Original Article

ULCERATIVE COLITIS – IS IT THE CLINICAL PROBLEM IN NEPAL?

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Abstract

Published study of ulcerative colitis remains nearly nonexistent in Nepal. Simple outpatient clinical records of 34 cases suspected and receiving mesacol is noted since 1994. At the same time 10 cases received operative treatment in different hospitals. Total/ subtotal colectomy (no.8) with ileostomy and mucus fistula or hartmanns' procedure performed. 3-6 months later Restorative ileorectal anastomosis performed in 5 cases. Segmental resection of colon in 2 cases with immediate colorectal anastornosis who were reported as doubtful ulcerative colitis. One patient died due to sepsis and multiorgan failure. Rest did not come for follow up. All this indicate that the ulcerative colitis is emerging as clinical problem in Nepal.

Keywords

Diarrhoea, ulcerative colitis, Drug mesacol (mesalamine), total colectomy.

Introduction:

Ulcerative colitis is the inflammatory disease of colon and rectum of uncertain etiology first described in 1875[2]. Although it was virtually unknown in Nepal two decades ago[3], our objective is to identify the presence of this diseases causing diarrhoea with or without bleeding per rectum and pain in abdomen in patients visiting our hospitals.

Set up : 1. Bir hospital (Two private hospital patients are included)
2. W.R. Hospital (Pokhara)
3. Bhaktapur hospital

Method

It is a hospital based retrospective review of 44 cases identified as ulcerative colitis since 1994 and the timing of records reflect posting (BRP) period in these hospital. A surgical Register was used to list these patients. We grouped them in two categories with separate inclusion criteria .

A) Patients taking mesacol
(Mesalamine Delayed Release tablets) - Total 34

B) Patients whounderwent operation.- Total 10

A) Patients taking mesacol: Patient who attended surgical OPD receiving mesacol prescribed by any doctors and has been taking it for at least a month for diarrhea were included in it. Because of poor information contained in the clinical note of respective patient, other relevant

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information were not made mandatory for inclusion. However, out of 34 patients listed in the register, 20 patients records were better diagnostically. This method is consistent with "diagnostic label of ulcerative colitis in British General (Routine) practice study[4] which does not represent protocal– based evaluation as in the norm of subspecialty.

B) Patient who underwent operation: Clinical and operative findings, type of operation and biopsy report sent to surgeon were essential criteria. Baseline investigations and their reports were only supportive. Doubtful finding or nonconvincing irrelevant information's which are not the characteristics of ulcerative colitis were carefully scrutinised. Surgical colleague in the same working room were very helpful to review critically before listing the patient in this category.

Result- ulcerative colitis is emerging as clinical problem.

	A. Taking Mesacol group*	B. Operated group
Total patients	34	10
Age (yr)	40(range 15-54)	30(25-40)
Sex	F - 16 M- 18	F -3 M-7
Diarrhoea	>6times/day before drug <3 times/day after drug	Diarrhea (Bleeding P/R) > 6/ day
Region	Hills + Tarai	Hills + Tarai
Diet	Average Nepalese	Average Nepalese
Family history (of disease)	No	No
Colonoscopy	6 patients	8 patients complete 2 patients unsuccessful
Sigmoidoscopy	5 patients	not done
Proctoscopy	20 (only)	All
Biopsy report	25mention in prescription sheet	All
Occult blood (In stool)	30	All
Hb% (Less than 10gm%)	30	All
ESR high (1st hr.)	30 (range20-40)	25
CRP		Present 10 6 Absent 10 3 Not tested 14 1
x-ray abdomen (for KUB)	suggestive -15 lost x-ray 19	8 x
Taking preduisolone	3 Patients	8 patients

extraintestinal problem	arthralgia -10(vague)	2(no objective findings history only of arthralgia)

Personal communication with 10 doctors

therapeutic diagnosis	Author involved in surgical
(because mesacol responded diarrhea)	management
disease presence suspected in Nepal	diagnosis made after considering
after mideighties	overall clinical course.
histology report	
"consistent with ulcerative colitis"	
as commented by pathologist mainly	
appearing after midnineties	

B. Operated group:

Procedure/outcome	**no of patients(10)**
- Total colectomy	6
- subtotal colectomy	2
- Ileostomy + mucus fistula or hartmanns' procedure	8 (6+2)
- ileorectal anastomosis (3-6 months later)	5 only*
- segmental colectomy with immediate colorectal anastomosis	2**
outcome of procedure survival	(90%)
death – sepsis, multiorgan failure	1(10%)

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*3 patients do not come for restorative anastomosis.

**Surgeon being alerted by postoperative biopsy report as "ulcerative colitis should be considered "

Surgeons impression of pathology of resected specimens:

lesion (of resected specimen Fig. 1 – 5)	**No. of patients**
Mucosal (+ sub mucosal) inflammation	10
Petechial haemorrhage	4
Ulceration of mucosa	10
Undermining of mucosa	8
Mucosal bridges (overt)	4
Psuedopolyp	4
Elevated plaques (severe dysplasia)	2
Toxic megacolon	1
Biopsy report sent to surgeon	

- Consistent with or should be considered
  Ulcerative colitis 10(8+2)

Discussion

To begin with, ulcerative colitis was suspected by clinician in Nepal during mideighties when usual drug therapy was ineffective against infective cause of diarrhoea. Successively therapeutic diagnosis i.e. clinical improvement with drugs acting against ulcerative colitis, prompted to investigate further and the emergence of the disease was thus realized in our context as was the early report of ulcerative colitis in Indian subcontinent[3].

34 patients with diagnostic label of ulcerative colitis by treating doctors whose patients felt some improvement with mesacol, signifies that the presence of ulcerative colitis is accepted by medical community in Nepal.

Although the number of patients is small, benefit of operative treatment was available to 10 patients of whom Nine patients (90%) got immediate relief of distressful diarhoea and pain in abdomen. One patient died due to sepsis and multiorgan failure. Opportunity to close examination of clinical course and macroscopic lesion in colon supported by biopsy reports helped us to advance our knowledge of the presence of ulcerative colitis in Nepal and the pattern is in conformity with reports from India [5,6,7,8,9,10] and Pakistan[11] .

2 patients who received segmental colectomy with immediate anastomosis were strongly suspected only after biopsy reports were received by surgeon following patients discharge. Unluckily, patients did not come for follow-up. Segmental colectomy for segmental colitis may be an inadequate procedure because of future development of more extensive lesion[3] in few years time, perhaps half a decade. Historically, this operation was normally performed in early phase of learning curve to manage segmental colitis by surgeons[2].

Uniform and protocol- based norm of proper investigation of subspeciality in advance centre is perhaps lacking in all our patients but the confusion with other form of colitis was cleared by overall clinical feature and course, operative finding, examination of intraluminal surface of resected specimen and reports of microscopic picture, which are standard hypotheticodeductive thinking process to arrive at proper diagnosis of diseases. Extraintestinal manifestation e.g. arthralgia is limited to history only (12 patients-30.6%) in contrast to 39% in India. Young male are more sufferer [5,6,7,8] in our study too. Antineutrophil cytoplasmic antibodies were present in most patients in western series but the test is not available here with us. None of our patients were investigated to identify genes responsible for ulcerative colitis and none of our patients gave incidence of the disease in their family. Because of the probability of ulcerative colitis as a "heterogenous disorder in which mutation in any of several genes contributing to similar clinical manifestation"[12] might be relevant in our patients yet genetic analysis is not a practical option open to us. Ulcerative colitis patients from multiethnic Nepalese population and hence the association with HLA markers (class I & II) may be different from others e.g. HLA-Al9 (subtype HLA-A33)and HLA-cw6 in India[5], HLA-A24 and B35 in Israeli, HLA-B52 and DR3 in Japanese, HLA-B27in Caucasian patients[12]. We can mobilize, in future, to help us by the

international effort of "Functional cloning and positional cloning" to identify genetic aspect in our patients and the role played by environmental influence in susceptible individual will be better clearified.

Conclusion

This preliminary study indicates that the ulcerative colitis is prevalent in Nepal causing diarrhoea and pain in abdomen in susceptible individual. Although the patients suffering from it are few in numbers at present, additional burden to existing clinical problem must be anticipated.

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Fig. 1 Acute on chronic inflammation

Fig. 2. severe inflammation.

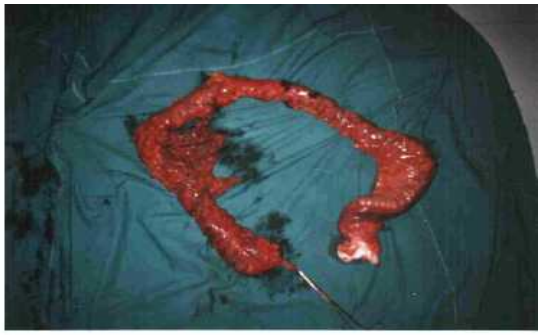

Fig.3. total colectomy with serosal surface.

Fig.4. toxic megacolon.

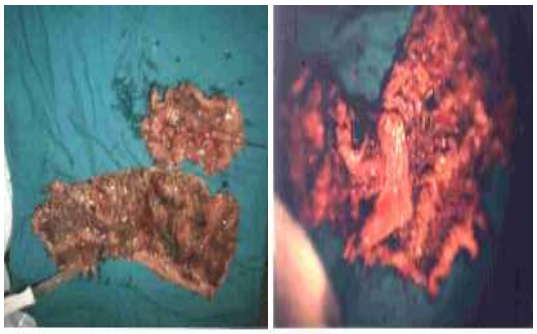

Fig.5. severe dysplasia in two specimen of resected colon.

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