

**Original article:**

## **Chronic active colitis presenting as acute infectious gastro-enteritis with normal colonoscopy and abnormal biopsy**

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### **Abstract**

Chronic active colitis is a difficult scenario in any clinical setting. To evaluate for the cause of chronic colitis is always a diagnostic challenge. A proper systematic assessment with regular follow-up including colonoscopy and biopsy is very crucial in younger individuals diagnosed with chronic colitis to monitor for its progression to inflammatory bowel disease. We report a case of chronic active colitis in a 28 year old gentleman who presented as acute infectious gastro-enteritis. A high index of suspicion is important to diagnose chronic active colitis in individuals presenting with acute gastroenteritis though history is favoring an infectious etiology.

Key words- Chronic active colitis, inflammatory bowel disease

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### **Introduction**

Chronic active colitis is a condition which demands a proper and systematic follow-up. This is very important as it can progress to inflammatory bowel disease later on. A regular assessment of the patient helps in early diagnosis and aids in necessitating appropriate treatment.

Chronic inflammatory bowel disease includes ulcerative colitis and Crohn's disease. Patients having features of inflammatory bowel disease but cannot be classified into any of these are labelled as having indeterminate colitis<sup>1</sup>. In Asia, the disease was thought to be uncommon, but present reports shows an increasing incidence. Men are more likely to have ulcerative colitis whereas women with crohn's disease<sup>1</sup>.

We report a case with chronic active colitis in a young male who presented as acute infectious gastro-

enteritis. He requires close follow up to look for any progression later on. The patient had a normal colonoscopy, but biopsy was suggestive of chronic active colitis with non-specific proctitis. There are case reports showing normal colon and abnormal biopsy<sup>2</sup>.

### **Case report**

A 28 year old gentleman without any co-morbidities now presented with c/o multiple episodes of loose bloody stools, vomiting, fever and lower abdominal pain since one day. He gives history of one similar presentation with fever, abdominal pain and bloody stools 5 years back while he was working abroad, after which he was apparently healthy and no similar complaints till now. On general examination he was febrile, pulse rate was 104/min, regular and no other positive findings. On abdominal examination, he had tenderness in the right iliac fossa, no guarding or

rigidity, bowel sounds were present, no ascites or mass palpable.

His routine blood investigations showed elevated total white blood cell counts (15700) with neutrophilic predominance (92%) with normal platelet counts and hemoglobin level (14.1). Renal function test was slightly altered (Serum creatinine-1.5) with decreased urine output suggestive of acute kidney injury possibly pre-renal. Liver function test, serum electrolytes, HIV, HBSAG, HCV and urine routine were all normal. An ultrasound of the abdomen showed enteric and peri-enteric oedema suggestive of colitis with grade 1 fatty liver. Stool analysis showed presence of red blood cells and mucus with no growth isolated on culture. Blood culture done also showed no growth.

The provisional diagnosis kept was acute infectious gastroenteritis. He was treated with ciprofloxacin and metronidazole, adequate fluids and supportive measures. He became symptomatically better, afebrile, acute kidney injury resolved, but minimal amount of bloody stools was persisting. So we planned for a colonoscopy to evaluate further so as to rule out inflammatory bowel disease.

The colonoscopy was normal, but the biopsy taken from two different sites (right colon and rectum) showed features of chronic inflammation. The section studied from tissue of right colon showed feature suggestive of chronic active colitis and that taken from rectum showed features of non-specific proctitis. He is presently asymptomatic and is under close follow up as he can progress to more active colitis and is not a usual infective gastroenteritis.

### **Discussion**

Chronic active colitis always requires proper follow-up. Chronic colitis like the ulcerative colitis may present with diarrhea, rectal bleeding, passage of

mucus, crampy abdominal pain and tenesmus. In some cases diarrhea and bleeding may be very minimal and occasional that the patient does not even seek medical attention<sup>3</sup>. So when young individuals present with history suggestive of acute infectious gastroenteritis or dysentery, it is always wise to repeatedly enquire for similar episode previously so that we never miss a major chronic condition.

Another group like the collagenous colitis and microscopic colitis are conditions which may be missed if we don't go for an endoscopy and biopsy. These entities are normal on endoscopy but with abnormal biopsy. Evaluation of our patient also showed normal colon on colonoscopy, but histopathology suggestive of chronic active colitis. There are studies which highlights the need for routine biopsies of rectum and colon in patients presenting with diarrhea and a normal colonoscopy finding<sup>4</sup>.

There are various differential diagnosis for a case of chronic colitis. Even infectious colitis can mimic ulcerative colitis<sup>5</sup>. This states the need for excluding infection prior to diagnosis of ulcerative colitis. In our case both stool culture and blood culture demonstrated no growth.

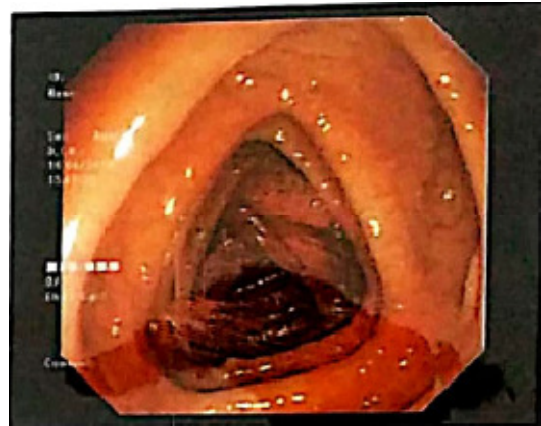
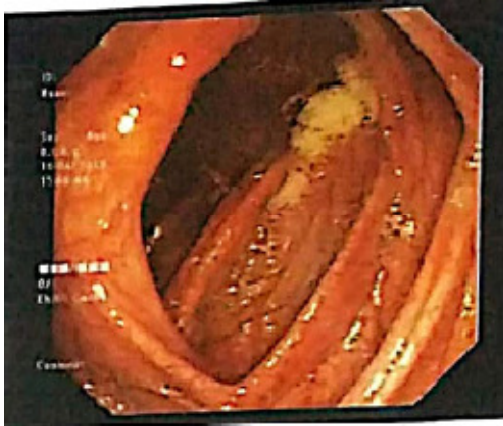
A similar case was reported in a 15 year old female who was initially suspected to have acute infectious gastroenteritis later turned out to be ulcerative colitis<sup>6</sup>. So differential diagnosis should always include chronic colitis even if clinical setting favors infectious gastroenteritis in those presenting with bloody diarrhea.

This case report is mainly intended to alert health care professionals in systematic re-assessment of those with chronic active colitis. Though the patient presented with history suggestive of acute infectious gastroenteritis, the final diagnosis was chronic active

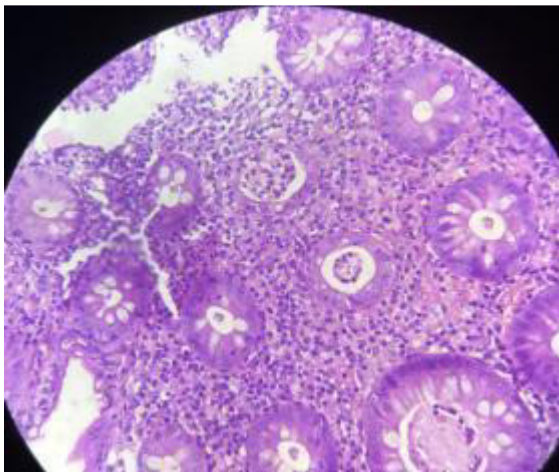
colitis with a normal appearing colonic mucosa on endoscopy.

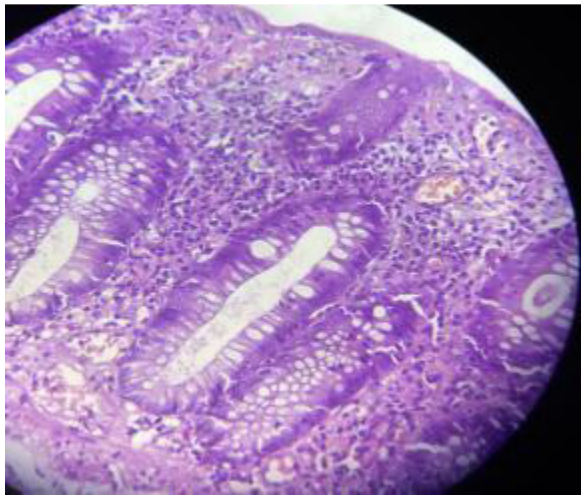
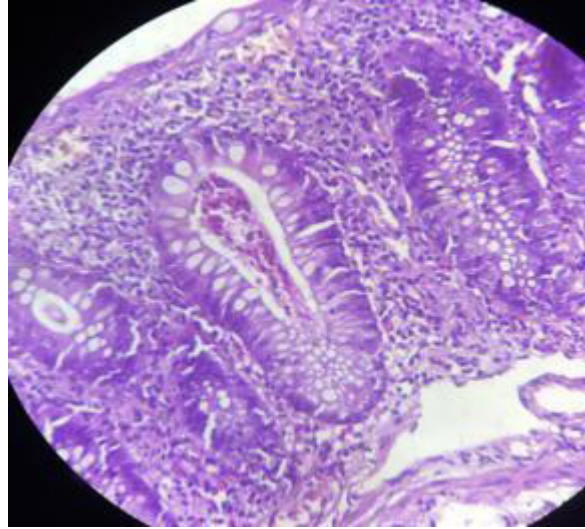
So we report a case of chronic active colitis mimicking acute infectious gastroenteritis with normal colonoscopy and abnormal biopsy.

Normal appearing caecum and colon



### Histopathology





#### Histopathology report-

- Section studied from tissue of right colon shows oedematous lamina propria with dense infiltrates of lymphocytes, plasma cells, eosinophils and neutrophils. Focal cryptitis and crypt abscess are seen. No evidence of granuloma or malignancy. Suggestive of chronic active colitis.
- Section studied from rectal tissue shows normal rectal mucosa with mildly increase infiltrates of lymphocytes and plasma cells. Suggestive of chronic non-specific proctitis

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