OCULAR DISEASES AMONG HIV/AIDS PATIENTS IN JAKARTA, INDONESIA

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Abstract. We conducted a survey of ocular diseases among HIV/AIDS outpatients in Jakarta, Indonesia. This cross sectional study was conducted among 311 HIV/AIDS patients presenting to three referral hospitals in Jakarta, Indonesia from September 2008 to May 2009. All subjects underwent ophthalmological examination, including visual acuity, intraocular pressure, eye movement, Schirmer’s test and anterior and posterior segment evaluation. Most subjects (86%) were aged 20-40 years; and 77% were male. Intravenous drug use was the most common risk factor (48.9%) for HIV infection. At the time of enrollment, 85% of subjects were receiving anti-retroviral therapy (ART); the median CD4+ T cell count prior to ART was 56 (0-757) cells/µl. The most common ocular manifestations were dry eye syndrome (54%), followed by toxoplasma retinochoroiditis (8.4%) and cytomegalovirus (CMV) retinitis (5.8%). Risk factors associated with ocular diseases were late HIV clinical stage (OR= 4.35 for clinical stage 4 vs 1; p= 0.001), co-infection (OR= 2.67 for 2 co-infections vs no co-infection; p = 0.009) and low CD4+ T cell count prior to ART (<50 cells/µl vs ≥ 200 cells/µl; p = 0.003). The CD4+ count at the first visit (p=0.041) and clinical stage (p=0.049) were associated with dry eyes. This study shows dry eyes were the most prevalent ocular disease among HIV/AIDS patients in Jakarta. HIV clinical stage 3 or 4, co-infection with tuberculosis and hepatitis C infection and a CD4+ T cell count of <50 cells/µl were risk factors for ocular disease in HIV/AIDS patients.

Keywords: ocular manifestations, HIV/AIDS, dry eye, toxoplasma retinochoroiditis, CMV retinitis, Indonesia

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