SUMMARY AND CONCLUSION

Human adenoviruses are non—enveloped DNA viruses. Adenovirus infection occurs worldwide and cases a wide range of clinical diseases that affect ocular, gastrointestinal and respiratory system. Ocular adenoviral infections exhibit varieties of clinical presentations, such as epidemic keratoconjunctivitis and pharyngoconjunctival fever.

Adenovirus infection causes a variety of clinical diseases that affect ocular, gastrointestinal and respiratory systems. Ocular adenoviral infection has two clinical forms epidemic keratoconjuctivitis and pharryngoconjunctival fever.

Laboratory diagnosis of adenovirus infection depends on direct electron microscopic examination, viral isolation, DNA or antigen detection by immunofluorscent staining or detection of serum specific antibodies and detection of DNA by polymerase chain reaction (PCR).

The aim of the present study was to evaluate the incidence of adenovirus keratoconjunctivitis by using immunofluorscent staining of direct swabs and immunofluorscent staining after cell culture and compare between the results.

- Adenoviral antigens were detected in 45 cases (90%) out of 50 cases having viral conjunctivitis by using immunofluorscent staining of direct swabs and 30 cases (60%) of them were positive for the presence of adenovirus antigen in their specimens, by using cell culture technique, while adenoviral antigens were detected also in 33 cases (66%) by using immunofluorscent staining after cell culture.

Recommendations

Adenovirus infection can be avoided by different control measures which include careful attention to hand washing, wearing gloves when examining infected patients, isolation of suspected cases, disinfection with sodium hypochlorite (1-2%) of equipments used to examine infected patients, discarding opened ophthalmic solutions and work restriction of infected staff physician and nurses and ophthalmological staff who examined infected patients must not assigned to care for other patients.

lmmunofluorscent staining of direct swabs can be used as rapid screening test in diagnosis of adenovirus infection in large tiumber of patients as it could be done within 30 minutes but we can't depend only on it as a definitive method of diagnosis because its specificity is very low and must be confirmed by cell culture as it is a gold standard method for identification of adenovirus infection.