

Polymorphism of IL10RA (S159G) Associated with Late-Onset Ulcerative Colitis

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ABSTRACT Inflammatory bowel disease (IBD) is a group of disorders distinguished as Crohn's Disease (CD) and Ulcerative colitis (UC). The etiology is multi-factorial and numerous genes are involved in the pathogenesis of IBD; hence the genetic cause is only moderately understood. Interleukin-10, a candidate gene of UC is activated by binding of IL10RA and IL10RB. The objective of the study is to examine IL10RA polymorphism in two patients with late onset of UC with an increased risk for development of Colorectal Cancer (CRC). Case 1 is a 35-year old male presented with UC for past 6 months who underwent colonoscopy which showed inflammatory ulcers, inflammation and pseudopolyps. Case 2 is a 37-year old female undergoing UC treatment for past 6-7 years and the colonoscopy revealed pseudopolyps in colon and rectum. Genetic analysis was performed by PCR-RFLP which revealed polymorphism in IL10RA with an SNP S159G (A/G) in exon 4. When compared with previous reports, the present data deciphers that in Indian population IL10RA is a novel mutated gene in UC.