Published in final edited form as:

J Pediatr Gastroenterol Nutr. 2013 June ; 56(6): e50. doi:10.1097/MPG.0b013e318291fd7c.

Inflammatory Bowel Disease in Pediatric Patients with Cerebral Palsy

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To the Editor

Cerebral palsy (CP) has not been associated with inflammatory bowel disease (IBD). We have diagnosed IBD in 5 children with CP in the past 2 years. We reviewed our pediatric patients seen from 1996 to 2009 at Children's Hospital Colorado with CP and/or IBD and identified 13 with CP and newly diagnosed IBD (6 Crohn's disease, 5 Ulcerative colitis, and 2 indeterminate colitis), providing an estimate of 1.8% (95% CI 0.97–3.08%) for frequency of CP in IBD and an estimated cumulative incidence of 193 (95% CI: 103–330) IBD cases per 100,000 patients with CP.

IBD patients with CP frequently presented with high WBC counts, often received infliximab or tacrolimus in the first month following diagnosis, and commonly developed perianal fistula during follow-up. Therefore, we suggest that CP is possibly associated with an aggressive form of IBD. We estimate a prevalence of CP in our IBD patients (1.8%) that is higher than reported in the general population (0.36%)¹. The estimated cumulative incidence of IBD in our cross-sectional study of pediatric CP patients was 193 per 100,000. While we cannot explain this relationship, potential mechanisms include 1) causes of, or treatments for CP, including special formula diets, that may impact the GI microbiota or function², 2) an undefined nutritional deficiency³, and 3) an altered intestinal environment in some children with CP that predisposes to immune dysregulation⁴. The possible association between IBD and CP requires further evaluation in population-based studies.

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