Nuclear pregnane X receptor single nucleotide polymorphism (-25385C/T) is not associated with inflammatory bowel disease in pediatric patients.

OBJECTIVE: Studies in adults characterized the role of the pregnane X receptor (PXR) in the pathophysiology of inflammatory bowel disease (IBD) with conflicting results; pediatric studies are still lacking. PATIENTS AND METHODS: Genotyping for the -25385C/T polymorphism of the PXR gene in 187 white children with IBD and 185 controls. Determination of colonic PXR expression in selected patients with IBD. RESULTS: Minor allele frequency was seen in 35.6% patients with IBD and 40.5% controls (P = 0.174), although no significant differences were seen between the genotypes (P = 0.366). PXR was underexpressed in colonic tissue of 7 out of 11 Crohn disease and in 4 out of 5 patients with ulcerative colitis. CONCLUSIONS: We could not confirm an association of the -25385C/T polymorphism in pediatric patients with IBD.