ULCERATIVE COLITIS-A RETROSPEC-TIVE STUDY

Pages with reference to book, From 141 To 145

Tariq A. Mian, Sarwar J. Zuberi (PMRC Research Centre, Jinnah Postgraduate Medical Centre, Karachi.)

Abstract

Forty-seven patients with chronic ulcerative colitis were studied over a period of ten years. There were 27 males and 20 females. Maximum frequency of disease was found between the ages of 21-30 years. The main presenting symptoms were rectal bleeding and diarrhoea with or without mucus. On examination most of the patients had abdominal tenderness and anaemia. Extracolonic manifestations like joint pains, gingivitis and dermatological disorders were infrequent.

Stool examinations were negative for Entamoeba Histolytica. Diagnosis in 44 cases was confirmed on sigmoidoscopy and radiological changes suggestive of ulcerative colitis were observed in 68 per cent. The patients were treated with salazo-pyrine and/or oral and rectal steroids according to the severity of the disease.

Forty-two patients were followed up from 1-552 weeks (Mean 66.0 weeks). Relapses occurred in 21(50%) patients. Three patients underwent surgery including one who developed adenocarcinoma of sigmoid colon (JPMA 30:142, 1980).

Introduction

Ulcerative colitis still remains a disease of obscure etiology although several factors have been claimed to be responsible. The disease manifests itself at any age, though the frequency is high in young adults, affecting both sexes equally. Compared to the West, the disease appears to be relatively uncommon in this country. In this study an attempt has been made to determine the clinical course and response to therapy in patients with ulcerative colitis referred to this department during the last 10 years.

Material and Methods

Forty-seven patients of ulcerative colitis were seen between November, 1969-September, 1979. They were referred by general practitioners and from the surgical and medical wards of Jinnah Postgraduate Medical Centre.

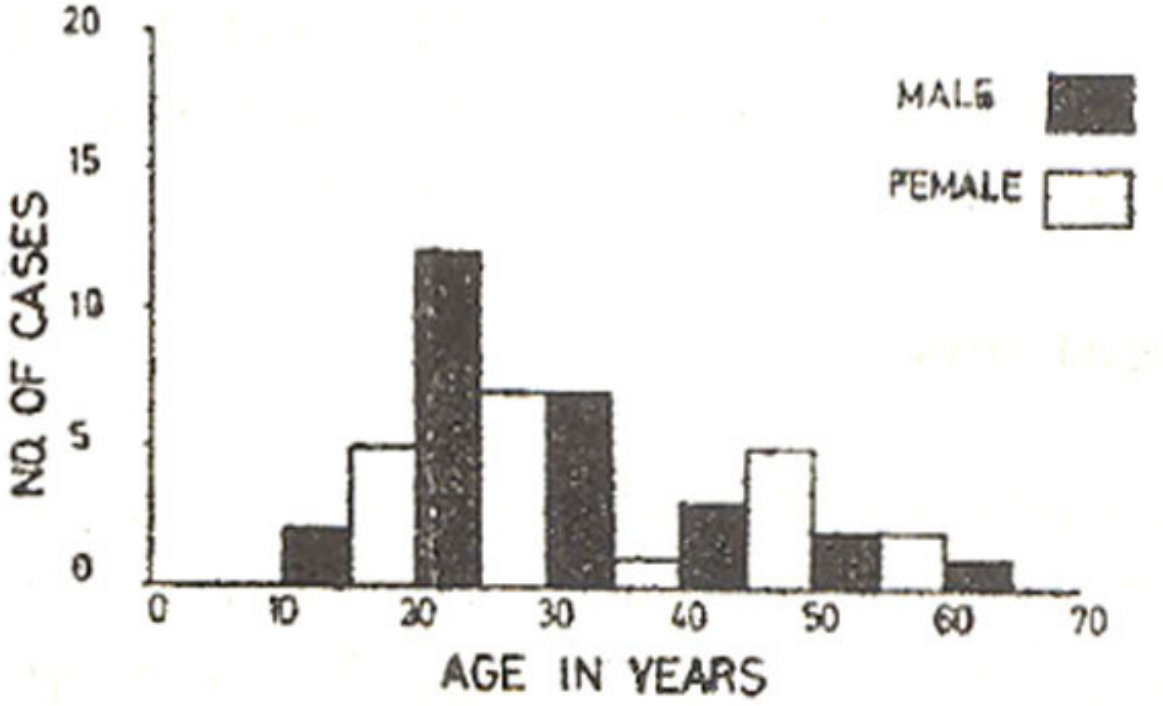
Investigations included haemoglobin, total leucocyte count, scrum proteins, stool examination, sigmoidoscopy and Barium Enema. Rectal biopsy was done only in 3 patients. The patients were seen at weekly intervals in acute stage and checked for haemoglobin, weight and sigmoidoscopic changes.

Results

Age and Sex: There were 27(57.4%) males and 20(42.6%) females. Age ranged from 13-64 years (Mean±SE 33.1 ±1.86). Maximum fre-quencv was observed between the ages of 21-30 (40.42%) years. The age distribution is shown in Fig. 1.

FIG. 1

AGE AND SEX DISTRIBUTION IN FORTY-SEVEN CASES OF ULCERATIVE COLITIS



Of forty-three patients 11(25.6%) were house wives, 12(27.9%) manual workers, 9 (20.9%) teachers and students, 7(16.3%) professionals and Government employees and 4 (9.3%) were unemployed.

Clinical Features: The presenting symptoms are shown in Fig. 2 and signs are shown in Table I.

FIG II

SYMPTOMS IN ULCERATIVE COLITIS

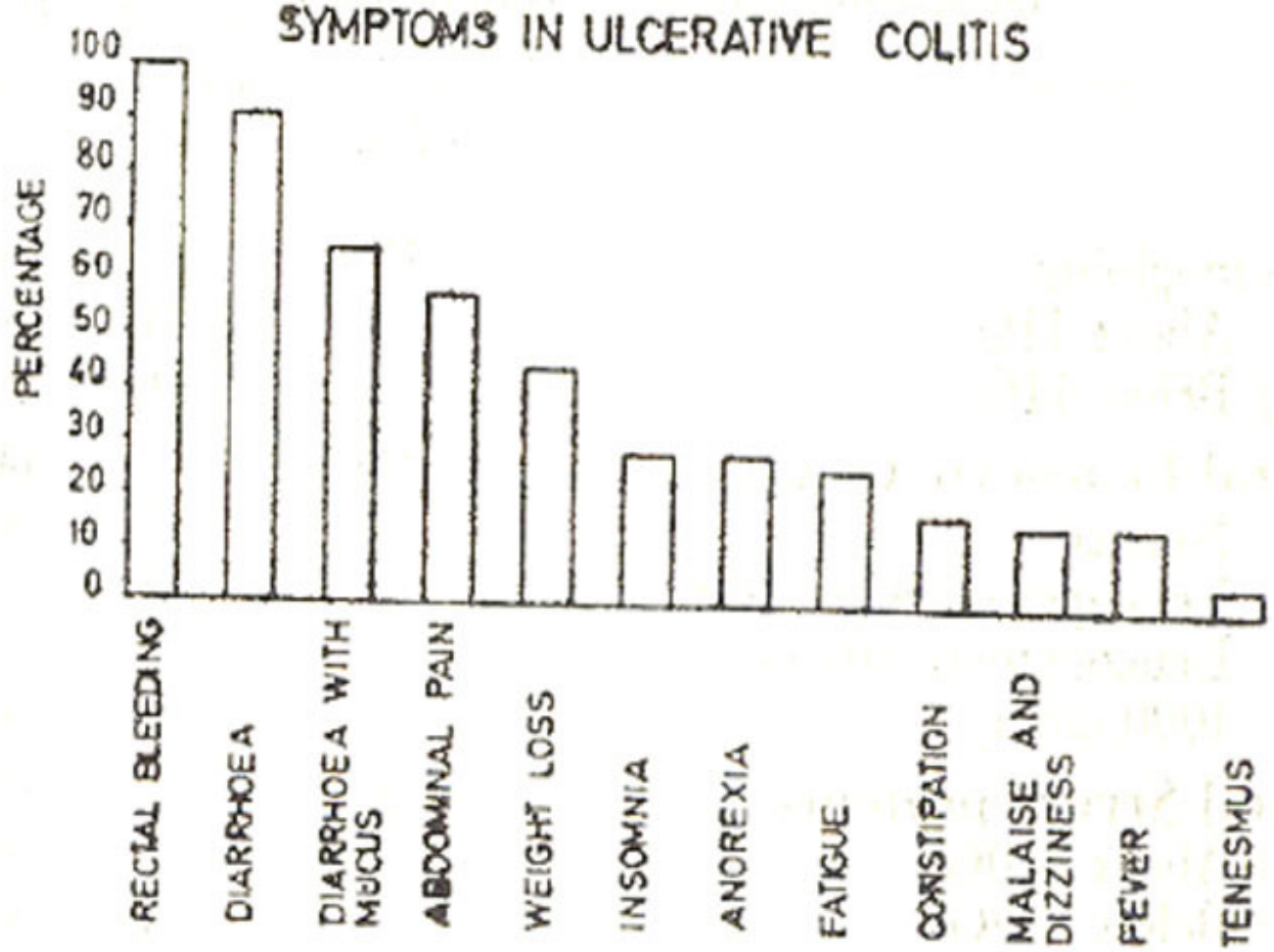


Table I: Physical Findings

Signs	*No. of patients*	*Percentage*
Abdominal tenderness	(21)	(44.68)
(*i*) Left Iliac Fossa	6	12.8
(*ii*) Right Iliac Fossa	4	8.5
(*iii*) Lower half of abdomen	7	14.9
(*iv*) Other sites	4	8.5
Palpable Viscera	(8)	(17.2)
(*i*) Caecum	2	4.3
(*ii*) Sigmoid colon	2	4.3
(*iii*) Hepatomegaly	3	6.4
(*iv*) Hepatosplenomegaly	1	2.1
Systemic Manifestations	(15)	(31.9)
(*i*) Involvement of Joints	7	14.9
(*ii*) Involvement of gums	1	2.1
(*iii*) Involvement of skin	7	14.9

Main symptoms were rectal bleeding and diarrhoea with or without mucus. Duration of symptoms varied from 3 months to 25 years. There was no family history of ulcerative colitis.

Allergy to various edibles was found in 6(12.8%) patients. In 3(6.4%) to milk and 1(2.1%) each to cucumber and cantaloupe, meat and mangoes.

Other symptoms included stomatitis (2), aphthous ulcers (1), pain in the limbs and back (8), flushing (1), cyanosis (1), worm infestation (2), vomiting (4) nausea (2), epistaxis (1), precordial pain (1) and pruritus (1).

On examination abdominal tenderness was present in 21(44.7%) patients and extra-colonic manifestations in 15(31.9%). One (2.13%) patient had slight gingivitis. Joint manifestations included ankylosing spondylitis in 1(2.13%),spina bifida with liping of L 3-4 in 1(2.13%) and arthritic changes in other joints in 5(10.6%). patients. No case of colitic arthritis was seen. Skin lesions included psoriasis (J), purpuric rash (1) recurrent boils on face (I) and facial erythema (1). No cases of erythema

nodosum on pyoderma gangrenosum were seen.

Investigations

Hacmatological findings and scrum protein levels are shown in Table II.

Table II: Haematological and Biochemical Findings

Investigations	*Total No. of patients*	*No. of patients*	*Percent-age*
Haemoglobin	(37)	—	(78.7)
(*i*) Above 11G%	—	21	56.8
(*ii*) Below 11G%	—	16	43.2
Total Leucocyte Count	(21)	—	(44.7)
(*i*) Normal	—	17	81.0
(*ii*) Leucopenia (below 4000/cmm)	—	1	4.7
(*iii*) Leucocytosis (above 1000/cmm)	—	3	14.3
Total Serum proteins	(8)	—	(17.0)
(*i*) Above 6.0G%		7	87.5
(*ii*) Below 6.9G%		1	12.5

Fifty-seven per cent of patients had anaemia, 5% leucopenia, 14% leucocytosis and 12.5% low serum proteins.

No abnormalities were found in differential leucocyte count. Stool examination was performed in 28(59.6%) patients on first visit. It revealed RBC and pus cells in 19(67.9%); R.B.C., pus cells and macrophages in 6(21.4%), worm infestation in 2(7.14%) and no abnormal findings in 1 patient. Concomitant worm infestation was seen in 5 patients; Giardia (2), E. Histolytica (2) and Ascaris (1).

Sigmoidoscopy was performed in 44 patients. Two patients did not return and one was reluctant to have sigmoidoscopy. All had varying degrees of congestion, oedema, granularity, friability and superficial erosions or ulcerations of rectal and colonic mucosa.

Radiological findings are shown in Table III.

Table III: Radiological Findings of Barium Enema

Findings	*No. of patients*	*Percentage*
Diffuse ulcerative colitis involving entire colon	13	40.6
C.U.C. involving sigmoid colon and rectum	9	28.1
Disease limited to rectum	3	9.4
Pseudopolyposis	3	9.4
Normal	3	9.4
Inconclusive	1	3.1
Total	32	

Rectal biopsy was done in 3(6.38%) patients. Reports were mild colitis in 1, chronic infection with lymphoid hyperplasia in 1 and the changes suggestive of chronic ulcerative colitis in 1 patient.
Treatment: The therapeutic regime employed is shown in Table IV.

Table IV: Medical Treatment

Treatment	No. of patients	Percentage
Salazopyrine alone	10	22.2
Oral steroids alone	2	4.4
Steroids and salazopyrine	33	73.3
(*i*) Oral steroids + Salazopyrine	(22)	(66.6)
(*ii*) Oral steroids + Rectal Steroids + Salazopyrine	(11)	(33.3)

Therapy included Tab. Salazopyrine (500 mg) initially in doses of 4G daily in divided doses and reducing it to a maintenance dose according to the response. Two patients showing sensitivity to salazopyrine, e.g., rash, fever and puffiness of the face were treated with steroids alone. In severe cases prednisolone 40 mg daily in divided doses, was given alongwith salazopyrine. In acute exacerbations rectal steroids as hydrocortisone enemata or suppositories were also given. Ten patients were given 40 units of In). ACTH 1/M at the completion of steroid therapy. One patient was given Tab. Immuran 50 mg daily.

Follow up and Relapses: Forty-two patients were followed up from 1 week-552 weeks (Mean±SE 66±1.86) weeks. Recurrences were seen in 21(50%) patients. Eleven (26.2%) patients had recurrence of symptoms only once. They were having salazopyrine (3), salazopyrine and steroids (5) and oral and rectal steroids with salazopyrine (2). Eight (19.0%) patients had relapses twice. Five of them were being treated with salazopyrine and oral steroids and 3 were also given rectal steroids. One patient who was on salazopyrine alone had relapse of symptoms thrice and another who was being treated with salazopyrine and oral and rectal steroids had relapses four times.

Three patients underwent surgery. Ileorectal anastomosis was performed in one and total colectomy with ileostomy in other. Both were operated abroad and are in good health. One patient developed adenocarcinoma of sigmoid colon with secondaries in the liver during the course of illness. A proximal colostomy was done and patient expired three and a half months after operation.

Discussion

Ulcerative culitis appears to be an infrequent and a milder disease in tropics when compared to the western population. The presentation of the cases was similar to that seen in the West but no case of acute fulminating ulcerative colitis was seen. In this series slight male preponderance of 1:1.3 was observed, whereas in the series reported by Bonnevie et al (1968) there were 6.7 males and 7.6 females

per 100,000. Monk et al (1967) also found a female preponderance i.e., 3.9 males and 5.2 females per 100,000. Monk and co-workers (1967) have also reported a higher prevalence rate for ulcerative colitis amongst whites than non-whites. There were 193 whites and 16 non-whites in this series, a fact that might be of interest regarding its infrequency in this part of the world.

In the present series maximum frequency of the disease was observed between the ages of 21-30 years which is one to two decades earlier than that described by Monk et al (1967). No family history of ulcerative colitis or any allergic diathesis was obtained in this study whereas Binder et al (1966) and Hammer et al (1968) have described increased incidence of ulcerative colitis and other allergic disorders in the relatives of the patients with ulcerative colitis as compared to the control group.

Allergy to milk is considered to be a possible etiological or aggravating factor by several investigators. Wright et al (1965) found that patients on a milk-free diet get signilicantly fewer relapses than those on a dummy diet. Allergy to milk was found only in 6.4% of the patients in the present series.

Hepatomegaly and hepatosplenomegaly were found) on physical examination in 6.4% and 2.1% of the patients respectively but other stigmata of chronic liver disease were not seen. Rankin et al (1966) have reported 3 cases of bile duct carcinoma in a study of 441 patients. Twelve of 42 patients with primary sclerosing eholangitis had associated ulcerative colitis (Warren et al., 1966). Dordal et al (1967) have reported pericholangitis or portal triaditis as the most common histological lesion and "Bridging portal hepatofibrosis" as the most common form of cirrhosis in patients with hepatic complications of ulcerative colitis although postnecrotic cirrlhosis have also been seen.

Other extra-colonic manifestations were also found to be quite rare. No case with occular complications of the disease was found, neither any patient had erythema nodosum or pyoderma gangrenosum. On the contrary, Golighar et al (1968), Sams and Winkclman (1968) and Johnson and Wilson (1969) have reported erythema nodosum in approximately 1-2% of the patients with ulcerative colitis. Uveitis was reported by Wright et al (1965) 11.8%. Only I (2.1%) had ankylosing spondylitis and 5(10.6%) patients had arthritic changes in the peripheral joints in the present study whereas Wright and Wattkinson (1966) found ankylosing spondylitis in 15(5.6%), peripheral arthritis in 31(11.5%) and sacroiliac abnormalities in 18% of their patients. Incidence of acroiliac abnormalities were reported by Wright et al (1965) in 17.4%. Rarity of these systemic complications in the present study reflects that the disease is relatively mild in the tropics.

In this scries, local complications of the disease like, acute dilatation of the colon, colonic perforation or massive haemorrhage were not seen. Frequency of pseudopolyposis as revealed by radiography was only 9.4% in this study whereas a higher frequency has been reported by deDombaf et al (1966) and Jalan et al (1969) i.e., 12.5% and 19% respectively. Only 1(2.1%) young patient developed adenocarcinoma of the sigmoid colon one and a half years after the onset of the symptoms. Several reports describe increased risk of malignant change in colon in patients with ulcerative colitis particularly if entire colon is involved, if the disease persisted for more than ten years or if the disease commenced in early childhood (deDombal et al., 1966; Morson, 1966; Hinton, 1966). Incidence of malignancy is negligible in patients with ulcerative proctitis (Sparberg et al., 1966; Farmer and Brown, 1966).

The mortality in this study was only 2.1% whereas it varied from 16-39% in other series (Lindner et al., I960; Edwards and True-Love, 1963).

Since the use of salazopyrine in ulcerative colitis for the first time in 1942 by Svartz, it still remains the drug of choice in the long term maintenance treatment of ulcerative colitis. However, opinions vary regarding the long term maintenance treatment with salazopyrinc Dissanayake and True-Love (1973) suggested that the maintenance treatment with salazopyrine should be continued indefinitely unless con-traindicated by side effects whereas Riis et al (1973) have found only a minor beneficial effect in long term maintenance treatment with this drug and advise discontinuation of the drug if the patient is symptom free for one year. Because of the infrequent relapses and relatively mild form of disease the use of salazopyrine was preferred during the acute stage as well as for the maintenance therapy. The

drug was discontinued after the patients became symptom-free.

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