Extraintestinal Manifestations of Idiopathic Ulcerative Colitis

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Abstract
One hundred and fifty patients of idiopathic ulcerative colitis were studied for extraintestinal manifestations by clinical, radiological and biochemical means. One or more such manifestations occurred in 34:7% of patients. Sacro-iliitis (14%); peripheral arthritis (10:7%); were the commonest manifestations, followed by ocular (8%), mucocutaneous (2:7%), vascular (2%) and hepatobiliary (1%) manifestations. We conclude that the incidence and spectrum of extraintestinal manifestations in Indian patients with idiopathic ulcerative colitis are similar to those in western patients.

Key words: Inflammatory bowel disease.

Introduction
Extraintestinal manifestations of idiopathic ulcerative colitis (IUC), though well documented in the developed world, have been reported to occur less frequently in Indian patients. The present study reports on the occurrence and nature of extraintestinal manifestations in patients with IUC in North India.

Material and Methods
In a one-point, prospective study, 150 consecutive patients with IUC attending the Gastroenterology Clinic at our hospital between 1985 and 1987 were studied. A detailed clinical history was followed by a thorough clinical examination for evidence of extraintestinal involvement. The diagnosis of IUC was based on sigmoidoscopy and histology. Microscopic examination of rectal swab for Ent. melaena histolytica and stool culture for Shigella and Salmonella species were negative in all patients. The extent of disease was assessed by double contrast barium enema and or colonoscopy and classified into (1) procto-sigmoiditis (involvement of rectum and sigmoid colon), (2) left sided colitis (involvement up to and including the descending colon), and (3) pancolitis (involvement proximal to the splenic flexure) with or without backwash ileitis.

Besides routine tests, serum bilirubin, transaminases and alkaline phosphatase were measured and X-rays of the sacro-iliac joints and spine were taken in all patients. Sacro-iliac joint changes were graded using the New York criteria as O—normal; 1—suspicious changes; 2—indistinct edges, slight sclerosis, joint space narrowing and minimal erosions; 3—definite sclerosis of both sides of joint, indistinct margins, erosive changes and loss of joint space; 4—complete ankylosis with some sclerosis. Liver biopsy and ERCP were done in patients with alkaline phosphatase levels raised more than two times normal or history of jaundice in the recent past. Platelet count, prothrombin time and one stage partial thromboplastin time with kaolin were studied in patients with clinical evidence of deep vein thrombosis. Skin biopsy was performed in patients with pyoderma gangrenosum and erythema nodosum.

Active disease was treated with oral and/or rectal steroids and oral sulfasalazine. The relationship between clinical course and extraintestinal manifestations was also recorded.

Results
The 150 patients (79 males, 71 females) were aged 13 to 78 years, with 38:5% being in the age group 21 to 40 years. One hundred and thirty seven (91-3%) patients had a chronic, intermittent course of disease. Acute fulminant course was seen in four and chronic continuous in nine patients. The extent of involvement was determined in 128 patients. Procto-sigmoiditis was present in 43 (33:6%), left sided colitis in 59 (46:1%) and pancolitis in 26 (20:3%) patients. The duration of disease varied from 1 month to 30 years.

Extraintestinal manifestations were seen in 52 (34-7%) patients, five (3-3%) having more than one such manifestation.

Peripheral arthritis was seen in 16 (10-7%) patients. The commonest joint involved was the ankle joint, followed by the knee, elbow and wrist. There was no sex predilection for peripheral joint involvement.

Sacro-iliitis was seen in 21 (14%) patients who had symptomatic and or radiological evidence of the same. Twelve (8%) patients had backache and radiological evidence of sacro-iliitis — nine of them with bilateral grade II radiological changes and one each with grades I, III and IV changes. Nine patients (6%) were clinically asymptomatic but had radiological evidence of unilateral grade I sacro-iliitis. In no patient did the symptoms of sacro-iliitis precede the colonic symptoms. There was no relationship between the severity of sacro-iliitis and the extent of colonic involvement. More male (15) than female (6) patients reported arthritic symptoms.

Ocular complications were seen in 12 (8%) patients as follows: bilateral tridaculitis (5 patients), conjunctivitis (4) and episcleritis (3). Tridaculitis was more frequent in female patients (4 of 5) and in all patients occurred during exacerbations of colitis. Episcleritis was seen in male patients only.
Hepatobiliary complications: Primary sclerosing cholangitis was diagnosed in two (1.3%) patients on ERCP and liver biopsy. Both the patients had history of recurrent episodes of jaundice and elevated serum alkaline phosphatase levels.

Deep vein thrombosis occurred in three (2%) female patients admitted with exacerbation of the disease and subsided without anticoagulants. All had normal coagulation parameters.

Miscellaneous manifestations occurred in four (2.7%) patients. Two patients had pyoderma gangrenosum and two had oral aphthous ulcers. Pyoderma gangrenosum occurred during exacerbation of bowel disease in both patients.

The incidence of extraintestinal manifestations did not correlate with the extent of colitis. Twelve (27.9%) of the 43 patients with proctosigmoiditis, 22 (58.8%) of the 39 patients with left-sided colitis, and 9 (34.6%) of the 26 patients with pancolitis had extraintestinal manifestations.

Coccygodynia (2), psoriasis (1), tropical pyemoyectasis (1) and hypothyroidism (1) were also seen and considered to be coincidental.

Discussion

Our study shows that extraintestinal manifestations occurred in one third of the patients with IUC and sacro-iliitis was the commonest of these manifestations. A number of studies have documented the occurrence and clinical pattern of IUC in India. Only a few workers have addressed the question of extraintestinal manifestations in patients with IUC and it is thought that these manifestations are less common in Indian patients. Tandon et al. and Gadekar et al. did not find any patient with extraintestinal manifestations of IUC in their studies. Other workers have reported an incidence of 4-3% to 15%. On the other hand, reports from western countries have found an incidence of 25% to 36%. Our results suggest that extraintestinal manifestations are as common in Indian patients with IUC as their western counterparts. The previously reported lower incidence from our country can perhaps be attributed to a lower index of suspicion and lack of complete investigative work up.

Radiological evidence of sacro-iliitis was found in 21 (14%) of our patients, which compares well with an incidence of 4% - 18% reported from the West. Twelve of 21 patients had symptoms pertaining to sacro-iliitis while others had asymptomatic disease detected radiologically. The next common manifestation in our patients was peripheral arthritis in 10-7% of patients. Its incidence was also midway between the reported incidences from the developed world. We did not encounter a single case of spondylitis associated with sacro-iliitis which is found in up to 6% of cases of IUC in the West.

We encountered ocular complications, i.e. conjunctivitis, episcleritis and anterior uveitis in 8% of our patients — an incidence comparable with the 4% - 7.5% reported from the West. Not reported by Chuttani et al. and Vakil et al., ocular complications occurred in 2-5% of patients reported by Kapur et al.

Primary sclerosing cholangitis was seen in 1-3% of our patients. This complication has been only rarely reported from India and its exact incidence remains unknown. The incidence in our patients is similar to that reported in the West. We did not find evidence of fatty liver, pericholangitis or chronic hepatitis in our patients presumably because liver biopsies were not done routinely.

The occurrence of deep venous thrombosis in 2% of our patients concurs with the 1-3% incidence reported by Talbot et al. though Edward and Trueove reported an incidence of 6-4%. This complication has not been reported in any Indian series earlier.

We conclude that in North Indian patients with IUC, extraintestinal manifestations are as common as in the West and are also similar in spectrum.

References


Received September 14, 1990 Accepted April 24, 1991

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