Effect of Povidone Iodine in Treatment of Epidemic Keratoconjunctivitis: Clinical Trail Study

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Abstract : Background and Aim: Epidemic keratoconjunctivitis is a type of conjunctivitis caused by adenoviruses that can spread rapidly through direct and indirect contact. The aim of this study was to evaluate the therapeutic effects of Povidone-Iodine 0.4% and 0.2% in improving the symptoms and signs of patients with epidemic keratoconjunctivitis. Materials and Methods: In this clinical trial study, 60 patients with a mean age of 27.8 ± 8.4 years who were eligible for inclusion criteria were randomly divided into three groups. The first group received eye drops of Povidone-Iodine 0.4% and betamethasone 0.1%, the second group received PovidoneIodine 0.2% and betamethasone 0.1% and the third group received betamethasone 0.1%. Follow-ups were on the first, fourth, seventh and tenth days after starting treatment. Parameters examined at each examination were hyperaemia, mucopurulent discharge, eyelid edema, hemorrhage, and subepithelial infiltration. Results: The results showed that mucopurulent discharge on the fourth day of the examination (P = 0.005) and the seventh day of the examination (P = 0.001) were significantly different in the three treatment groups. Sub-epithelial infiltration on the tenth day after treatment did not show a significant difference in the 3 groups (P = 0.287). Conclusion: Based on the results of this study, Povidone-Iodine is more effective in relieving some of signs of EKC, such as reduced mucopurulent discharge than steroids alone.

Keywords: EKC, topical bethadine, adenovirus, sub epithelial opacity

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