

Conjunctival Cytologic Features of Primary Sjögren's Syndrome

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Abstract: To determine whether there are specific cytologic features associated with primary Sjögren's syndrome (SS), the authors evaluated impression cytology specimens from three conjunctival sites (temporal bulbar [TB], inferior bulbar [IB], and inferior tarsal [IT]) from 38 SS eyes, 34 eyes of aqueous tear-deficient patients without SS, 35 eyes of seborrheic blepharitis patients, and 17 eyes of normal controls in a masked fashion. The following features were observed more frequently in SS eyes than in the eyes of the other groups: squamous metaplasia of the TB and IB ($P < 0,05$), extensive ($> 75\%$) goblet cell loss of the TB ($P < 0,05$), mucous aggregates of the bulbar conjunctiva ($P < 0,05$), and inflammatory cells intercalated with epithelial cells on the IT conjunctiva ($P < 0,06$). The conjunctival inflammatory cell infiltrate correlated with the presence of extensive squamous metaplasia ($P < 0,01$) in SS specimens. The inflammatory cells on the IT conjunctival epithelium

were found to consist predominantly of T-lymphocytes by immunofluorescent staining of cytologic specimens from six eyes. Based on these findings, the authors speculated that conjunctival squamous metaplasia, in addition to aqueous tear deficiency, may be due to primary involvement of the dysfunctional immune system of SS.

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Analysis of Aqueous Humor in Ocular Toxoplasmosis

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