

HLA STUDIES IN IDDM AND MRDM

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Heterogeneity is the hall mark of Diabetes Mellitus. The role of genetic factors in the causation of Diabetes Mellitus will be discussed, more with reference to IDDM and MRDM. It has been shown conclusively that a person with DR3 and DR4 is more prone to develop IDDM than either HLA-DR3 or DR4. It has not been proved whether the relevant susceptibility or resistance related factors are DR determinants themselves or other class II determinants in linkage disequilibrium with DR or Non-class II genes in this region. RFLP studies of MHC Class II genes have

shown that DQ genes, which are in linkage disequilibrium with DR are more strongly associated with IDDM than the DR genes. A recent work suggests that the amino acid Aspartic acid, at position 57 in the DQ beta molecule determines susceptibility or resistance to IDDM. Its presence confers resistance in a dominant manner and its absence in both DQ beta allele is necessary for the disease development in 90% caucasians. The role of genetic factors in MRDM which has not been studied will be discussed.