

Clinical profile of Vernal kerato-conjunctivitis patients at tertiary care hospital in Aurangabad district of Maharashtra, India

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Abstract

Vernal kerato-conjunctivitis also called as Spring Catarrh is a chronic and recurrent allergic type of conjunctivitis commonly affecting pre-pubertal age-group individuals during the spring season and the summer season. Present study was undertaken to describe the clinical profile of vernal kerato-conjunctivitis patients from a tertiary care centre in Aurangabad district of Maharashtra, India. Study was carried over a period of one year at the Department of Ophthalmology, Govt Medical College, Aurangabad. Thirty five patients with clinically diagnosed bilateral vernal catarrh were included in the study. The diagnosis of vernal kerato-conjunctivitis was made on the basis of history and typical signs and symptoms. Age & gender of the participants was recorded. Presence of symptoms and signs of vernal kerato-conjunctivitis was noted and described. Giemsa staining of conjunctival scrapings was done to detect the presence of eosinophils. Total leukocyte count and differential leucocyte count was done and personal as well as family history of allergic diseases like asthma, hay fever, eczema was taken. Maximum incidence was seen in the age group of 0 to 20 years with 80% of the cases in that age group. There was male predominance with around 74% cases being males. Itching was seen in 97.14% and Watery discharge was present in 94.28% cases. Conjunctival injection was present in all cases, conjunctival oedema in 91.42% and papillary hypertrophy was seen in all cases. Limbal injection was seen in 88.57%, limbal oedema in 80%, limbal papillae in 97.14% while tranta's dots were found in 57.14% patients. Superficial punctate keratitis was seen in 48.57% cases and 25 patients (71.42%) were found to be atopic individuals.

Key Word: Vernal kerato-conjunctivitis, Maharashtra.

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Received Date: 01/04/2014 Accepted Date: 12/04/2014

Access this article online

Quick Response Code:



Website:

www.statperson.com

DOI: 13 April 2014

INTRODUCTION

Vernal kerato-conjunctivitis also called as Spring Catarrh is a chronic and recurrent allergic type of conjunctivitis commonly affecting pre-pubertal age-group individuals during the spring season and the summer season. Although it is a self-limiting disease, it is

commonly reported to cause complications like visual impairment occurring due to secondary corneal involvement if the disease is not properly treated during the active stage. Also it adversely affects the quality and productivity of life especially in the school going children due to sickness absenteeism and causing limitations to the outdoor activities of the affected person. [1] Various exogenous as well as endogenous causes have been reported to be associated with the etio-pathogenesis of vernal kerato-conjunctivitis. An immune mechanism is found to be involved in its development as suggested by various studies. [2] Knowledge of clinical profile of the disease in the local population will help in designing preventive measures and also proper management of the disease. Present study was undertaken to describe the clinical profile of vernal kerato-conjunctivitis patients from a tertiary care centre in Aurangabad district of Maharashtra, India.

METHODS

Study was carried over a period of one year at the Department of Ophthalmology, Govt Medical College, Aurangabad. Thirty five patients with clinically diagnosed bilateral vernal catarrh were included in the study. Informed consent was taken from each of the participants as per guidelines. The diagnosis of Vernal kerato-conjunctivitis was made on the basis of history and typical signs and symptoms. Age & gender of the participants was recorded. Presence of symptoms of Vernal kerato-conjunctivitis i.e. redness, itching and watering was described. Similarly, the presence of signs of vernal kerato-conjunctivitis like hyperaemia, limbal papillae, tranta's dots, limbal oedema and punctate keratitis were examined and described. Conjunctival swabs and scrapings were taken for staining and culture to rule out presence of microorganisms as patients with bacterial conjunctivitis were excluded from the study. Giemsa staining of conjunctival scrapings was done to detect the presence of eosinophils. Total leukocyte count and differential leucocyte count was done and personal as well as family history of allergic diseases like asthma, hay fever, eczema was taken.

RESULTS

Maximum incidence was seen in the age group of 0 to 20 years with 80% of the cases in that age group whereas remaining 20% patients were in the age group of 21 to 30 years. There was male predominance with around 74% cases being males while only around 26% cases belonged to the female gender. Itching was seen in 34 out of 35 cases (97.14%). Watering was present in 33 out of 35 cases (94.28%). Conjunctival injection was present in all cases, conjunctival oedema in 32 cases (91.42%) and papillary hypertrophy was seen in all cases. Limbal injection was seen in 31 patients (88.57%), limbal oedema was noted in 28 patients (80%), limbal papillae in 34 patients (97.14%) while tranta's dots were found in 20 patients (57.14%). Superficial punctate keratitis was seen in 17 patients (48.57%). In the present study, 25 patients (71.42%) were found to be atopic based on history of hay fever, asthma, eczema or by eosinophilia based on blood counts. Giemsa staining of conjunctival scrapings was done in 32 patients and all of them were positive for presence of eosinophils.

DISCUSSION

Vernal kerato-conjunctivitis is considered to be a childhood disease and has been found to resolve usually by the age of puberty. We have observed that 20% of cases in our study group were more than 20 years of age. A hospital-based study done in Pakistan by Shafiq et al [3] has reported a low prevalence of only 6% of patients

with vernal kerato-conjunctivitis to be above the age of 20 years. Leonardi et al [4] in their study have also reported only 4% of patients to be more than 20 years of age. However, and Indian study by Ujwala Saboo et al [5] has reported 12% patients to be above 20 years of age. Thus a slightly larger number of patients were found to be beyond 20 years of age in our study population. Male to female ratio in our study was 2.9:1. Most of the studies have reported Male: Female ratio between 4:1 and 2:1. [6,7] However, a study by Ukponmwan [8] from Nigeria has reported higher ratio of females affected with Male: Female ratio of 1:1.3. Our study has found a male to female ratio which is in line with most other studies. Most of the cases from our study showed a mixed presentation regarding limbal and palpebral involvement as noted from presenting symptoms and signs. Similarly Ujwala Saboo et al [5] has reported a predominance of mixed presentation. A majority of subjects in our study (71.42%) were found to be atopic based on history of hay fever, asthma, eczema or by eosinophilia based on blood counts. Studies by Lambiase et al [9] and Bonini et al [10] have reported associated systemic allergies in 41.5-48.7% patients in different series.

Limitations of our study include a cross-sectional study design and sample size also needs to be large. Further research is needed with larger samples from diverse geographical areas and longitudinal studies to further the knowledge regarding epidemiology and natural course of vernal kerato-conjunctivitis which can help in better prevention and management of the disease.

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