Ulcerative colitis on treatment presenting with intestinal obstruction secondary to tuberculosis

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Abstract

Patient was diagnosed to have UC for which the treatment was started with drugs along with steroids. Initially patient responded to treatment and was symptom free for 8 months but later presented with features of intestinal obstruction and was diagnosed to have superadded intestinal tuberculosis along with UC. In this case report we concluded that intestinal tuberculosis can occur in patients receiving the steroids for Ulcerative colitis (UC).

Key words : ulcerative colitis, tuberculosis.

Introduction

Ulcerative colitis (UC) is a chronic inflammatory disease of unknown etiology, which affects the large bowel [1]. It is characterized by colonic mucosal inflammation and has a relapsing course. Usually UC is mildly active but it can be life-threatening during severe attack because of colonic and systemic complication and later in the disease course because of the development of colorectal cancer [2]. The prognosis for the patient with UC has changed greatly over the past few decades with introduction of steroid therapy, which has reduced the mortality of patients with severe UC to 7%. [3]. In comparison to UC, intestinal tuberculosis is a disease of small intestine which can develop as primary or secondary [4]. In present case patient initially presented with complaints of loose stool with mucus and blood, both colonoscopy and histopathologic features were consistent with UC and drugs were started along with steroid. The patient responded to treatment but after 8 months he presented with complaints of intestinal obstruction for which colostomy was done which revealed superadded features of tuberculosis with UC.

Case history

65 year male complained of loose stool with mucus and blood since several years for which twice colonoscopy was done which showed features of UC. Microscopy also showed features of UC [Figure 1 and 2]. The patient was treated with drugs for UC along with steroid. Initially patient responded to treatment and patient was symptom free for 8 months but later he presented with features of intestinal obstruction for which no colonoscopy was done as the patient presented with symptoms and signs of acute obstruction. The patient underwent emergency operation; the affected segment of colon was removed and was sent for histopathological examination.

Gross

Specimen of colon was received measuring 40 cm in length. Mucosa and a firm constricted area measuring 18 cm in length. On opening constricted area showed narrowed lumen with thickening of bowel wall and multiple, irregular grey white to grey brown ulcers. Proximal mucosa was flattened [Figure 3 and 4]. No palpable lymph nodes were detected.

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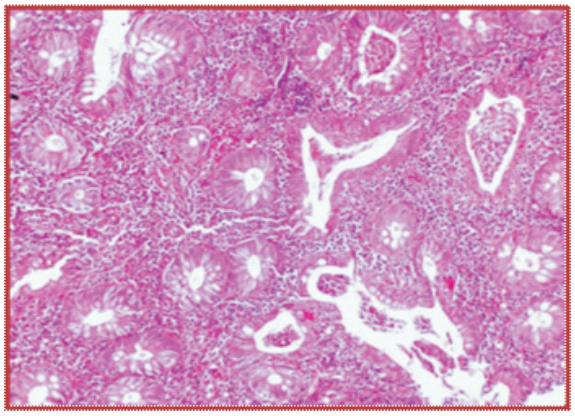


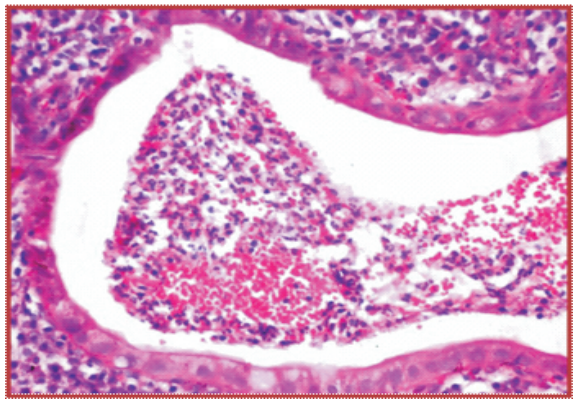
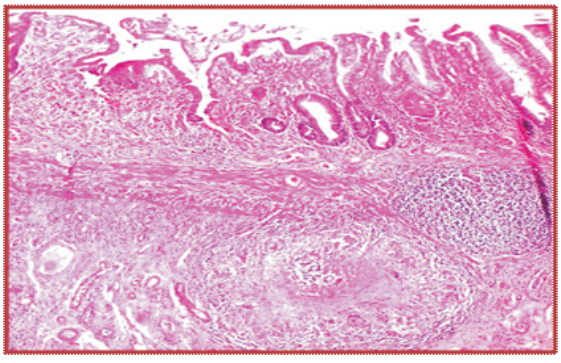


Figure (1 and 2) – Colonoscopic biopsy shows distorted mucosal glands, crypt abscesses and cryptitis.

Figure (3 and 4) Shows narrowed lumen, thickened bowel wall and multiple, irregular mucosal ulcer

Microscopy

The colon showed ulcerated mucosa. Mucosal glands were distorted, showing branching, scattered crypts abscesses and heavy lymphoplasmacytic and neutrophilic infiltration in the lamina propria. The submucosa showed presence of caseating granulomas comprising of epithelioid cells with central caseating necrosis [Figure 5 and 6].



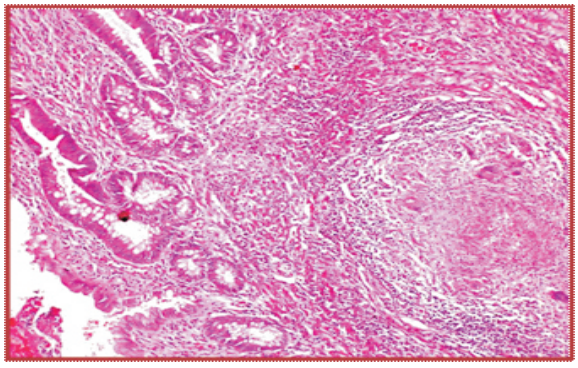


Figure (5 and 6)–Mucosa shows distorted glands and branching. mucosa shows lymphoplasmacytic, neutrophilic infiltration and caseating granuloma

Discussion

UC occurs worldwide. The incidence of UC varies not only according to geographical region but also with race and ethnicity. Incidence of UC in India is 6.02/105 per year [5]. The most common sites involved in UC are rectum and left colon but the entire colon may be involved [1]. Rectal bleeding and diarrhea are the most important symptoms, may be associated with severe local and systemic complications. The course is characterized by remission and exacerbations [4]. UC is usually confined to mucosa and to a lesser extent to the adjacent submucosa [1]. Crypt abscess formation and nonspecific acute and chronic inflammation, which may be patchy or diffuse are the most important microscopic findings [6]. The introduction of steroids therapy greatly improved the prognosis of patients with severe UC [2]. The steroids have reduced the mortality of patients with severe UC to 7% [3].

In comparison intestinal tuberculosis may develop primarily within intestinal tract or it may be secondary to a primary focus elsewhere in the body. It usually results from swallowing human tubercle bacilli and small intestine is the site of predilection [7,8]. Symptoms are usually non-specific and there may be no distinguishing physical sign [4].

In present case the patient was initially diagnosed as UC on colonoscopy. Microscopy of biopsy showed cryptitis, crypt abscesses and chronic inflammatory cells infiltrate. There was no evidence of granulomas. The treatment started with drugs along with steroids and patients was symptom free for 8 months but later he presented with complains of acute intestinal obstruction for which he was operated and the affected colon was removed. Microscopic study of the resected colon revealed combine features of UC and tuberculosis. In the present case, patient had UC involving colon and he was treated and later he developed tuberculosis affecting the same segment and presented with obstruction.

Conclusion

In India prevalence of the intestinal tuberculosis is high in patient with idiopathic UC on steroid and a high degree of suspicious is required to detect these cases. Steroid therapy greatly improves the prognosis of patients with UC but it also adds the risk of intestinal tuberculosis secondary to steroid therapy.

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