Peran sel t regulator pada pasien hiv dengan tb aktif dan laten = The role of regulatory t cells in hiv patients with active and latent tuberculosis

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Abstrak

Telah dilakukan suatu penelitian eksperimental untuk menilai peran sel T regulator pada pasien dengan ko-infeksi HIV-TB. Terhadap 18 subyek HIV positif dilakukan penilaian IGRA, isolasi dan kultur PBMC dengan stimulasi antigen MTB, serta sorting dan deplesi Treg CD4 CD25highCD127low dengan metode FACS. Produksi sitokin IFN- dan IL-10 dinilai secara kuantitatif dengan multiplex Luminex 200. Diperoleh sebanyak 10 55,6 subyek TB negatif, 6 33,3 subyek TB laten, dan 2 11,1 subyekTB aktif. Persentase Treg dari CD4 pada subyek HIV dengan status TB menunjukkan kenaikan signifikan dibanding nilai referensi batas atas persentase Treg dalam CD4 subyek normal 11,006 2,840 ; p=0,008 . Rerata persentase Treg dari sel PBMC total antara kelompok TB aktif dan TB negatif menunjukkan perbedaan yang signifikan 1,3 vs 0,8 ; p=0,036 . Tidak terdapat perbedaan rasio sitokin proinflamasi INF- terhadap sitokin anti inflamasi IL-10 pada kelompok dengan ko infeksi HIV- TB aktif dan laten sebelum dan sesudah deplesi Treg. <hr />An experimental study has been conducted to assess the role of T regulatory cells in patients with HIV TB co infection. 18 HIV positive subjects undergo IGRA assessment, PBMC isolation and culture with ESAT 6 CFP 10 mycobacterial antigen stimulation, and Treg CD4 CD25highCD127low sorting and depletion by FACS method. The production of cytokines IFN and IL 10 were quantitatively assessed with Luminex 200 multiplex assay. Respectively, 10 55.6 were negative TB subjects, 6 33.3 were latent TB subjects, and 2 11.1 subjects were TB active. The percentage of Treg from CD4 cells in HIV subjects with TB status showed a significant increase over the reference value in normal subjects 11.006 2.840 p 0.008 . The mean percentage of Treg from total PBMC cells between active and negative TB groups showed a significant difference 1.3 vs. 0.8 p 0.036 . There was no difference in the ratio of proinflammatory cytokines INF to the anti inflammatory cytokine IL 10 in the group with active and latent HIV TB infection coinfection before and after Treg depletion.