

A Study of Angiotensin Converting Enzyme (ACE) Gene Polymorphism in Essential Hypertension among a Business Community in Punjab

Badaruddoza, A.J.S. Bhanwer, R. Sawhney, N.K. Randhawa, K. Matharoo and B. Barna

Department of Human Genetics, Guru Nanak Dev University, Amritsar 143 005, Punjab, India

KEYWORDS ACE Polymorphism. Hypertension. Bania Population. Punjab

ABSTRACT The present study was carried out to investigate the association of the angiotensin - converting enzyme deletion/insertion polymorphism with hypertension and its role in increasing the susceptibility to hypertension among Bania population in Punjab. The study blood samples consisted of 50 normal (28 males and 22 females) healthy individuals and 50 hypertensive, age and sex matched (28 males and 22 females) individuals. The genotype frequencies were found to be 0.22, 0.32 and 0.46 for II, DD, ID genotype in hypertensives. The same has been found for normotensives to be 0.26, 0.18 and 0.56 for II, DD and ID respectively. The observed overall genotype distributions were consistent with Hardy-Weinberg equilibrium. The present analysis suggested that the genetic variation at the ACE gene may be associated with some determinants for blood pressure.