PREVALENCE OF FUNGAL KERATITIS IN RURAL POPULATION -AN INDIAN BASED

PROSPECTIVE; RETROSPECTIVE STUDY

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ABSTRACT

Introduction: Fungal keratitis is a major eye disease leading to blindness in South Asia. Many authors has reported in

South India, it was found that 44% of all central corneal ulcers are caused by fungi. This high prevalence of fungal

pathogens in South India is significantly greater than that found in similar studies in Nepal (17%), Bangladesh (36%),

Ghana (37.6%), and south Florida (35%). In Indian perspectives the incidence of fungal keratitis is being increased during

the past decade, due to Intemperate and retrogressive climatic changes. The present study aims to find out the incidence of

fungal keratitis in rural population.

Materials and Methods: A prospective and retrospective study of corneal ulcer conducted at Department of

Ophthalmology, People Education Society Institute of Medical Sciences and Research, Kuppam, Andrapradesh, India. For

accrual period of May 2010 to March 2011. Total of 100 patients were considered for the study with written consent and

meet their inclusion criteria. A study details were documented with special reference to history of injury with vegetative

matter, foreign body, use of antibiotics, steroids, plant juice, latex, milk, butter, etc. Concomitent clinical diagnostic history

were tested with high specificity and sensitivity.

Results: Study revealed that the incidence of fungal keratitis was PPV (6.25) and the incidence rate was 0.625 with NPV -

85.71%, specificity 17.24%, sensitivity 7.14%. Injury to the cornea is the leading cause of microbial keratitis, particularly

fungal keratitis. Our study reported that, 36% of the patients had dry, moisture 50% and remaining patients had no

evidence of both.

Conclusions: Fungal keratitis is responsible for a significant burden of blinding disease in the developing world. In winter

season incidence is more and strongly associated with older age group population. Therapeutic gaps will probably persist,

and further development is necessary. Basic awareness programme should be encapsulated and implemented by policy

makers at rural areas.

KEYWORDS: PPV, Fungal Keratitis, NPV, Prevalence, Prospective