

Codon 54 in the fatty acid-binding protein-2 (A54T) polymorphism studies in type 2 diabetes mellitus in Saudi population

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Diabetes is a multi-factorial disease induced by genetic variations at multiple loci, environmental factors, and gene-environment interactions. The prevalence of this health problem is rapidly increasing throughout the world and particularly in the Kingdom of Saudi Arabia. A large number of genes have been implicated in type 2 diabetes mellitus (T2DM), but in population dependent manner. The FABP2 gene codes for a protein responsible for the absorption of long chain fatty acids. We investigated association of FABP2 A54T gene polymorphism with T2DM cases. Genotyping was carried out by real time-polymerase chain reaction using purified DNA. The study included 460 healthy controls and 438 T2DM cases. None of the allele or genotype of FABP2 A54T was associated with T2DM cases versus the controls (OR=1.219, 95%CI=0.988-1.502; p=0.06). Clinical data and anthropometric measurements of the patients were significantly different from those of the controls (p<0.05). We concluded that A54T polymorphism was not associated with T2DM in Saudi population.

Biography

Khalid K. Alharbi completed Ph.D. from University of Southampton, UK in 2004. He has 9 years of research experience in molecular biology. After his completion of master's in Medical Molecular Genetics he joined in Ph.D. and done various research projects simultaneously. He has published more than 20 publications in reputed ISI indexed journals. He has been working as associate Professor and principle investigator for three projects in the King Saud University and guiding students in their research oriented programs. His research team is working on glucose 6 phosphate dehydrogenase deficiency, type 2 diabetes mellitus, gestational diabetes mellitus, hypercholesterolemia and obesity.

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