



Lack of association between Gly82Ser, 1704G/T and 2184A/G of RAGE gene polymorphisms and retinopathy susceptibility in Malaysian diabetic patients

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ABSTRACT. Diabetic retinopathy is the most common diabetic eye disease, occurring in about 60% of type 2 diabetic patients. Other than known clinical risk factors, the influence of genes has been suggested as part of the development of diabetic retinopathy. We investigated the association of Gly82Ser, 1704G/T and 2184A/G polymorphisms in the RAGE gene with retinopathy in type 2 diabetic patients in Malaysia. Ninety-eight unrelated retinopathy patients and 185 unrelated healthy controls from all over Malaysia were recruited in this study. The allele and genotype frequencies of the three gene polymorphisms were investigated using PCR-RFLP. The allele frequency of the three polymorphisms did not differ significantly between the control and the retinopathy group ($P > 0.05$). Analysis of the frequency of GA+AA, GT+TT and AG+GG in the retinopathy group did not reveal significant differences ($P > 0.05$) compared to

the control group. We conclude that RAGE gene Gly82Ser, 1704G/T and 2184A/G polymorphisms are not associated with retinopathy development in the Malaysian population.

Key words: RAGE; Gene polymorphism; Retinopathy