Korelasi antara anti mutated citrullinated vimentin antibodies (Anti MCV) dengan destruksi sendi dan aktifitas penyakit pada pasien artritis reumatoid = Correlation between anti mutated citrullinated vimentin antibodies (Anti MCV) with joint destrution and disease activity of reumatoid artritis patiens

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Abstrak

Latar Belakang: Artritis Reumatoid (AR) merupakan penyakit inflamasi sendi autoimun yang multi-sistemik persisten, eksaserbatif dan progresif. Anti-mutated citrullinated vimentin antibodies (Anti MCV) adalah autoantibodi golongan anti citrullinated protein antibody (ACPA) yang memiliki sensitifitas sama namun lebih spesifik dibandingkan dengan anti cyclic citrullinated protein (Anti CCP). Anti MCV berkaitan erat dengan gen HLA DRB1*04 yang berperan penting dalam patogenesis AR. Studi korelasi anti MCV dengan destruksi sendi dan aktifitas penyakit masih kontroversial dan karakteristik pasien AR di Indonesia yang berbeda, menjadi alasan penting dilakukannya penelitian ini.
Tujuan: Mengetahui hubungan antara kadar anti MCV dengan destruksi sendi dan aktifitas penyakit pada pasien artritis reumatoid.
Metode: Penelitian ini merupakan studi potong lintang pada 37 pasien AR berdasarkan kriteria EULAR/ACR 2010 yang berobat di poliklinik Reumatologi RSCM periode September-Nopember 2014 dengan metode consecutive sampling. Anti MCV diukur dengan metode ELISA. Penilaian destruksi sendi menggunakan skor Sharp yang dimodifikasi Van der Heijde (SSvH) sedangkan aktifitas penyakit dinilai dengan disease activity score (DAS) 28 meliputi DAS 28-CRP dan DAS 28-LED. Korelasi anti MCV dengan destruksi sendi dan aktifitas penyakit dinilai dengan uji korelasi Spearman serta p untuk kemaknaan. Data penyerta lain adalah data demografis, jenis dan dosis terapi, status gizi, faktor reumatoid (FR), CRP, LED, dan darah tepi.
Hasil: Sebanyak 37 subjek diikutsertakan pada penelitian ini, dengan 34 (91,9%) adalah perempuan. Anti MCV positif ditemukan 26 subjek (70,3%), sedangkan FR positif ditemukan 21 (56.%). Median anti MCV didapatkan 26 IU/ml (minimal 10 IU/ml, maksimal 151 IU/ml) termasuk titer rendah. Median SSvH yaitu 31 (2-107), dengan nilai median erosi 5(0-49) dan joint space narrowing (JSN) 26 (0-64). Rerata nilai DAS 28-CRP 2,69 (SB 1,34) dan median DAS 28-LED 4,08 (2,10-5,97) yang masing-masing termasuk dalam kelompok aktivitas penyakit rendah dan sedang.Pada analisis bivariat didapatkan korelasi positif yang lemah antara anti MCV dengan SSvH sebesar r = 0,393 (p=0,016) dan korelasi positif yang lemah antara anti MCV dengan skor DAS 28-CRP (r=0,365, p=0,013) namun tidak ada korelasi antara anti MCV dengan skor DAS 28-LED.
Simpulan: Terdapat korelasi positif lemah yang bermakna antara titer anti MCV dengan destruksi sendi dan skor aktivitas penyakit DAS 28-CRP, korelasi antara titer anti MCV dengan skor DAS 28-LED tidak ada.
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Background: Rheumatoid Arthritis is a multi-systemic, persistent, exasperated and progressive auto immune joint inflamation disease. Anti-mutated citrullinated vimentin antibodies (Anti MCV) is an auto antibody in the category of anti citrullinated protein antibody (ACPA) that has same sensitivity but more specific

compared with anti cyclic citrullinated protein (anti CCP). Anti MCV is closely related to gen HLA DRB1*04 which has important role in pathogenesis of rheumatoid arthritis. Study on correlation between anti MCV and joint destruction and disease activity is still controversial and the different characteristics of AR patients in Indonesia become a strong reason for this study.
Objective: The aim of this study was to described the correlation between anti-mutated citrullinated vimentin (anti MCV) with joint destruction and disease activity of in rheumatoid arthritis patients.
Methods: This is a cross-sectional study on 37 RA patients based on criteria of EULAR/ACR 2010 who came to Rheumatology outpatient clinic Cipto Mangunkusumo Hospital, period of September ? November 2014 with the method of consecutive sampling. Anti MCV is measured with ELISA method, while joint destruction is scored with Sharp score modified with Van der Heijde (SSvH). disease activity score (DAS) 28 is used in disease activity covering DAS 28-CRP and DAS 28-LED. Correlation between anti MCV and joint destruction as well as disease activity is measured with Spearman correlation test with p for significance. Other supporting data include demography, type and dose of therapy, nutrition status, rheumathoid factor, CRP, LED, and peripheral blood.
Results: 37 subjects were taken into this study, with 34 (91,9%) are women. Positive anti MCV was found in 26 subjects (70,3%) while positive FR was found in 21 subjects (56%). Median of anti MCV was obtained 26 IU/ml (minimal 10 IU/ml, maximal 151 IU/ml)which is including in low titer. Median of SSvH was 31 (2 ?107) with erosion median score of 5 (0-49) and joint space narrowing (JSN) of 26 (0-64). Average score of DAS 28-CRP was 2,69 (SD1,34) and median score of DAS 28-LED was 4,08 (2,10-5,97), each of which is included in low and medium disease activity. In bivariate analysis it?s found that there is a weak significant positive correlation between anti MCV and SSvH of r = 0,393 (p=0,016) and between anti MCV and score of DAS 28-CRP (r= 0,365 , p=0,013) but there is no correlation between anti MCV and score of DAS 28-LED.
Conclusion: There is a weak significant positive correlation between anti MCV and joint destruction and level of disease activity score DAS 28-CRP. Apart from that, there is no correlation between anti MCV and DAS 28-LED.