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Chronic Colitis : Clinical , endoscopic & histological Evaluation of 130 Iraqi patients

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Abstract:

***Background*:**

Chronic colitis is an increasingly recognized problem in our area especially inflammatory bowel disease (IBD) and other colitidies like microscopic colitis or solitary rectal ulcer syndrome SRUS.

***Aim of the study*:**

To evaluate the different causes of chronic colitis in a sample of Iraqi patients.

***Patients and methods*:**

130 Iraqi patients with chronic diarrhea of colonic origin presented to the Gastroentrology and Hepatology center with chronic diarrhea were included in this study. Diarrhea due to small bowel disease, or due to diverticular or colonic neoplasia was excluded from the study.

These patients were evaluated,clinically biochemically and endoscopically. In addition to Colonic histopathological examination.

***Results*:**

IBD were diagnosed in 93/130 (71.5%) patients, followed by infective colitis in 17/130 (13%) then microscopical colitis in 15/130 (11.5%) & 5 (3.8%) cases were diagnosed as SRUS.

***Conclusion*:**

IBD is the major cause of chronic colitis in Iraq, however infective colitis comprise the next major entity though often missed diagnosed, raising the great demands for improvement in the stool examination, culture and sensitivity.

Treating physician should not miss SRUS and microscopic colitis in the differential diagnosis of chronic diarrhea.

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%	2. ÇáÊåÇÈÇÊ ÇáÞæáæä ÇáÎãÌíÉ	17 / 130	13
%	3. ÇáÊåÇÈ ÇáÞæáæä ÇáãÌåÑí	15 / 130	11.5

***Introduction*:**

Patients with chronic diarrhea comprise a large percentage of general and gastroenterology outpatient's clinic services. During the year 1998 - 1999,out of 661 patient's referred to the Gastroentrology & Hepatology Center in Baghdad for colonoscopy, 25% proved to have chronic colitis of different causes.

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Inflammatory bowel disease and infective colitis are the main causes of chronic colitis how-ever, there are other causes which mimic IBD like vascular (Ischemic, radition colitis),drug induced (NSAID) idiopathic (microscopic colitis, Behcet's disease), and solitary rectal ulcer syndrome (SRUS)[1].

Microscopic colitis is used to refer to a clinical syndrome of chronic watery diarrhea with normal gross appearance of colonic luminal surface on endoscopy with increased numbers of inflam-matory cells in the colonic mucosa on histological examination, three subtypes are recognized acco-rding to different pathological feature:

- Increase intraepithelial lymphocyte IEL infiltr-ation with thickened collagen band (collagenous colitis).
- Increase IEL with normal collagen band.
- Nonspecific colitis where the lamina-propia (LP) expanded with inflammatory cell composed mianly of plasma cell without significant IEL or thickened collagen band[2].

Solitary rectal ulcer syndrome. Is a benign chronic condition characterized by rectal bleeding, defecation disorder, tenesmus and mucorrhea. It is considered as misnomer as the ulcer could be multiple or replaced by area of polypoidal, hyp-ertrophied or hyperemic mucosa recognized as pre- ulcer phase, Histological criteria for diagnosis are the following[3]:-

1- Obliteration of LP by fibromuscular prolifration of muscularis mucosa.
2- Streaming of fibroblast and muscle fibers up bet-ween crypts.
3- Thickening of muscularis mucosa.
4- Branching distorted glandular crypts.
5- Diffuse collagen infiltration of LP.

This prospective study was conducted to eval-uate the different causes of chronic colitis in pati-ents attending the gastrointestinal & hepatology center .at AL- Shaheed Adnan hospital.

Patients and methods:

During the period Dec 1998 to Oct 1999,patients with diarrhea for at least 4 weeks with or without mucus, blood, tenesmus and abdominal pain attending the gastrointestinal & hepatology center during this period were inclu-ded in this study .

Patients with chronic diarrhea of noncolonic origin were excluded so also those with colorectal malignancy & diverticular disease.

Full history & medical examination, was carried in addition to microscopic and bacteri-ological stool examination biochemical, hematol-ogical and gastrointestinal radiological examina-tion was performed.

Total colonoscopy or sigmiodoscopy was carried using Olympus cF. PCF 200S 40L with multiple biopsies taken & stained by H.E. and special stain when needed.

Clinical assessment according to the Truelove & Witt's criteria and endoscopic examination according to the modified Jewell's classification [4], was carried when ulcerative colitis was suspected.

Results and discussion:

One hundred thirty patients fulfilled the criteria for inclusion in the study. Table (1) & fig (1) demonstrate the age; gender and final diagnosis of the study group.

The predominant diagnosis was IBD 93/130 (71.5%) followed by infective colitis 17/130 (13%), microscopic colitis 15/130 (11.5%). SRUS: 5 patients (3.8%).

The apparent low percentage of infective colitis in our study may be explained on the basis that most infective colitis are self limited disease, which usually resolve in a period shorter than four weeks, which is the minimum period of chronic diarrhea for inclusion criteria, Ten patients with specific pathogen were demonstrated in the stool culture while the remaining seven patients had negative stool culture but they responded clinically & endoscopiclly to the therapeutic trial of cipro-fluxacin 500 mg twice daily for 10 days [5], with no recurrence of colitis during follow up period of 6 months . This low percentage of positive stool culture in infective colitis is similary observed in the other centers [2,5]. Matsamato[6] advise culture of rectal biopsies to increase the yield of bact-eriological examination.

Table(2) demonstrate the correlation bet-ween laboratory findings in different groups of col-itis . In UC group it is quite evident that the severity of anemia and elevation of ESR and low albumin correlates with severity of the disease, which is similarly observed by other studies[1,2]. The appa-rently elevated alkaline phosphatas (ALP) in the moderate degree is explained by the presence of two cases of sclerosing cholangitis in this group.

The association between amoebic colitis & chronic UC could be due to asymptomatic carrier, coexisting infection or super infection causing exacerbation of UC [7].The well known established practice of prescribing antiamebic therapy before steroid therapy in UC patients is very much justi-fied as 26% of our cases of UC had revealed a concomitant ambiasis on GSE. Nurdan Tozan[8] from Turkey reported 14.7-40% of E.hjstolytica infe-ction with IBD in Turkey and offered similar advice of specific antiamebic before steroid ther-apy in endemic area 12% of patients with UC grew bacteria in stool culture which is similar to a study reported by Schumacher[9] from Sweden where 21% of IBD had positive microbiological finding in which the colitis causing agent were identified in 14% & other agents like virus in other 7%.

Ulcerative colitis was diagnosed in 77/130 patients with F:M ratio of 1.2:1 & mean age 33.5 years (table 3).

Half of our cases of UC graded mild both clinically & endoscopically (44.5%, 46.75%) respectively (tables 4&5). Most of those patients were found to have distal colitis 46.74% (table 6) Similar result were reported in north west Greece[10] & Norway [11], while Severe extensive colitis were reported in 60% of UC patients in India [12].

Crohn's diseases (CD) was diagnosed In 16/130 patient's. Terminal ileum was the main site of the involvement in (75% of cases) while colonic involvment alone was seen in 25 % of cases (table 7) Bjorrssion[13] in Island reported colonic Crohn's colitis alone in 54.7 % only.

15/130 patients (11.5%) were grouped as micr-oscopic colitis (table 8). Three were labeled as lymphocytic colitis (2) collegenous colitis, & (10) patients were grouped as non specific colitis, Lee etal [14] reported 78.8% of non specific colitis in his review of 118 patients with chronic diarrhea & ne-gative endoscopic finding & recommended careful follow up for patients with borderline histological abnormalities.It is interesting to note that 6/15 of this group of patients received NSAID, whether. this could be related to their condition is to be evaluated further. Shubbar etal [15] in a prospective study of histological colonic mucosa changes in 34 patients on NSAID with or without diarrhea, concluded that patients with NSAID with diarrhea had statically significant histological change, compared to those with no diarrhea and there was no relation between the severity & duration of diarrhea to the duration ot NASID intake.

Solitary rectal ulcer syndrome SRUS was seen in 5 patients, which is higher than what was reported by ozgultekin [16]. He described only six cases of SRUS during 5 years prospective study in Turkey. Accordingly SRUS could be considered as important cause for rectal bleeding & disordered defecation.

Table (1) : Age , gender , and causes of diarrhea of the study group.*

Diagnosis	Number & (%)	Range (years)	Male No. and (%)	Female No. and (%)
IBD	93 (71.54)	7-65 (36)	45 (34.6)	48 (36.95)
Infective	17 (13.08)	4-50 (27)	9 (6.96)	8 (6.15)
Microscopic	15 (11.54)	12-78 (41)	5 (3.84)	10 (7.69)
SRUS	5 (3.84)	11-43 (27)	2 (1.54)	3.(2.30)
TOTAL	130		61 (46.94)	69 (53.06)

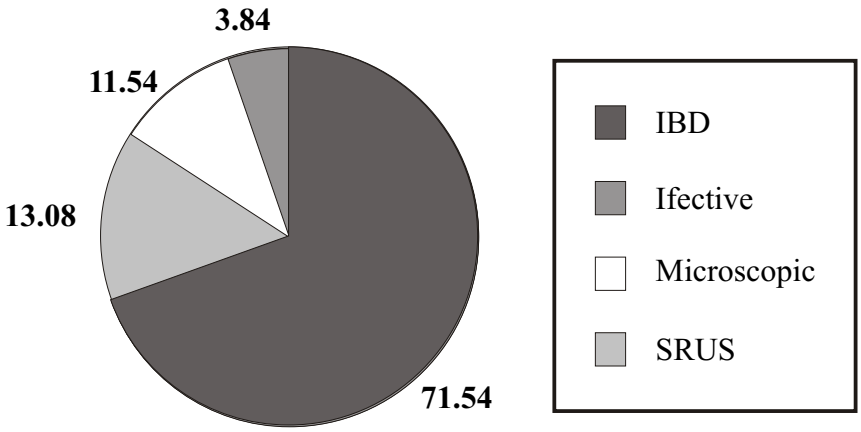

Figure (1) : Causes of chronic diarrhea in the study group.

Table (2) : Laboratory findings in the study group.

Investigation	Ulcerative colitis n=77 Clinical severity			Crohn's Disease n=7	Infective colitis n=17	Microscopic n=15	SRUS n=5
	Mild n=35	Moderate n=29	Severe n=13				
Hemoglobin gm/100ml	10 - 13	10 - 12	6 - 9	9 - 12	10 - 14	11 - 14	10 - 14
ESR mm/hr	20 - 40	30 - 70	50 - 150	40 - 80	20 - 50	20 - 40	10 - 20
Alkaline phosphatase K.A	4 - 10	6 - 36	10 - 16	-	-	-	-
S. Alb.(gm/dl)	4 - 5.5	2.5 - 4	1.2 - 3	-	-	-	-
General stool examination							
RBC			+ in all	+ in 2	+ in 16*	-	+ in all
pus cells			+ in all	+ in 3	+ in all	-	+ in 3
Ent. Hystolyticat			+ in 20	-	+ in 3	-	+ in 2
Stool Culture			No. = 40	No. = 6	No. = 17	No. = 10	No. = 4
Normal flora			35	5	7	-	-
Campylo bacter			2		1		
E. Coli			2	1	1		
Plesimona			1		1		
Shigella					2		
Salmonella					1		

+ = Present
- = Absent
*** One case TB.**

Table (3) : age and gender distribution of the study group

Type of IBD	Patients No and %	Age range	Male No and %	Female No and %
UC	77 (59.2)	7 - 60	35 (45.5)	42 (54.5)
CD	16 (12.3)	17 - 65	10 (62.5)	6 (37.5)
Total	93 (71.5)		45 (48.39)	48 (51.61)

Table (4) : the clinical severity of UC study group

Degree of Severity	Patients No and %	Age range Y	Male No and %	Female No and %
Mild	35 (45.4)	11 - 60	18 (23.38)	17 (22.07)
Moderate	29 (37.7)	7 - 60	14 (18.18)	15 (19.49)
Severe	13 (16.9)	18 - 56	3 (3.90)	10 (12.98)
Total	77	7 - 60	35 (45.46)	42 (54.54)

Table (5) : Endoscopic grading in UC study group

Endoscopic grading	Patients No and %	Age range	Male No and %	Female No and %
Grade I	13 (16.88%)	11 - 58	4 (5.19)	9 (11.68)
Grade II	23 (29.87%)	7 - 50	12 (15.58)	11 (14.29)
Grade III	25 (32.47%)	25 - 60	18 (23.39)	7 (9.09)
Grade IV	16 (20.78%)	20 - 56	1 (1.29)	15 (19.48)
Total	77	-	35 (45.45)	42 (54.55)

Table (6) : The extent of disease in UC study group

Local involvement	Patients No and %	Age range	Male No and %	Female No and %
Proctitis	24 (31.17)	11 - 55	12 (15.58)	12 (15.58)
Proctosigmoiditis	12 (15.58)	18 - 50	5 (6.49)	7 (9.09)
Subtotal	18 (23.38)	14 - 60	11 (14.28)	7 (9.09)
Pan colitis	23 (29.87)	7 - 60	7 (9.09)	16 (20.78)
Total	77	-	35 (45.45)	42 (54.55)

Table (7) : The location of disease in CD study group

Site	Patients	
	Number	%
Terminal ileum	5	31.3
Terminal ileum and Rt. Colon	7	43.7
Colonic	4	25

Table (8) : Description microscopic colitis group

Sub type	Number	Gender	Age (y)	NSAID intake
Lymphocytic	3	2 : 1	30 - 65	2
Collagenous colitis	2	All female	50 - 78	2
Nonseptic	10	6 : 4	12 - 60	2
Total	15			6

***CONCLUSION AND RECOMMENDATIONS*:-**

1. IBD is the major cause for chronic colitis in Iraq, which seems to be diagnosed more frequently in our area.
2. The next major cause for chronic colitis is infection. In addition to its association with other specific causes like UC or SRUS, there is a great demand for improvement in the stool examination and culture and sensitivity services, including amebiasis, to improve the yield of positive results.
3. Solitary rectal ulcer syndrome, comprises important group of patients with chronic recurrent blood and mucus per rectum which has not to be missed by treating physician.
4. There is a great need for proper follow up clinics

for patients with chronic colitis distributed all over the country, with standardized methods of diagnosis, grading and treatment to improve patients care and well-being.

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