishyanda
- 4) Raktaj Abhishyanda

#### KAPHAJA ABHISHYANDA-

# Nidana (Aetiology)<sup>13</sup>-

Separate *Nidana* for *Abhishyanda* are not mentioned in any classical texts by our *Acharyas*, so general *Nidana* of *Netra Rogas* can be considered as the *Nidanas* of *Abhishyanda*. Among all *Nidana*, *Ushna-abhitaptasya* (feeling of hotness), *Raja Nishevana*, *Dhuma Nishevana*, *Mithya Aahara*, *Mithya Vihara* and *Ritu Viparyaya* (seasonal variation) can be considered as special *Nidana* for it.

#### Kaphaja Netra Roga Samanya Nidana:

- **A.** Ahara Sambandhi: Atisheeta, Guru, Ati Ambu/ Dravapana
- **B.** Vihara Sambandhi: Rajo Sevana, Dhuma Sevana, Swapna Viparyaya, Mootra Graha, Vata Graha,
- C. Kala Sambandhi (Environmental factors): Ritu Viparyaya.

# Etiology of Vernalkerato conjunctivitis-

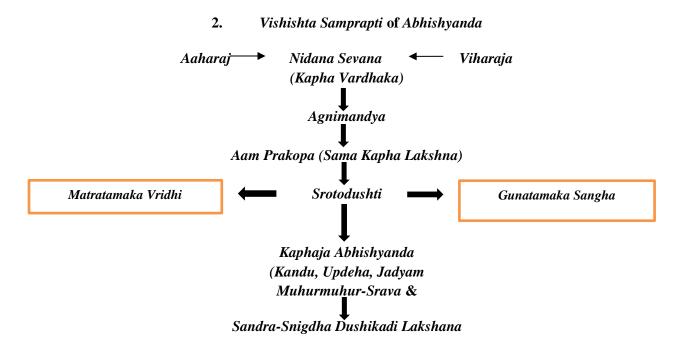
In modern ophthalmology, there is presence of a conjunctival hyperreactivity when sun, dust, wind, smoke, pollution, seasonal variation, pollens, mites and pet danders come in contact with the conjunctival mucosa. This hyperreactivity, which is also known to be frequently associated with asthma and other allergic diseases, may actually be considered as etiological factors of the disease Vernalkerato conjunctivitis<sup>14</sup>.

# Samprapt (pathogenesis)<sup>15</sup>-

Above said *Nidana* when taken in excess quantity causes *Agnimadya* (indigestion) which leads to vitiation of *Dosha*. When these *Doshas* migrate in whole body through *Srotas* and *Sira*, they get localized in *Netravaha Srotas* leading to *Netra Roga*; *Kaphaja Abhishyanda*.

Acharya Vagbhatta quotes that the Achakshushya Nidana lead to aggravation of Pitta predominant Dosha and spread to Urdhva Jatru Bhaga through Sira and Manifests Akshi Roga.

1. Samanya Samprapti of Netra Roga: The Samanya Samprapti of Netra Roga explained in classics can be considered as the base to understand the Samprapti of Abhishyanda. According to Acharya Susruta, the vitiated Dosha spreads to Jatru Urdhva Bhaga through the Sira and manifest the eye diseases.



#### Samprapti Ghataka-

Dosha - Kapha pradhana Tridosha

**Dushya** - Rasa and Rakta

**Agni** – Mandagni

Srotasa - Rasavaha and Raktavaha

Stroto Dushti – Sanga, Vimargagamana and Atipravriti.

Rogamarga – Madhyama

Adhishthana - Sarvaakshi-Tejojalashrita Patala

Vyadhi Svabhava- Chirakari

Poorvarupa<sup>16</sup>-

No specific *Poorva Rupa* of *Kaphaj Abhishyanda* is mentioned in classical texts, but *Acharya Charaka* quoted that, whenever *Poorva rupa* of the disease is not mentioned, weak manifestation of *Roopa* can be considered as *Poorva Rupa*. So, all the cardinal features like *Toda* (pricking pain), *Shopha* (*Swelling*), *Kandu*, *Stravo Muhu of Kaphaj Abhishyanda* in mild form can be considered as *Poorvarupa*.

# Rupa<sup>17</sup> (Clinical feature)-

# Kaphaj Abhishyanda is characterized by-

Ushnabhinandana: longing for warm

*Guruta*: heaviness *Kandu*: itching

*Upadeha*: stickiness due to increased exudates

Sitata: whiteness

Ati saityam: excessive coldness

Stravo muhuh: frequency of discharge increased Pichila: slimy A/C to Vagbhata (Ashtanga Sanghraha)

Jadhya: feeling of lethargicMahan shopha: severe swelling

*Nindra*: sleep in excess

Anannabhinandana: loss of appetite

Symptoms of Vernalkerato conjunctivitis-

# According to modern ophthalmology, symptoms are burning and itching sensation, which is usually intolerable, other associated symptoms include: mild

photophobia, lacrimation, stringy (ropy) discharge and heaviness of lids.

ilcavilless of flus.

# Signs of Vernalkerato conjunctivitis can be described in three clinical forms<sup>18</sup>:

1- Palpebral form- upper tarsal conjunctiva of both eyes may get involved. The typical lesion is the presence of hard, flat topped, papillae arranged in a 'cobble stone' or pavement stone', fashion along with conjunctival hyperemia.

In severe cases, papillae may hypertrophy to produce cauliflower-like excrescences of 'giant papillae'.

- 2- Bulbar limbal form: characterized by
- Dusky red triangular congestion of bulbar conjunctiva in palpebral area
- Limbal papillae occur as gelatinous, thickened confluent accumulation of tissue around the limbus, and
- Presence of discrete whitish raised dots along the limbus (horner trantas spots).
- 3- Mixed form- it shows combined features of both palpebral and bulbar form.

# Sadhyata-asadhyata (Prognosis) 19

Sadhyasadhayata gives the clear picture of prognosis of the disease. It depends upon many factors like nature of disease, severity of disease, Vaya (age), Prakriti, Bala (strength) of patient etc. Abhishyanda is a Vyadhana Sadhya Vyadhi.

# Prognosis of Vernal keratoconjunctivitis<sup>20</sup>-

Prognosis for VKC patients is generally good and the disease is self-limiting with appropriate treatment.

*Upadrava* (complications): In the classics, there is no reference available regarding the *Upadrava* of *Abhishyanda* but there are references opining that it can lead to *Adhimantha* (glaucoma) and all other *Netra Rogas* especially *Avrana Shukla* (corneal opacity), *Akshipakatyaya* (uveitis).<sup>21</sup>

# Complications of Vernalkerato conjunctivitis-

Modern literature describes it as chronic, vision threatening complications superficial keratopathy, shield ulcer and neovascularization, Cataract and steroid induce glaucoma are major complications<sup>22</sup>.

# Chikitsa<sup>23</sup>(Treatment)-

Different *Acharya* has described number of treatment modalities for *Kaphaja Netra Roga*, not only for localized measure; *Kriyakalpa*, but systemic drugs also, having properties like *Kapha-Shamak*, *Kandughna*, *Lekhana*, *Rasayana* etc.

#### Samanya Chikitsa:

**Prevention:** "Prevention is better than cure", this proverb has the most significance in the ocular disorder, where inadequate prophylaxis leads to visual

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handicaps, the worst of all handicaps. *Acharya Sushruta* has described mainly three preventive measures i.e.

- Nidana Parivarjan- Avoidance of the etiological factors, specifically by which the eye diseases occur.
- 2. **Prophylactic measures:** -Use of *Triphala*, control over mind, use of *Anjana*, *Nasya*, blood-letting therapy, taking the flesh of bird as food, worshiping the foot of elders, *Ghritpana*, *Padahyanga*, taking foot bath, use of the umbrella etc are the measures for protection of eye.
- 3. Vishishta Chikitsa: In Kaphaj Abhishyanda chikitsa, Sushruta Samhita quoted that Snehan, Swedana, Raktamokshana Avapidan Nasya, Anjana, Dhumpaana, Seka, Pralepa, Kavalgraha, Ruksha Aschyotan, & Ruksha Putpaka are beneficial in Kaphaj Abhishyanda. In Kaphaj Abhishyanda and Adhimantha, three days of fasting or light food with Tikshna (irritating) Dhumpana, Kavala and Nasya is advocated by Acharya Vagbhata (A.S.Ut.19.27).

### Treatment of Vernalkerato conjunctivitis-

Drugs being used in modern ophthalmology are Decongestant, Mast cell stabilizer (e.g. Sodium cromoglycate), /Anti-histaminics (e.g. Pheniramine), NSAID's, Corticosteroids, and Immunosuppressive<sup>22</sup>.

#### DISCUSSION

Childhood age is the *Kaphaja Dosha*—dominant period of life, wherein, liking for sweet, curd, excess fluid, and day sleep leads to *Kapha Sanchaya*. The rising atmospheric temperature in the spring season leads to *Kapha Prakopa*. This vitiated *Kapha*, through the blood channels, reaches the supraclavicular region and affects kapha dominating parts of the eye, that is, *Shweta Mandala* and lids (*Mansa*) and thus lead to features like *Shotha*, itching, *Upadeha*, *Srava etc*.

The vitiated *Kapha* being carried through the *Sira Marga* (blood vessels) also vitiates the *Rasa–Rakta Dhatu*, thus, the *Rakta* and subsistent *Pitta* also get vitiated. The *Pitta* is vitiated when provoked in the sun or heat, wherein the eyes get reddened and photophobia as well as lacrimation and discharge appear. Limbus, being the junction of the *Kapha* and *Pitta / Raktaja-*

Srotas derivative structures (Shweta Mandala and Krishna Mandala), is more involved. If the Rakta / Pitta vitiation is more, then the chances of corneal ulcer increase. Therefore, the treatment line should also be anti-Kapha and Pitta/Rakta. Perhaps, this is the reason Abhishyanda has been categorized / classified as Raktaja Roga on pathological grounds.

Kapha is Bala – Oja (immunity): "Prakritastu Balam Shleshma Vikruto Malam Uchyatey, Sa Chaiva Ooja Smritah "Vitiated Kapha fails to discharge this duty of providing Bala / Oja immunity to the eye. Therefore, the disease-fighting capacity as well as preventing ability is diminished and whatever comes in contact with the eyeball makes the eye diseased, whether it be allergens or pathogens.

Patients with VKC also experienced disease related limitation in their daily routine of their life and while playing sports and meeting friends. Patients reported limitation in their activities that cause exposure to allergens such as from dusty particles while playing in ground and it may lead to irritation in their eyes and thus disease become more severe. Treatment of VKC should improve not only the children's signs and symptoms, but also their daily life.

# CONCLUSION

From above discussion, it may be concluded that symptoms and signs of Vernalkerato conjunctivitis (VKC) are similar to *Kaphaja Abhishyanda*. Vernalkerato conjunctivitis does not affect the vision but in childhood it is an extremely comfortless disease, decreasing the studying time of children, and some time it will last for a year. Rarely it causes corneal ulcer or keratoconus which effects vision. *Kaphaja Abhishyanda* is a benign, but distressing illness of childhood, which can be better managed or treated with a simple, safe, non-toxic, cheap, and effective *Ayurvedic* formulations.

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# **Source of Support: Nil Conflict of Interest: None Declared**

How to cite this URL: Ekta Ramola et al: A Conceptual Review Of Kaphaja Abhishyanda / Vernalkerato Conjunctivitis. International Ayurvedic Medical Journal {online} 2021 {cited May, 2021} Available from: <a href="http://www.iamj.in/posts/images/upload/2939\_2944.pdf">http://www.iamj.in/posts/images/upload/2939\_2944.pdf</a>