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BMH Medical Journal 2015;2(4):91-96 **Research Article**

Attitude And Practices Of Subjects With Recent History Of Conjunctivitis, Regarding Treatment And Prevention Of The Disease

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Abstract

Conjunctivitis is considered as a mild disease affecting the eyes with epidemic potential. Supportive care and isolation helps to contain the disease and limit sequelae.

Aims and objectives: To assess the attitude and practices of subjects who have recovered from a recent episode of conjunctivitis regarding treatment and prevention of the disease.

Design: Cross sectional study based on questionnaire survey.

Material and methods: The cases were selected by convenient sampling. The questionnaire covered demographic characteristics, general knowledge, use of local remedies, compliance to the drugs and preventive strategies taken.

Results: The study included 54 cases. Male: female ratio was 14:40; mean age was 43.46 (SD 14.597). 40.7% were illiterate. 24.1% led a sedentary life. 85.2% belonged to rural areas. Use of alternate medicines was seen among 2.2% subjects. 13 cases used local remedies. Majority stopped the drug by themselves. 42.5% took precautions to prevent the spread of the disease.

Conclusion: Healthy practices regarding containment of conjunctivitis were lacking in the study group. Lack of adequate compliance, use of home remedies and self treatment with off the counter medicines have to be discouraged.

Keywords: conjunctivitis, epidemic, home remedies, alternate medicines, drug compliance

Introduction

Conjunctivitis is a ubiquitous disease. It is a community acquired infection with epidemic potential. Prevention of spread has a major role in limiting the disease. Though the disease is self limiting and the course is short lasting, the associated ocular disturbance, symptoms and functional impairment can affect the quality of life of such individuals. Rarely, sequelae like keratitis, uveitis, retinitis, optic

neuritis and extra-ocular muscle palsy can complicate the scenario.

Viral conjunctivitis is the most common type of infectious conjunctivitis and is more prevalent in hot humid seasons. It often follows upper respiratory infections. The disease spreads through contaminated touch, fomites and aerosols. Treatment is symptomatic and supportive in a majority. Practicing good hygiene is the best way to control the spread of the disease.

Aims and objectives

This study was undertaken to assess the attitude and practices regarding conjunctivitis and its prevention among subjects attending the Ophthalmology Out-Patient Department of a tertiary care unit in northern Kerala. An attempt was made to ascertain the role of age, gender, educational status and the living style with this awareness. Further the study also intended to analyze the knowledge regarding use of alternative medicines, local remedies, compliance to topical drugs, prevention strategies, precautions undertaken and the duration of the illness.

Materials and methods

A questionnaire based descriptive cross-sectional study was adopted for this investigation. The study group included subjects attending Ophthalmology OPD of our institute for eye care. The criteria for inclusion in the study were subjects with an educational background of higher secondary studies and below and history of conjunctivitis within one month of the present visit. Those with preexisting ocular diseases, young adults less than twenty years and children were excluded. The study period was six months.

The study was briefly explained to the subjects who met the criteria for the study. Those who agreed to participate were requested to provide consent on a consent form. There was no additional financial burden for the patient to participate in the study and it was approved by the Institutional Review Board.

A two page questionnaire was administered to the study participants. The questionnaire included queries pertaining to symptoms, duration of illness, treatment chosen, use of local remedies and spread among members of family. The questions were also formulated to assess the various precautions taken to prevent the spread of the disease. The demographic characteristics, occupation and education levels were also noted. To those who could not understand or read English, the questionnaire was interpreted in local languages, by trained staff. Data were analyzed using SPSS version 17. The effect of variables (such as age, education, place of residence, gender and type of spectacles) on attitude and practices regarding conjunctivitis and its care was analyzed. Chi-square test was used for univariate analysis. P value less than 0.05 was considered as statistically significant.

Results

The study group included 54 cases with history of conjunctivitis in the recent past. There were 14 males and 40 females. The age ranged from 20 to 70 years. Mean age was 43.46 (SD 14.597). 40.7% were illiterate (n=22). 24.1% (n= 13) were unemployed and led a sedentary life. 85.2% (n=46) belonged to rural areas (table 1). 35.2% (n=19) had more than one episode of conjunctivitis in the past.

Table 1: Demographic profile of the study group

	Factors	N (%)
Age group in years	20-30	11(20.4)
	31-40	13(24.1)
	41-50	9(16.7)
	51-60	13(24.1)
	61-70	7(13.0)
	70	1(1.9)
Socioeconomic status	APL	28(51.9)
	BPL	26(48.1)
Occupation	nil	13(24.1)
	manual labour	8(14.8)
	clerk	33(61.1)
Education	nil	22(40.7)
	primary	20(37.0)
	secondary	12(22.2)
Area of residence	rural	46(85.2)
	urban	8(14.8)

70.37% cases took only allopathic medication. Use of alternate medicines was seen among 22.2% subjects. Majority consulted the physician within one day (n= 25, 46%). 13 cases used local remedies (24.1%). The symptoms appreciated by the patients are given in **Figure 1**.

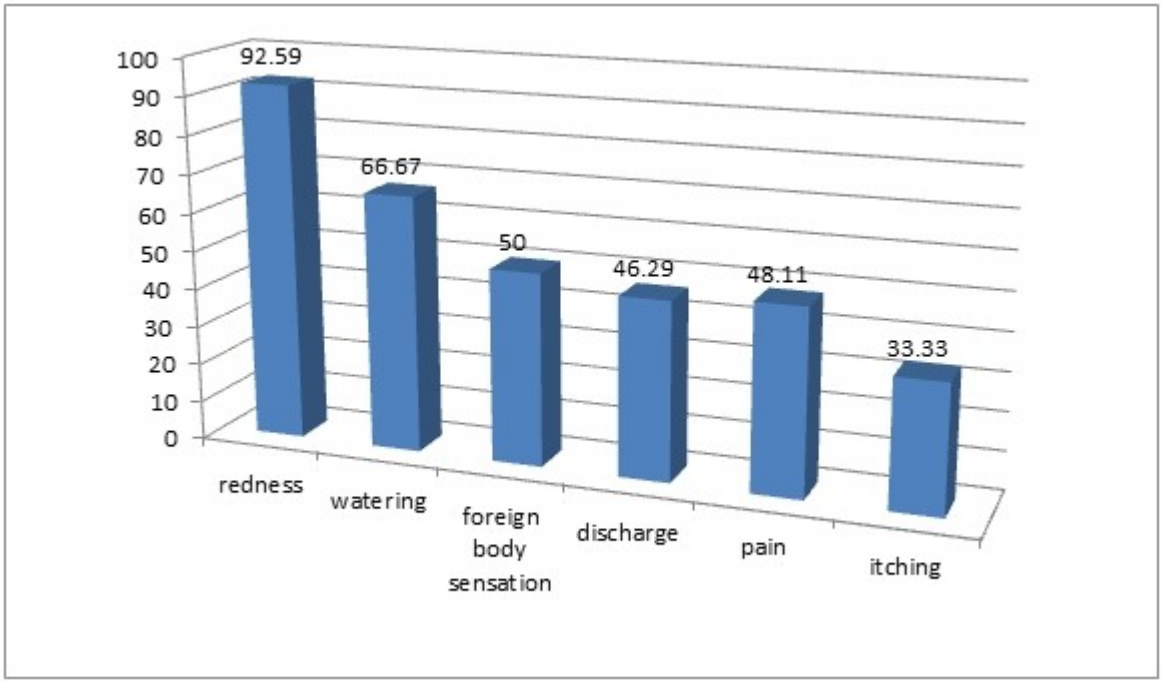

Figure 1: Symptoms appreciated by the subjects

The disease lasted for at-least one week in a majority (n=30, 55.5%). 81.5% participants were compliant to the daily regime of drugs. Majority stopped the drug by themselves without consulting the physician as the symptoms subsided. 42.5% took precautions to prevent the spread of the disease among their kith and kin. Distribution of cases based on whether other family members were affected is given in **Table 2**.

Table 2: Distribution of cases based on the practices followed by the study group.

	Factors	N (%)
What treatment did you follow?	Allopathy	38(70.4)
	Alternative medicines	12(22.2)
	nil	4(7.4)
When did you approach an ophthalmologist/physician?	within 2-3 days	25(46.3)
	after 2-3 days	11(20.4)
	used medicine of others	14(25.9)
	never consulted a doctor	4(7.4)
Can conjunctivitis cause loss of vision?	yes	15(27.8)
	no	36(66.7)
	dont know	3(5.6)
How many members in your household were affected?	<25 %	3(5.60
	26-50%	19(35.2)
	51-75%	14(25.9)
	>75%	18(33.3)
Did you use any local remedies?	yes	13(24.1)
	no	41(75.9)
Which local remedy was used? (n=13)	breast milk	3(25.0)
	juice of thulsi	1(8.3)
	juice of coriander	8(66.7)
What was the duration of the illness?	2-3 days	12(22.2)
	4-6 days	18(33.3)
	1-2 weeks	18(33.3)
	>2weeks	6(11.1)
Did you consult the physician before stopping the drugs?	yes	10(18.5)
	no	44(81.5)
Did you use the drugs as prescribed?	yes	44(81.5)
	no	10(18.5)
Did you take precautions to limit the spread of the disease?	yes	23(42.6)
	no	31(57.4)
What were the precautions taken? (n= 23)	Used separate towels, soaps etc	16
	Avoided contact	4
	Used eye drops as prescribed	5
	Frequent eye wash	4

The concept of the participants regarding the mode of transmission was as follows (**Figure 2**). Many had multiple answers.

On factor analysis by logistic regression, no statistically significant association was observed between the response of the subjects and their demographic profile.

Discussion

Acute infective conjunctivitis is one of the most frequently encountered ocular disorders in primary care, responsible for self referral to clinics throughout the world. [1] Conjunctivitis is an innocuous disease entity similar to viral flu having spontaneous remission without much functional disability.

[2,3] The widespread use of broad-spectrum antibiotics has led to concerns regarding antibiotic resistance in ocular therapy. Often the poly pharmacy is associated with ocular surface dysfunction adding on to the misery of the disease. [4] A Cochrane systematic review of 5 randomized clinical trials comparing antibiotic treatment with placebo in patients with acute conjunctivitis indicated that the use of antibiotics is associated with significantly improved rates of early clinical remission and early and late microbiological remission. However these observations were insufficient to suggest routine and regular use of broad spectrum antibiotics in an event of epidemic conjunctivitis. No serious outcomes were reported in either the active or placebo arms of these trials, indicating that important sight-threatening complications are an infrequent occurrence. [5]

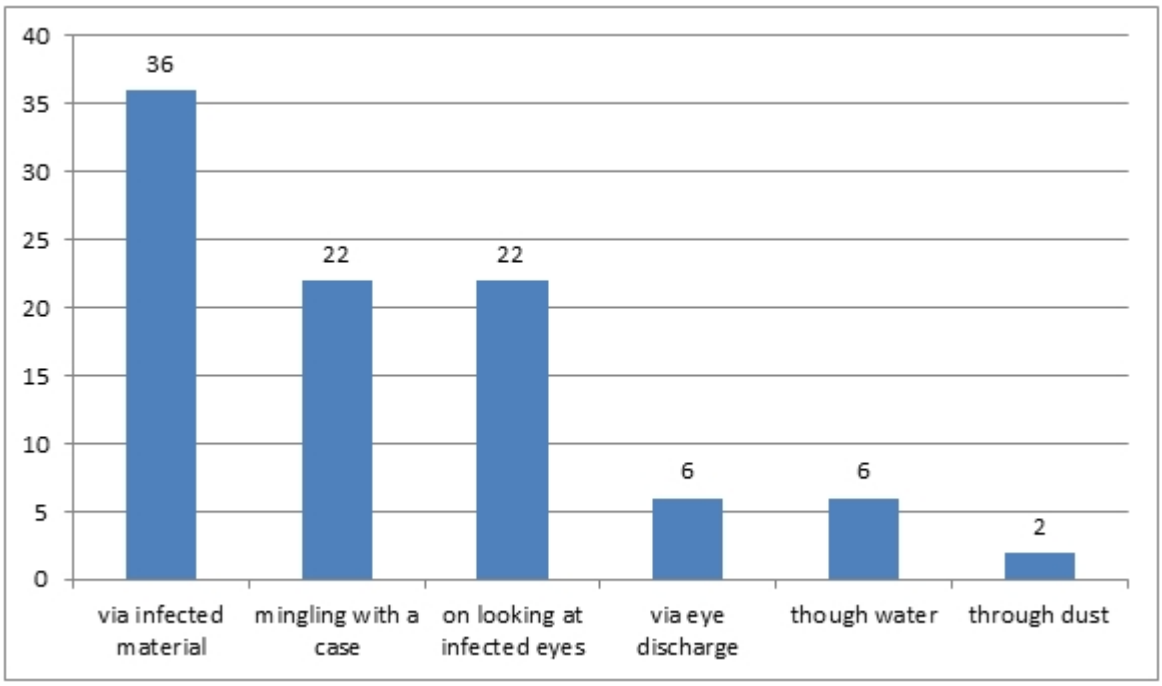

Figure 2: Concepts regarding spread of conjunctivitis.

Even with such a background, use of topical conventional and alternative medicine as an over the counter drug is rampant. Often this follows a trial of homemade remedies as noted in our cases. Whether these topical preparations have a bad impact on the recovery from the disease or whether they can substitute unwanted use of antimicrobials is to be studied.

Infective conjunctivitis is highly contagious and can easily spread in schools and at home. An outbreak of any communicable disease can be prevented by eliminating or reducing the source of infection, interrupting the transmission and protecting the person at risk. [6] Personal hygiene, proper disposal of contaminated fomites and isolation of the infected person to reduce the airborne transmission can easily control an epidemic of conjunctivitis. However we observed that the care taken by the affected person and his contacts in the context of conjunctivitis is often partial and prejudiced. This may be accounted by the absence of sight threatening complications or sequelae after this disease, its short duration and lack of coexistent systemic symptoms or morbidities. However, control of this mild but rapidly spreading disease is important in reducing loss of man hours of work and academics. Information, health education and judicious health care have to be implemented. Information regarding preventive measures via mass media, health care workers and medical personnel has to be promoted. This will prevent unnecessary alarm, discourage home remedies, and control the spread of this highly contagious disease.

Limited data, selection bias due to convenient sampling, translational bias, bias in the understanding

of the response by the interviewer and recall bias due to self reporting are the limitations of this study. Though the sample size is less, this data can be considered as a representative sample of subjects infected with conjunctivitis approaching a tertiary centre for the indolent course of the disease or its complications.

Conclusion

A majority of participants had a moderate level of knowledge regarding prevention and treatment of conjunctivitis. Interventions are needed to promote prudent use of antibiotics among the public, avoid misconceptions and limit the use of local remedies.

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