Purpose: The study aims to report the differences in the findings of epidemic keratoconjunctivitis (EKC) between premature babies and their families at an outbreak of viral conjunctivitis. Methods: In this prospective observational study, premature babies who were diagnosed with EKC and the family members (mother, father, or grandmother/father) who had EKC after contacting them were monitored closely. Patients were divided into two groups as preterm babies (group 1) and adults (group 2). For both groups, clinical findings (conjunctival hyperemia, conjunctival edema, palpebral edema, secretion, palpebral conjunctiva, membranes, and corneal involvement) and subepithelial corneal infiltrates (SEI) were investigated and recorded. Results: The present study investigated particularly the SEI occurrence after EKC, which was searched at each visit in second week, first month and 3rd month after EKC. Distribution of SEI in two groups was statistically significant at each visit (p<0.001). The difference in the signs and symptoms of EKC was statistically significant in two groups (p=0.006). Conclusion: None of the preterm cases were found to have SEI after EKC. On the other hand, the family members, who were considered to be infected with the same infective agent, were found to have large amount of SEI after EKC. Financial Disclosure: No