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Persistent fever in ulcerative colitis

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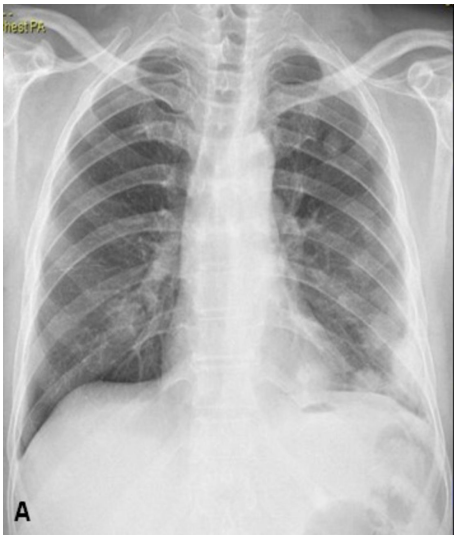
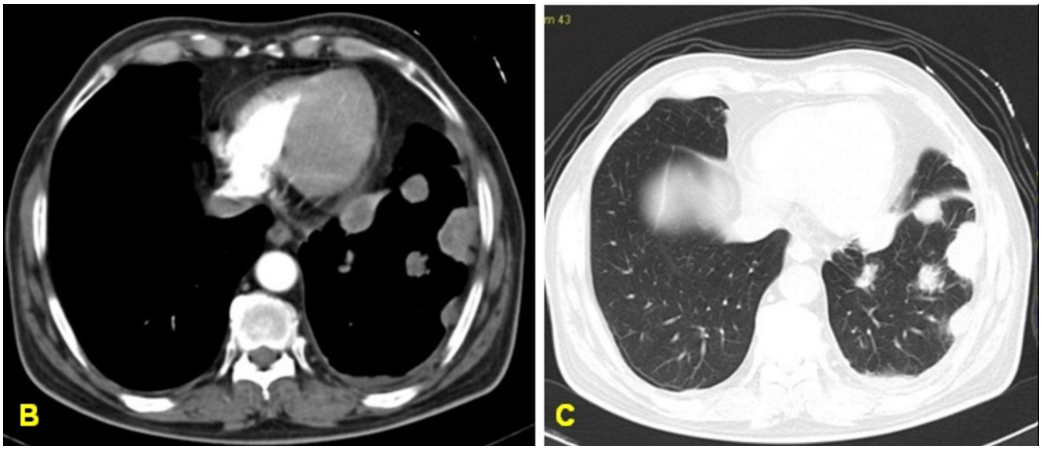
Clinical—A 69-year-old man with ulcerative colitis was admitted with persistent fever for 4 days. There was no history of cough, breathlessness or chest pain. He was on treatment for ulcerative colitis for the past 5 years. He was started on prednisolone for acute exacerbation of ulcerative colitis, 4 weeks prior to the onset of fever. There was no abdominal pain, vomiting, jaundice or distension of the abdomen. Blood investigations revealed haemoglobin: 11.3 gm/dl; total count – 8300 and platelets – 228,000/mm^3. His renal and liver function tests were normal. X-ray of the chest (Figure A) and contrast CT scan of the thorax (Figures B & C) were done.

Figure A. X-ray chest



What is your diagnosis?

Figure B & C. Contrast CT of the thorax



Answer and Discussion—X-ray chest showed multiple rounded opacities in the left lung (Figure A). Contrast CT of the thorax showed multiple subpleural and pleural basal nodular densities predominantly in left lung fields (Figures B & C).

Sputum examination showed branching filamentous acid fast bacilli resembling *Nocardia* which was later grown in culture. His fever settled with combination of sulfamethoxazole and trimethoprim and withdrawal of steroids. There was complete resolution of lung shadows at 4 weeks.

Pulmonary involvement is less common in inflammatory bowel disease (IBD) with drug-induced disease responsible for a majority of cases.

Aspergillus fumigatus, *Nocardia asteroids*, *Mycobacterium tuberculosis* and *Pneumocystis carinii* have been reported with cyclosporine, infliximab and corticosteroids.[1]

TREAT registry has identified the use of prednisone, narcotic analgesics and severe disease activity as responsible for serious infections and mortality in Crohn's disease.[2] There is often difficulty and delay in the diagnosis of *Nocardiosis* due to its varied clinical and radiological presentation.

The infection can be localized or disseminated most often affecting the lungs, skin and central nervous system. No randomised control trials are available for the best treatment regimen in nocardiosis.

A combination of SMZ-TMP is preferred for pulmonary and cutaneous involvement. The duration of treatment varies from 6 months to a year depending on the location of lesions and host immunity.[3]

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References:

1. Storch I, Sachar D, Katz S. Pulmonary manifestations of inflammatory bowel disease. Inflamm Bowel Dis. 2003 Mar;9(2):104–15.
2. Lichtenstein GR, Feagan BG, Cohen RD, et al. Serious infections and mortality in association with therapies for Crohn's disease: TREAT registry. Clin Gastroenterol Hepatol. 2006 May;4(5):621–30.
3. Baldi BG, Santana AN, Takagaki TY. Pulmonary and cutaneous nocardiosis in a patient treated with corticosteroids. J Bras Pneumol. 2006 Nov-Dec;32(6):592–5.