

Clinical profile of patients with vernal keratoconjunctivitis

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Abstract

Background: To study the clinical profile of Vernal keratoconjunctivitis (VKC) patients.

Methods: 50 patients with VKC selected at random, who attended the Department of ophthalmology, were include in the study.

Results: 46 studied subjects (92.00%) had itching as the primary symptom, 25 patients (50%) complained of foreign body sensation, 40 patients (80.00%) had photophobia, 45 patients (90.00%) had watering and 25 (50%).

Conclusion: VKC was common in males, during hot climate. Limbal type of VKC was more commonly present.

Keywords: Clinical profile, Vernal keratoconjunctivitis, Ophthalmology

Introduction

Vernal keratoconjunctivitis (VKC) is a chronic, bilateral, recurrent ocular inflammatory condition found in individuals predisposed by their atopic background and associated with secondary keratopathy. The disease

shows marked seasonal influence, probably secondary to vernal allergens, but perennial forms exist as well. The allergens usually implicated in the development of VKC are pollens, primula flower, house dust mite and its feces. Contact with pet animals like horse and cats have also been reported.¹⁻²

Understanding and treating vernal keratoconjunctivitis has been a challenge for ophthalmologists, since the pathogenesis is unclear and anti-allergic therapy is often unsuccessful. It is considered that vernal keratoconjunctivitis is an IgE and Th-2 mediated allergic reaction with additional, not well defined, perhaps non-specific hypersensitivity responses. The pathogenesis includes several factors, including environmental allergens, climatic and genetic predisposition.³

Material & Methods

50 patients with VKC selected at random, who attended the Department of Ophthalmology, were included in the study.

The relevant details of history and clinical examination of the patients were recorded on a specifically designed Proforma. The history was obtained with Special attention to

1. Occurrence of symptoms seasonal or perennial
2. Personal and or family history of allergy
3. Aggravating and relieving factors
4. Post treatment

Inclusion criteria

- Patients with symptoms and signs suggestive of VKC.

Exclusion criteria

- Allergic conjunctivitis due to Atopy.
- Contact lens induced conjunctivitis.

Data Analysis

Data was recorded as per Performa. The data analysis was computer based; SPSS-22 will be used for analysis. For categoric variables chi-square test was used. For continuous variables independent samples’s *t*-test was used. *P-value* <0.05 was considered as significant

Results

The Mean age of onset of vernal keratoconjunctivitis in patients enrolled was 5.12 SD ± 3.21 Yrs and age range was from 8 months to 25 years. Out of the total 50 enrolled subjects, 31 were males and 19 were females.

Table 1: Distribution of symptoms

Symptoms	No of patients	Percentage
Itching	46	92.00
Foreign body sensation	25	50.0
Photophobia	40	80.00
Watering eye	45	90.00
Previous history of mucus production	25	50.0
Burning sensation	12	24.00
Constant blinking	19	38.00

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Table 2: Sign present

Sign	No of patients	Percentage
Congestion	43	86.00
Perilimbal pigmentation	38	76.00
Perilimbal conjunctival hypertrophy	20	40.00
Horner Trantas dots	6	12.00
Palpebral papillary hypertrophy	22	44.00
Giant papillary (>3mm) hypertrophy	11	22.00

Congestion was present in 43 patients of VKC and 7 patients had no congestion at presentation. Perilimbal pigmentation was seen in 38 patients out of 50 studied subjects of vernal keratoconjunctivitis.

Discussion

Vernal Keratoconjunctivitis is an ocular allergic disease affecting mainly boys in the first decade of life. Diagnosis is based on typical clinical signs and symptoms, including intense itching, photophobia, sticky mucus discharge, giant papillae on the upper tarsal conjunctiva and limbal conjunctival hypertrophy, superficial keratopathy and corneal shield ulcers. The disease is traditionally considered to be a type 1 hypersensitivity reaction. A personal history of atopy, increased levels of serum and tear IgE and response to anti-allergic therapy are common features of VKC.⁴ Despite significant advances made in the field of immunology the exact etiopathogenesis of the disease still remains elusive.

In our study major symptoms seen in this study group are itching, watering and photophobia. Ujwala S Saboo

and co-workers also found almost similar results itching (88%), redness (86%) and watering (65%).⁴

In our study congestion was present in 43 patients of VKC and 7 patients had no congestion at presentation. Perilimbal pigmentation was seen in 38 patients out of 50 studied subjects of vernal keratoconjunctivitis. Ujawala S Saboo and co-workers found perilimbal conjunctival pigmentation in 52/468 (11%) of the patients.⁴

Ujawala S Saboo and co-workers found palpebral papillae in 85% of patients and limbal thickening in 73% of patients with VKC.⁸

This study shows that VKC in the temperate Sub Himalayan region of North India is predominantly of limbal form (57.8%) followed by palpebral form (22%). This is in contradiction to other studies which mention Limbal form to be more common in tropical regions of the world. A study from southern part of India done by Saboo et al⁵ found mixed form to be predominant in their studied group.

Conclusions

VKC was common in males, during hot climate. Limbal type of VKC was more commonly present.

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