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Vitamin D Receptor Gene Polymorphisms in Indian Children with Idiopathic Nephrotic Syndrome

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ABSTRACT Idiopathic nephrotic syndrome (INS) is the most common glomerular disorder of childhood. In the present study we have investigated the prevalence of VDR gene polymorphisms in INS patients and healthy controls in North Indian population to assess the role of VDR genes in INS as these patients are at high risk to develop metabolic bone disease. Genotyping of four polymorphic sites (FokI, ApaI, TaqI and BsmI) in the Vitamin D receptor (VDR) gene of 108 unrelated nephrotic patients and 569 healthy controls were performed by PCR-based method. The genotype frequencies were compared among INS and controls. There was significant difference at three polymorphic sites except at TaqI. When the two high risk genotype ff of FokI and BB of BsmI of VDR were combined we found that the risk was increased to ~3.5 folds. Our results revealed the VDR gene polymorphism may have a significant role.