

Killer cell immunoglobulin-like receptor gene's repertoire in rheumatoid arthritis

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摘要

Abstract

OBJECTIVE: To investigate the role of the killer cell immunoglobulin-like receptor (KIR) gene's repertoire in the pathogenesis of rheumatoid arthritis (RA) in Taiwan. **METHODS:** KIR genotypes were determined in 122 patients with RA and 96 healthy controls by the sequence-specific primer polymerase chain reaction (SSP-PCR) method. Human leucocyte antigen (HLA)-C genotyping was also performed simultaneously in 72 patients and 66 controls by the SSP-PCR method. **RESULTS:** The total carriage frequency of KIR 2DS4 regardless of corresponding HLA-Cw4 was significantly increased in RA patients compared with controls [$p < 0.001$, odds ratio (OR) = 1.9, 95% confidence interval (CI) = 1.1-3.4, $P_c < 0.01$]. The total carriage frequency of KIR 2DL1 regardless of corresponding HLA-C also tended to be increased in RA patients ($p < 0.02$, OR = 2.1, 95% CI = 1.2-3.9, P_c = not significant). The frequency of KIR 2DS4 with corresponding HLA-Cw4 was increased in RA patients in comparison with controls ($p = 0.02$, OR = 3.2, 95% CI = 1.1-9.4). Moreover, the association of RA with KIR 2DS4 depended on the presence of the corresponding HLA-Cw4. **CONCLUSIONS:** KIR 2DS4 may be a risk factor for susceptibility to RA in Taiwan.