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Conceptual Study of Haritaki and Shunthi Churna Bidalaka in Vernal Keratoconjunctivitis.

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ABSTRACT

Vernal keratoconjunctivitis (VKC) is a chronic, bilateral corneal and conjunctival problem which typically presents in young individuals. VKC is characterized by itching, photophobia, white mucous discharge, lacrimation, foreign body sensation, and pain due to corneal involvement of shield ulcers. Vernal keratoconjunctivitis is categorized within ocular diseases. The diagnosis is clinical, as no sure biomarkers pathognomonic of the disease have yet been identified. The VKC therapy relies on different types of drugs, from antihistamines and topical steroids to cyclosporine or tacrolimus eye drops. In extremely rare cases, there is also the need for surgical treatment for the debridement of ulcers, as well as for advanced glaucoma and cataracts, caused by excessive prolonged use of steroid eye drops.This condition can be correlated with Kaphaja Abhishyanda in Ayurvedic texts. Owing to the symptoms and signs, the case was diagnosed as Kaphaja Abhishyanda/VKC. Hence this patient was treated with Kriyakalpa (ocular therapeutic procedures) Haritaki and Sunthi Churna Bidalaka which gave significant results and found useful in the management of Vernal keratoconjunctivitis.

According to Ayurvedic principles, the spring season is when Kapha prakopa (Kapha vitiation) occurs, which is indicated by the name of the ailment, spring catarrh. The Kapha dominant stage of life is childhood, and the disease's clinical signs resemble those of Kaphaja Abhishyanda. Kaphaja Abhishyanda and VKC share a striking clinical similarity. Thus, there is an increasing need to understand the disease in view of Ayurveda and to establish the management through Ayurvedic system of medicine.

1. INTRODUCTION

VKC is characterized by itching, photophobia, white mucous discharge, lacrimation, foreign body sensation, and pain due to corneal involvement of shield ulcers. The pathognomonic signs of VKC are Trantas dots (aggregations of epithelial cells and eosinophils), cobblestone giant papillae at the upper tarsal lids, and shield ulcers. Other signs described are conjunctival hyperaemia, gelatinous infiltrate at the limbus, neovascularization of the cornea, and pseudogerontoxon. There are three forms of VKC: tarsal, limbal, and mixed. The tarsal form is characterized by papillae in the upper tarsal lid, while the limbal form by gelatinous infiltrates in the limbus (characterized by an infiltration of lymphocytes, plasma cells, macrophages, basophils, many eosinophils, and conjunctival goblet cells, Trantas dots (white nodules composed of eosinophils and epithelial debris located at the limbus, and, eventually, punctate keratitis and shield ulcers. In the mixed form, both the cornea and the tarsal conjunctiva are involved.

Although VKC usually resolves after puberty, it can lead to severe visual impairments if the therapy is not adequate. The patient could develop progressively visual loss (reported in 5– 30% of cases), shield ulcers, cataracts, and glaucoma, caused by excessive prolonged use of steroid eye drops.

VKC therapy relies on different types of drugs. The mild form is usually treated with antihistamine eye drops, mast cell stabilizers, eosinophil inhibition drops (e.g., ketotifen), and short cycles of topical steroids. Moderate and severe forms usually require instead a prolonged course of steroids to control signs and symptoms of the disease, and/or an immunomodulatory therapy with cyclosporine or tacrolimus eye drops.

The clinical presentation aligns with *Kaphaja Abhishyanda* as described in Ayurvedic literature. Based on the characteristic signs and symptoms, the diagnosis was established as *Kaphaja Abhishyanda* (Vernal Keratoconjunctivitis - VKC). The treatment approach involved Ayurvedic ocular therapies (*Kriyakalpa*), along with the topical application of *Haritaki* and *Shunthi* churna in the form of *Bidalaka*. This regimen yielded notable improvement and proved effective in the management of VKC..

Vernal Keratoconjunctivitis

VKC is a recurrent, bilateral, interstitial, self-limiting, allergic inflammation of the conjunctiva having a periodic seasonal incidence.

Clinical features Symptoms

Marked burning and itching sensation. Itching is more marked with palpebral form of disease.

Other symptoms include mild photophobia, lacrimation, stringy ropy discharge and heaviness of lids.

Signs

Palpebral form – Typical lesion is the presence of hard, flat topped, papillaearranged in a ‘cobble-stone’ or ‘pavement stone’, fashion along with conjunctival hyperaemia. In severe cases, papillae may hypertrophy to produce cauliflower-like excrescences of ‘giant papillae’.

Bulbar limbal form – Dusky red triangular congestion of bulbar conjunctiva in palpebral area. Limbal papillae occur as gelatinous, thickened confluent accumulation of tissue around the limbus. Presence of discrete whitish red dots along the limbus (Horner – Tranta’s spots).

Mixed form – it shows combined features of both palpebral and bulbar forms.

Patients with VKC usually present at early to late school age (between 5 and 15 years of age) with primarily eye symptoms. The predominant eye symptoms are itching, discharge, tearing, eye irritation, redness of the eyes, and to variable extent, photophobia. In most patients, eye symptoms initially predominate, and thus, they commonly seek help from ophthalmologists. In some, rhinitis and asthma are associated symptoms and render the parents aware of the allergic nature of the problem. On examination, conjunctival hyperaemia can be observed on the bulbar and tarsal conjunctiva. Thick ropy, mucoid, or frankly purulent discharge is usually noted. With proper eversion of the upper eye lid, the appearance of conjunctival papillae can be observed. Pathognomonic papillae are more commonly observed on the upper tarsal conjunctiva than on the lower ones. By definition, papillae are classified as projections from conjunctival surface with diameters more than 0.2 mm. The sizes of papillae vary markedly from less than one to several mms. The surface of papillae can be a smooth solid surface with hyperaemia or a ‘melt-down’ ulcerative one. Gelatinous infiltrative substances – the Horner-Trantas dot – can be occasionally observed on the limbus surrounding the cornea. These are inflammatory infiltrates consisting primarily of eosinophils. Grading of severity of VKC has been proposed based on the size of the papillae and conjunctival hyperaemia.

However, in clinical practice, the degree of these two clinical signs may not coincide as proposed.

Pathophysiology

VKC has been included in the newest classification of ocular surface hypersensitivity disorders as both an IgE- and no IgE mediated ocular allergic disease. Additionally, not well defined, non-specific hypersensitivity responses could be implicated in the pathophysiology of the disease. The aetiology of VKC may involve a variety of factors, such as genetic predispositions, environmental allergens, and climate changes. The central role of specific IgE–mast cell activation is supported by evidence, such as the presence of specific IgE in serum and in tears, clinical correlation between allergen exposure and exacerbation of the disease, association with other allergic manifestations, increased number of mast cells in conjunctival tissue, cytologic pattern in tears and tissues and the pattern of mediators in the tears of patients with active disease. Nonetheless, it is also well known that not all VKC patients have positive allergy skin tests. Moreover, clinical signs and symptoms among those with and without positive skin tests are indistinguishable. The increased numbers of CD4+ Th2 lymphocytes in the conjunctiva and the increased expression of co-stimulatory molecules and cytokines suggest that T cells play a crucial role in the development of VKC. In addition to typical Th2-derived cytokines, Th1-type cytokines, pro-inflammatory cytokines, a varietyof chemokines, growth factors, and enzymes are overly expressed in VKC patients. Eosinophils and eosinophil-derived major basic protein (MBP) and cationic protein (ECP), neurotoxins, and collagenases, in particular MMP-9, have been shown to damage the corneal epithelium and the basement membrane causing corneal involvement in VKC. Tear levels of IL-5, eotaxin, and ECP have been shown to correlate with disease severity and corneal damage in VKC.

Management:

Dual action antihistamines and mast cell stabilizers includes olopatidine (0.1%) ect

Mast cell stabilizers like sodium chromoglycate(2%)

Toical steroids

Topical immunomodulators

Topical lubricating and mucolytics

Systemic therapy includes –oral antihistamines and oral steroids

Complications:

Vernal keratopathy

Prevention:

Use dark goggles to prevent photophobia

Cold compresses and ice packs

Eye rubbing should be avoided

KAPHAJ ABHISHYAND:

The symptoms of Vernal keratoconjunctivitis are found to be very similar and can be somewhat correlated with one of the *Sarvagata netra Roga*, which is *kaphaj abhishyand.*

It is a *kaphaj sadhya vyadhi.*

Acharya Sushruta had described *kaphaj abhishyand* as, *Kaphaj abhishyand* is a disease condition in which the following signs and symptoms are observed.

श्लक्ष्ण -Smoothness

शीत- Coldness

गुरु- Heaviness of the eye

मंदाद्रिक-Dull or blurred vision

स्पशश शीतल-Cold to touch

स्रावश्च द्रिच्छिलो –Thick, sticky, mucous like discharge

बन्ध –Stiffness or difficulty in eye

कण्डू –Itching**Features of Kaphaj Abhishyand are:**

It is caused due to vitiation of *kapha dosha*.

Characterized by marked burning sensation and itching

Mild swelling around the eyes.

Heaviness and mild discomfort in eyes.

Patient desires for hot things.

Chikitsa

Shodhana (Purification therapy):

Vamana (Therapeutic emesis) – To expel aggravated *Kapha*

Nasya – Administration of medicated oils through the nose

Anjana (Collyrium) – Especially *Lekhana Anjana* to reduce *Kapha*

Treatment of Kaphaj abhishyand:

Using *Kapha*-pacifying herbs and formulations:

Aschyotana (Eye drops): Decoctions of *Triphala, Daruharidra, or Yashtimadhu.*

Anjana (Collyrium): *Saindhava Anjana, Rasanjana* with honey, or *Triphala Anjana.*

Kavala/Gandusha (Gargling): With warm decoctions or medicated oils.

Netra dhara (Irrigation): With lukewarm *Triphala or Darvi Kashaya.*

According to Acharya Vagbhata,

Acharya has spoken use of kapha shaman using tikta, kaku, kashay rasa.

Snehana with ruksha type of Sneha (like using powders) is used

Nasya with shadbindu taila, anu taila.

Netra prakshalana with triphala kwath, daruharidra, nimba, patoladi kwath.

Lekhana anjana with saidhava, marich, apamarga.

HARITAKI AND SHUNTHI CHURNA BIDALAK

HARITAKI:

Family: Combretaceae

Doshagnata: Tridoshkar, Netrya ,Rasayan , Bruhana Scientific name: *Terminalia chebula*

PHARMACODYNAMICS	YASTIMADHU
RASA	Panchrasayukta(Lavan rahit) Kashay rasa Pradhan
GUNA	Laghu , ruksh
VEERYA	Ushna
VIPAKA	Madhura
KARMA	Netrya, Tridoshkar ,Rasayan , Brunhana

HARITAKI (Terminalia chebula) is one of the most revered herbs in Ayurveda, often called the ‘‘KING OF MEDICINE’ Major constituents of Haritaki that contribute to its wide range of medicinal effects in Ayurveda:

Tannis (20-40%): Chebulinic acid, Chebulagic acid , Gallic acid, Ellagic acid. These are powerful antioxidants, anti-inflammatory, and astringent agents.

Phenolic compounds: Corilagin, Terchebulin, Punicalagin helps in detoxification, anti-aging, and immunity boosting.

Flavonoids: Quercetin, Rutin known for their anti-allergic, anti-inflammatory, and anti-viral properties.

Glycosides: Provide laxative effects and help regulate bowel movements.

Amino acids: Important for cellular repair and nutritional support.

Fatty acids and Fixed oils: Palmitic acid, Oleic acid, Linoleic acid contribute to skin healing and anti-inflammatory actions.

Anthraquinones: Emodin, Chrysophanol have mild laxatives action; supports colon health.

Other compounds: Beta Sitosterol , Fructose and glaucose, Resins ans essential oils.

SHUNTHI

PHARMACODYNAMICS	GOGHRITA
RASA	Katu

GUNA	Snigdha, Laghu
VEERYA	Ushna
VIPAKA	Madhura
KARMA	Shitprashaman ,Shothhar, Vedanasthapan, Pachan

SHUNTHI is a dry form of ginger and chemical constituents of shunthi which give it its therapeutic potency in Ayurveda:

Volatile oils (1-3% in dried ginger): These responsible for ginger's aroma and many therapeutic actions. Includes Zingiberene, Beta bisabolene, Camphene, Citral, Linalool, Cineole gives anti-inflammatory, carminative, digestive stimulant, antiseptic effect.

Pungent compounds: Shogaols, Gingerols, Zingerone gives digestive , anti- inflammatory, anti-nausea, anti-microbial effect.

Other compounds: Resins and oleoresins, Proteins and free amino acids, Starch, Minerals.

2. DISCUSSION:

Probable mode of action:

Haritaki is *tridoshghana* –balances *vata, pitta, kapha.*

Kapha shaman: *Ruksha* and *Ushna* qualities reduces the excessive mucous (shlema) in the eyes.

Lekhana: Removes accumulated secretions and reduces the stickiness.

Shothahara (anti-inflammatory): Reduces swelling of conjunctiva and lids.

Ropana (healing): Supports healing of inflamed eye tissue.

Tridosha pacification: Especially helpful in *Kapha-Vata* dominant conditions.

Mode of action of *shunthi:*

Kaphahara: Ushna and *Tikshna* qualities are highly effective in liquefying and expelling *Kapha*.

Srotoshodhana (channel-cleansing): Clears microchannels around the eye, enhancing circulation and reducing stagnation.

Shoshana: Absorbs excess fluid and mucous secretion in the eyes.

Deepana-Pachana: Though mainly for digestion, these qualities support metabolic correction at the *Dhatu (*tissue) level, which is essential in chronic eye conditions.

Haritaki acts as a scraping, drying, and healing agent in *Kapha*-related eye disorders and

Shunthi works as a penetrative, fluid-absorbing, and *Kapha*-clearing drug.

Together in *Bidalak* form, they effectively reduce discharge, swelling, and discomfort in

Kaphaj Abhishyanda, restoring ocular health.

Bidalak helps in delivering the active constituents directly to the periorbital region. This form of treatment offers localized *dosha* pacification without systemic involvement. It also provides a cooling and soothing effect due to the combined *Rasa-Karma-Veerya* of *Haritaki* and *Shunthi.*

3. CONCLUSION:

Vernal keratoconjunctivitis, a modern-day affliction aggravated by allergens, eye rubbing and seasonal changes, has been effectively correlated with the Ayurvedic condition *Kaphaj abhishyanda*. While modern treatments focus on symptomatic relief, Ayurvedic management targets the root cause by balancing the vitiated doshas and offering long-term ocular nourishment through therapies like *Haritaki and shunthi churna bidalak.*

The study highlights the importance of integrating traditional Ayurvedic wisdom with modern therapeutic approaches for holistic and sustainable management of VKC. Ayurvedic treatments not only provide relief from the discomfort associated with VKC but also work to restore the natural health of the eyes by addressing the doshic imbalances, making them a promising alternative for long-term care. Further clinical research on the use of *Haritaki and shunthi churna bidalak* in the treatment of VKC could potentially pave the way for a broader acceptance of Ayurvedic therapies in the management of this

growing global health concern

REFERENCES

[1] Ayurvedacharya, K. S. A. (1991). Bhaishajya ratnavali. Choukhamba sanskrit sansthan.

[2] Ayush Govt of India. (2015). Ayurvedic Pharmacopeoia of India: Part 2 Vol.1- Formulations. Createspace Independent Publishing Platform.

[3] Chunekar, P. K. C. (2010). Bhavprakash nighantu. Choukhamba Bharti Academy.

[4] Khurana, A. K. (2014). Comprehensive Ophthalmology 5E (5th ed.). Anshan.

[5] Mansi Deshpande and Dr. A P Deshpande. (n.d.). Dravyaguna vidnyan. Choukhamba sanskrit pratisthan.

[6] Shrikanta Murthy, P. K. (2010). Sushrut samhita. Choukhamba Orientalia.

[7] Srikanta Murthy, P. K. (n.d.). Sharangdhar samhita. Choukhamba Orientali

[8] Sihota Ramanjit, Tandon Radhika, Parsons'Diseases of the Eye. 22nd edition. New Delhi: Elsevier Publications; 2016.p.180.

[9] Sihota Ramanjit, Tandon Radhika, Parsons'Diseases of the Eye. 22nd edition. New Delhi: Elsevier Publications; 2016.p.180.

[10] Acharya Sushruta. Sushruta Samhita with Nibandha Sangraha Commentary by Dalhana edited by Dr.Kewal Krishan Thakral, Chaukhambha Orientallia, Varanasi, reprint 2016; Sootrasthana 21/4.p.255