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INTERLEUKIN-10 PROMOTER POLYMORPHISMS AND SYSTEMIC LUPUS ERYTHEMATOSUS IN SOUTHERN CHINESE

MOK CC, *LANCHBURY JS, CHAN DW, LAU CS. **Divison of Rheumatology, Department of Medicine, Queen Mary Hospital, Hong Kong. *Department of Immunogenetics, UMDS, Guys' Hospital, London, UK**

Objectives : To study the genetic association of interleukin (IL-10) promoter polymorphisms in Chinese systemic lupus erythematosus (SLE) patients and with clinical manifestations of disease.

Methods : DNA was extracted from 88 Chinese SLE patients and 83 ethnically matched controls. The IL-10 promoter region between positions –533 and –1120 was amplified by polymerase chain reaction (PCR) and polymorphisms were detected by restriction enzyme cleavage.

Results : No significant difference in the allele or haplotype frequencies between the SLE patients and the controls could be demonstrated. The *A and * C alleles at the -597 position were linked to *T and *C alleles at –824 position, respectively. However, when clinical features were examined, the *A allele at the –597 position and the *T allele at the –824 position were significantly associated with lupus nephritis using Chi-square analysis (p=0.001, O.R. 4.19, 95% C.I. 2.0-8.8). Similarly, the haplotype (-1087*A, -824*T, -597*A) was also associated with renal involvement (p=0.001, O.R. 4.19, 95% C.I. 2.0-8.8).

Conclusions : IL-10 promoter polymorphisms are not strong determinants of susceptibility to development of SLE *per se* in southern Chinese. However, IL-10 genotypes are strongly associated with certain clinical manifestations of SLE and may have a role in predicting disease prognosis.

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DETECTION OF ANTI-ENA ANTIBODIES (Ab) IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): ADVANTAGES OF SUPPLEMENTING COUNTERCURRENT IMMUNOELECTROPHORESIS (CIEP) WITH WESTERN BLOTTING (WB).

MY Mok*, YT Chan, J Lawton, O Go, CS Lau*. University Departments of Medicine* and Pathology, Queen Mary Hostpial, Hong Kong

This study aimed to compare CIEP and WB in the detection of anti-ENA Ab in SLE, and to assess the clinical value of Ab detected by WB. Sera from 80 patients with SLE and 30 patients with other connective tissue disorders were assayed by in-house CIEP and WB. Clinical features were studied and SLE disease activity was assessed using the SLEDAI.

The 2 methods showed good concordance rate. WB was more sensitive for anti-Sm, anti-SS-B, anti-Jo-1, anti-Scl-70 and anti-PCNA Ab detection; CIEP was more sensitive for anti-nRNP and anti-SS-A Ab detection. However, anti-52 kD SS-A peptide Ab only were better detected by WB. Overall, anti-ENA Ab detection rate was increased by 9-20% if both assays were used. Anti-Sm Ab was still the only specific marker for SLE using both methods. Anti-PCNA Ab were detected in 6.3% of SLE patients and were associated with active disease and haemolytic anaemia.

Anti-ENA Ab	CIEP	WB	Either Method	WB specificity
Anti-Sm	9.0%	23.7%	25.0%	100.0%
Anti-nRNP	30.4%	29.0%	41.0%	66.7%
Anti-SS-A	62.0%	45.5%	71.0%	73.3%
Anti-SS-B	12.7%	29.0%	33.0%	66.7%
Anti-Jo-1	0%	3.8%	3.8%	-
Anti-Scl-70	0%	2.6%	2.6%	-
Anti-PCNA	0%	6.3%	6.3%	93.3%