Colonoscopic Finding in Children with Lower Gastrointestinal Complaints

Gholam Reza Khatami1, Seyed Mohamad Mahdi Mir-Nasserī2, Bahar Allah-Verdi3, Fariba Seyghali3

1 Professor, Pediatric Unit of Digestive Disease Research Center, Children's Medical Center Hospital, Tehran University of Medical Sciences, Tehran, Iran
2 Research Fellow, Pediatric Unit of Digestive Disease Research Center, Children's Medical Center Hospital, Tehran University of Medical Sciences, Tehran, Iran
3 Assistant Professor, Pediatric Unit of Digestive Disease Research Center, Children's Medical Center Hospital, Tehran University of Medical Sciences, Tehran, Iran

ABSTRACT

Background
Colonoscopy is used for both diagnostic as well as therapeutic purposes in patients with lower GI symptoms. The aim of this study was to assess the clinical manifestations and to determine the colonoscopic findings of children with lower GI symptoms attending a pediatric hospital in Tehran.

Materials and Methods
During a 5-year period (1996-2001), all children less than 16 years of age, who had undergone colonoscopy in the Gastroenterology Department of the Children's Hospital Medical Center in Tehran (Iran), were studied in respect to presenting symptoms, colonoscopic and pathologic findings, and the size, number and site of polyps if they were present.

Results
Among the 694 children (431 boys, 263 girls) less than 16 years of age who entered this study, 49.4%, who underwent colonoscopy, were aged between 1 and 5 years. Hematochezia, rectal prolapse, diarrhea, constipation, abdominal pain, fever, growth retardation, Clubbing, history of ulcerative colitis and polyps were present in 93.2%, 5.9%, 2.7%, 0.6%, 3.7%, 2.6%, 1.4%, 0.6%, 1.4%, 0.7% of the patients, respectively. Polyps, nodular lymphoid hyperplasia (NLH), granularity ulceration (suggestive for ulcerative colitis), suggestive for crohn's disease, mucosal edema, fragility, ulcer, solitary rectal ulcer, cobblestone appearance, vascular disorders, fissure, fistula and anal tags were present in 34.6%, 16.7%, 15.1%, 0.9%, 1.9%, 0.6%, 2.4%, 3.7%, 0.4%, 0.6%, 3%, 0.6% of the patients, respectively; 23.1% of the children had normal colonoscopic findings.

Among the 240 cases found to have polyps on colonoscopy, 209, 18, 7, 4, 2 cases were reported as juvenile polyps, hamartoma, hyperplastic, lymphoid and necrotic in type, respectively. Of the 232 patients with polyps, 197 had a solitary polyp, 22 had 2 to 4 polyps, and 13 had more than 5 polyps. In respect to site, polyps were more frequent in the rectum, rectosigmoid region, left colon, diffuse, and right colon in decreasing order of occurrence.

Conclusions
Colonoscopy is performed more frequently in children with hematochezia and rectal prolapse. Polyps, NLH and ulcerative colitis were the most frequent findings in the colonoscopies performed.

Keywords: Children, Colonoscopy, Lower GI Complaint

Corresponding author: Children Hospital Medical Center, Dr Gharib Ave., Keshavarz Blvd., Tehran, Iran.
Telefax: +98 21 66924545
E-mail: mirna@ams.ac.ir

BACKGROUND

GI disorders frequently occur in children and they present with different clinical manifestations.