

Original Research

Evaluation of clinical profile of vernal keratoconjunctivitis patients

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ABSTRACT:

Background: Vernal keratoconjunctivitis (VKC) is a unique disorder among a spectrum of allergic eye diseases. Hence; the present study was conducted with the aim of evaluating clinical profile of vernal keratoconjunctivitis patients. **Materials & methods:** The present study was conducted with the aim of evaluating clinical profile of vernal keratoconjunctivitis patients. A total of 50 VKC patients were enrolled. The diagnosis of VKC was made on the basis of history and typical signs and symptoms. Complete demographic and clinical details of all the patients were obtained. A Performa was made and clinical profile was recorded. **Results:** Itching, redness, photophobia, ropy discharge, burning sensation and watering were seen in 70 percent, 64 percent, 40 percent, 30 percent, 8 percent and 16 percent of the patients respectively. Mild, moderate and severe grade was seen in 46 percent, 24 percent and 30 percent of the patients respectively. **Conclusion:** From the above results, the authors concluded that VKC is a common form of allergic conjunctivitis, and is more common in male adolescents.

Key words: Vernal, Keratoconjunctivitis

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INTRODUCTION

Ocular allergy is a common disorder which can be debilitating for patients and, at times, challenging for physicians to diagnose and treat. Allergic disease affects 30-50% of the population, while ocular symptoms are present in 40-60% of allergic individuals. The allergic reactions of conjunctiva may assume five forms: 1) Seasonal allergic or „Hay Fever“ conjunctivitis, 2) Perennial allergic conjunctivitis, 3) Vernal conjunctivitis or Keratoconjunctivitis, 4) Atopic Keratoconjunctivitis and 5) Giant papillary Conjunctivitis.¹⁻³

Vernal keratoconjunctivitis (VKC) is a unique disorder among a spectrum of allergic eye diseases. It is a chronic, bilateral, inflammatory condition most commonly involving the upper tarsal conjunctiva. It more commonly affects young, male patients, but it is frequently observed in tropical regions where it may affect both sexes equally. VKC has also often been associated with higher socioeconomic status. The

incidence, as well as the type, of VKC varies depending on geographic region: limbal VKC is the predominate form in central and southern African countries, while the palpebral form is most frequent in Europe and the Americas. Seasonal exacerbations may occur based on the time of year, most often in Europe and Asia, but a significant number of patients may develop chronic perennial disease.⁴⁻⁷ Hence; the present study was conducted with the aim of evaluating clinical profile of vernal keratoconjunctivitis patients.

MATERIALS & METHODS

The present study was conducted with the aim of evaluating clinical profile of vernal keratoconjunctivitis patients. A total of 50 VKC patients were enrolled. The diagnosis of VKC was made on the basis of history and typical signs and symptoms. Active VKC was diagnosed based on the complaint of ocular itching in the presence of upper

tarsal conjunctival papillae and/or limbal hypertrophy with bulbar conjunctival pigmentation. The severity of the disease was retrospectively graded based on the clinical signs at initial presentation. Complete demographic and clinical details of all the patients were obtained. A Performa was made and clinical profile was recorded. All the results were recorded and analysed by SPSS software.

RESULTS

A total of 50 patients were enrolled. Mean age of the patients was 21 years. Majority of the patients were males. Itching, redness, photophobia, ropy discharge, burning sensation and watering were seen in 70 percent, 64 percent, 40 percent, 30 percent, 8 percent and 16 percent of the patients respectively. Mild, moderate and severe grade was seen in 46 percent, 24 percent and 30 percent of the patients respectively.

Table 1: Clinical profile

Symptoms	Number of patients	Percentage
Itching	35	70
Redness	32	64
Photophobia	20	40
Ropy discharge	15	30
Burning sensation	4	8
Watering	8	16

Table 2: Severity grade

Severity grade	Number of patients	Percentage
Mild	23	46
Moderate	12	24
Severe	15	30

DISCUSSION

The diagnosis is generally based on signs and symptoms of the disease, but in difficult cases can be aided by conjunctival scraping, demonstrating the presence of infiltrating eosinophils. Although various form of therapy can be used for symptomatic relief, there is no curative therapy. Chronic VKC in children is usually one of the difficult problem in management. The long term prognosis is generally good; however 6% of patients develop corneal damage, cataract, or glaucoma.⁶⁻¹⁰ Hence; the present study was conducted with the aim of evaluating clinical profile of vernal keratoconjunctivitis patients.

A total of 50 patients were enrolled. Mean age of the patients was 21 years. Majority of the patients were males. Itching, redness, photophobia, ropy discharge, burning sensation and watering were seen in 70 percent, 64 percent, 40 percent, 30 percent, 8 percent and 16 percent of the patients respectively. Saboo US et al studied the demographic and clinical profile of patients with vernal keratoconjunctivitis (VKC) at a tertiary eye care center in India. Retrospective chart analysis of 468 patients of VKC was seen. Mean age at presentation was 12 years. Majority of the patients had mixed pattern disease (72%). Chronic perennial disease was seen in 36% patients. Personal or family

history of allergies was noted in 5% patients. Severe disease based on clinical grading was present in 37% patients. Moderate to severe vision loss was seen in 12% of total population. Persistent disease beyond 20 years of age was found in 12% patients. VKC-related complications such as corneal scarring (11%), shield ulcer (3%), keratoconus (6%), and limbal stem cell deficiency (1.2%) were seen. Treatment-related complications like corticosteroid-induced cataract and glaucoma were seen in 6% and 4% of patients, respectively. Clinical pattern of VKC seen in the tropical climate of India is essentially similar to that seen in other tropical countries.¹⁰

In the present study, mild, moderate and severe grade was seen in 46 percent, 24 percent and 30 percent of the patients respectively. Nagpal H et al studied variations in clinical profile of vernal keratoconjunctivitis (VKC) among local population with data collected at our tertiary care hospital over a period of 6 months. Out of 150 patients, 110 (73.33%) were male and 40 (26.67%) were female. The highest incidence of VKC occurred in the age group of 11–15 years. Maximum cases (62%) had palpebral form followed by mixed form (23.33%) and bulbar form (14.67%). Corneal complications occurred in 22 (14.67%) patients; 20 patients had minor complications and 2 had major complications. The minor complications usually consisted of superficial punctate keratopathy (SPK) or other epithelial disturbance. Major complications consisted of superior pannus. Although patients with VKC often give a history of allergy or of atopic diseases such as allergic rhinitis, asthma, or hay fever, in the present study, coexisting allergic conditions could be detected in only 45 (30%) patients. VKC is a common form of allergic conjunctivitis and the disease tends to occur in males of 11–15 years age group. Most common is palpebral form followed by mixed and bulbar forms.¹¹

CONCLUSION

From the above results, the authors concluded that VKC is a common form of allergic conjunctivitis, and is more common in male adolescents.

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