

Role of *PTPN22* 1858 C/T Polymorphisms in Juvenile Idiopathic Arthritis in Egyptian Patients

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Juvenile idiopathic arthritis (JIA) the most common chronic arthropathy of childhood is a diverse group of chronic arthritis diseases. The protein tyrosine phosphatase N22 (*PTPN22*) gene exhibits regulatory activities for both T and B cells. This study aimed to study *PTPN* gene polymorphism in JIA. The study included 60 children with JIA and 40 age and sex matched healthy children as controls. Patients and control groups were subjected to *PTPN* gene polymorphism analysis. Our findings indicated a significant difference in *PTPN22* polymorphism between JIA patients and the control group ($P = 0.021$). Different *PTPN* genotypes were studied in relation to patient's age, sex and relevant laboratory data. It was concluded that *PTPN22* polymorphism is different in JIA patients than healthy controls. T allele is associated only in cases with JIA and it may be considered as risk allele for certain JIA subtypes.