

# **Human immunodeficiency virus-related microvasculopathy and Kaposi's sarcoma: a case-control study.**

Baumann, S; Geier, SA; Thoma-Gerber, E; Noehl, MA; Klauss, V; Goebel, FD

Date: 1995-07

## **Abstract:**

Ocular microangiopathic syndrome including retinal and conjunctival abnormalities is frequently found in patients with human immunodeficiency virus type 1 (HIV-1) disease. Kaposi's sarcoma (KS) is the most frequent neoplasia found in patients with HIV-1 disease. We have recently reported a significant association between conjunctival microvasculopathy and KS in 117 patients with HIV-1 disease. The objective of the present study was to determine whether this association is existent when matched patients with and without KS are compared. A total of 22 matched pairs were obtained under consideration of the absolute CD4+ lymphocyte count, Walter Reed (WR) classification, gender, and serum levels of beta-2-microglobulin and neopterin. Conjunctival microangiopathy was determined for each eye by a standardized rating scale ranging from 0 to 5, allowing a reliable and valid quantification of conjunctival blood-flow sludging. The mean value obtained for conjunctival sludge was 1.8 (SEM, 0.4) for patients without KS and 3.2 (SEM, 0.3) for patients with KS, demonstrating a clinically and statistically significant difference between the two groups (Student's  $t = 3.0$ ;  $P = 0.003$ ). This difference was higher when patients with a CD4+ lymphocyte count exceeding 200/microliters were regarded. Similar factors or mechanisms may contribute to HIV-related conjunctival microvasculopathy and KS.