CASE REPORT

Intestinal Tuberculosis Sometimes Mimics Crohn`s Disease

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Abstract- Intestinal tuberculosis is an uncommon presentation of tuberculosis (TB) and has clinicopathological similarities with Crohn's disease. In regions where TB is endemic clinicians must aware of this condition and fully evaluate their patients when Crohn's disease is diagnosed. We recommend all pathologic specimens be evaluate effectively for TB.Smear,culture and PCR for *Mycobacterium.tuberculosis* from samples aside the pathological reviews help for better diagnosis. Here we present a case of intestinal tuberculosis which initially diagnosed as Crohn's disease but after starting immunosuppressive agents he presented with disseminated tuberculosis.

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Introduction

In developing countries where tuberculosis is endemic, it is necessary to distinguish intestinal TB from Crohn's disease. Both diseases have similar clinical and histopathological characteristics (1). Tuberculosis and Crohn's disease both can cause involvement of any part of the alimentary tract. Furthermore fever, anorexia, weight loss, diarrhea and abdominal pain can be seen in both conditions (2).

Case Report

A 36 year old male came to the emergency department of Imam Khomeini hospital with the complaint of dyspnea and fever. The patient's illness started with abdominal pain, fever and diarrhea since 6 months prior to admission. Some work up was done for him in another hospital. His colonoscopy showed a mass lesion about 1×2 Cm in the ascending colon and a mass lesion with an ulcer in ileocecal valve and a polypoid lesion with ulcer, exudates and nodularity in the terminal ileum (Figure 1). Biopsy was taken from the lesions at that time; the histopathologic findings were reported in favour of inflammatory bowel disease (IBD) by two different pathologists. The patient was prescribed prednisolone and 5-aminosalicylic acid (5-ASA) the patient's symptoms transiently alleviated but one month later the patient's fever reoccurred and azathioprine was added to his drugs, after that the patient developed a dry cough, dyspnea and he was unable to do his daily activity. So he came to ED of our hospital. On Physical examination the patient was febrile, RR=30bpm, chest auscultation had diffuse bilateral coarse rales. His lab data was:

WBC=1.8×10^{12}/L Hb=7.7 g/dL, Platelet:100×10^{9}/L AST=164U/L, ALT=81 U/L

Alkaline Phosphatase=1313 IU/L, Na=130 meq/L ESR=24, Ca=9.7mg/dL

The chest CT scan showed diffuse bilateral nodular infiltrates (Figure 2).

Figure 1. Terminal ileum shows polypoid lesion with ulcer, exudates and nodularity.

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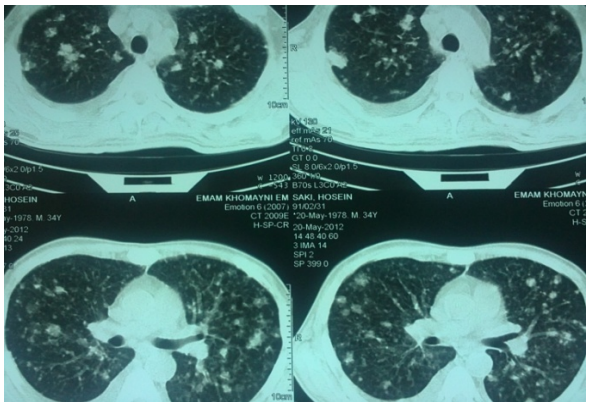

Figure 2. The chest CT scan shows diffuse bilateral nodular infiltrates.

Bronchoalveolar lavage was done, but was negative for AFB. BMA/B and liver biopsy was performed .The pathologic report of BMA/B was caseating granulomatous inflammation ,and liver biopsy although was negative for AFB again showed granulomatous hepatitis.

We started antituberculosis drugs for the patient and discontinued previous medications. General condition of the patient improved and discharged with good condition from our hospital.

Discussion

It is estimated that about one third of world‘s population is infected with M. tuberculosis and it is the leading cause of deaths from infectious diseases in the world (3). Abdominal tuberculosis is an underestimated clinical problem, and should always be considered in the differential diagnosis of IBD. Tuberculosis of the gastrointestinal tract is the sixth most extra-pulmonary site after lymphatic, genitourinary, bone and joint, miliary and meningeal tuberculosis (3).And in the intestine, ileocaecal TB

is the most frequent part(4).Presence of anorectal lesions, longitudinal ulcers, aphthous ulcers and cobblestone appearance were more common in Crohn‘s disease, while transverse ulcers, pseudo polyps, involvement of less than four segments and a patulous ileocecal valve were more seen in intestinal tuberculosis(2,5,6). Furthermore biopsy specimens from the colon in TB can reveal large confluent multiple granulomas with central necrosis and Langerhans cells. And it should be remembered that the presence of caseous necrosis and acid fast bacilli are pathognomonic features of intestinal tuberculosis (2). Polymerase chain reaction of biopsy can also help for detecting TB (7).

On the other hand features seen far more frequently in Crohn‘s disease include single granuloma as the only foci of granulomatous inflammation and architectural distortion distant from granulomatosis inflammation. Multinucleated giant cells are not characteristic and necrosis is usually not apparent. Only granulomas in the lamina propria not associated with active crypt injury may be regarded as a supporting feature of Crohn‘s disease (6).

In patients living or originating from developing countries with high prevalence of TB,intestinal TB should actively excluded especially before initiating anti-TNF and other immunosuppressive therapies for Crohn‘s disease. As in our patient this exclusion was not performed completely and intestinal tuberculosis progressed to disseminated TB with lung, liver and bone marrow involvement.

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