Pediatric Inflammatory Bowel Disease in South India

Among 34 children diagnosed to have inflammatory bowel disease (IBD) over past 8 years, 23 had Crohn's disease and 11 had ulcerative colitis. Pediatric patients accounted for 7% of new cases of IBD seen annually. Median delay in diagnosis was 15 months. Nutritional impairment was significantly more common in Crohn's disease.

Key words: *Children, Crohn's disease, Inflammatory bowel disease, Mal nutrition, Ulcerative Colitis*.

All children upto 15 years of age with inflammatory bowel disease (IBD) seen at CMC Vellore between January 2000 to March 2008 (8 years) were retrospectively evaluated. All underwent ileocolonoscopy and upper GI endoscopy with multiple segmental biopsies. Diagnosis of ulcerative (UC) colitis was based on the presence of diarrhea or rectal bleeding for more than 6 weeks and colonoscopic biopsy showing features suggestive of ulcerative colitis(1). Diagnosis of Crohn's disease(CD) was established by clinical evaluation, a combination of endoscopic, histological, radiological, and/or biochemical investigations and response to therapy(2). The study was approved by institute ethics committee.

A total of 34 patients with IBD (23 CD and 11 UC) were identified. The proportion of IBD was 0.03% per year (33 per 100,000) of all new pediatric patients attending the hospital. Pediatric patients accounted for approximately 7% of all new cases of IBD seen annually. ***Table* I** describes and compares the clinical and demographic profile of these patients. Eight (34.8%) patients with crohn's disease had ileocolonic granulomas and four of these also had gastric granulomas. Imaging showed small bowel involvement in 14 patients with crohn's disease. Extraintestinal manifestations included joint pain (n=4), and oral ulcers (n=1) in crohn's disease; and arthralgia (n=1) in ulcerative colitis. Nutritional impairment was present in 52.2% of CD patients (weight <3rd percentile = 39.1%, height and weight below 3rd percentile = 13.1%) and 9.1% UC patient (height <3rd percentile). All IBD patients were treated with 5ASA. In addition to ASA, 7 (34.7%) CD patients were treated with steroids (budesonide 4, prednisolone 3) and another 7 (30.4%) steroid dependent/resistant patients with azathioprine/methotrexate. Three patients with UC required steroids along with ASA. Four CD patients (17.3%) had surgery at diagnosis or during follow up (3 for perianal fistula and 1 for ileal perforation). One UC patient aged 13 years underwent total proctocolectomy.

Population based studies from the West show the incidence of pediatric IBD to be 7 per 100,000 per year(3). In a study on 739 pediatric IBD patients in UK, the median delay from onset of symptoms to diagnosis was 5 months with delays being more common in CD(4). Delay in diagnosis (15 months) in our series suggests lack of awareness and/or poor availability of diagnostic facilities.

Pediatric IBD is a challenging clinical entity requiring early diagnosis and therapy to avoid nutritional impairment and growth retardation.

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TABLE I CLINICAL AND LABORATORY PROFILE OF CHILDREN WITH INFLAMMATORY BOWEL DISEASE

	Crohn's disease (n = 23)	Ulcerative colitis (n = 11)	P
Sex (males)	15 (65.2%)	6 (54.5%)	0.7
Age (mean ± SD)	11.9 ± 2.8 yrs.	9.5 ± 3.4 yrs.	0.04
Duration of symptoms (median, range)	15(1- 60) mo	15 (6-48) mo	0.5
Abdominal pain	15 (65.2%)	5 (44.5%)	0.5
Diarrhea	21 (91.3%)	11 (100%)	1
Blood in stool	13 (56.5%)	9 (81.8 %)	0.3
Anorexia	9 (39.1%)	2 (18.2%)	0.3
Nutritional impairment#	12 (52.2%)	1 (9.1%)	0.02
Extraintestinal manifestations	5 (21.7%)	1 (9.1%)	0.6
Location (%)	13/8/2 (56.5/34.8/8.7) (IC†/C‡/I§)	2/9 (18.2/81.8) (proctitis / pancolitis)	
Hemoglobin (g%)	10.3 ± 1.8	10.5 ± 1.6	0.7
Albumin (g%)	3.2 ± 0.7	3.6 ± 1.0	0.2
ESR (mm/h)	59 ± 34	46 ± 33	0.3
Severity (mild/moderate/severe)¶	8.7/69.6/21.72/16/5	18.2/54.5/27.32/6/3	
Follow up (median, range)	24 mo (0-10 y)	2 mo (0 to 6 y)	

*†IC – Ileocolonic, ‡C – Colonic, §I – Ileal; ¶ CD- Harvey Bradshaw score, UC – Sutherland disease activity index; # <3rd IAP centile for height and/or weight for age; **Fischer's exact test for categorical variables , Mann-Whitney U test for continuous variables, Two tailed P value of ≤ 0.05 was considered significant.*

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Clinico-Serological Profile of Juvenile Idiopathic Arthritis

We report clinico-serological profile of 210 children with Juvenile idiopathic arthritis (JIA), diagnosed as per ILAR classification criteria. Polyarticular, oligoarticular, and systemic onset disease was observed in 72, 69, and 40 children, respectively. The knee joint was the most frequently involved joint. Antinuclear factor and Rheumatoid factor were positive in 10 and 8, 6 and 20, and 7 and 7 percent children with polyarticular, oligoarticular, and systemic disease, respectively.

Key Words: *India, Juvenile Idiopathic Arthritis; Rheumatoid factor.*

We prospectively analyzed the clinical and serological profile of 210 consecutive patients of juvenile idiopathic arthritis (JIA) attending the Pediatric Rheumatology specialty clinic of our hospital between November 2003 to September 2008. Diagnosis was based on the International League of Associations for Rheumatology (ILAR) criteria(1). These children were followed up for an average of 2 years.