



A Rare Case of Disseminated Tuberculosis with Perianal Tuberculosis

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Introduction

Disseminated tuberculosis defined as concurrent involvement of at least two non-contiguous organ sites of the body or involvement of blood or bone marrow by tuberculosis process [1]. Disseminated tuberculosis continue to be a diagnostic problem even tuberculosis endemic areas. Its account less than 2% of all cases of tuberculosis [2]. Among extra pulmonary tuberculosis only 3-4% develop abdominal tuberculosis and in case abdominal tuberculosis perianal involvement is a rare phenomenon. Presentation of perianal tuberculosis vary from mild perianal symptoms to multiple perianal fistulas [3]. Here we will present a case of disseminated tuberculosis with involvement of perianal region which is very rare specially after introduction of effective antitubercular therapy.

Case report

A 27 years old male, stone worker by occupation presented to department of medicine, Government Medical College Sirohi, Rajasthan with complaints of non-healing multiple fistulae

in perianal region with discharging pus from it from two and half months, loss of appetite and loss of weight for two months, pain during defecation for one and half month. Patient was taking multiple antibiotics on OPD basis but he was not improved. Patient had fistulectomy and sent for histopathological examination. Report came out as inflamed fistulous tract lined by granulation tissue with caseating granulomas consistent with mycobacterial tubercle infection.

Patient also had shortness of breath for two months, cough with purulent expectoration for 1month, loss of weight and loss of appetite. Blood investigation were sent all were within normal range except raised erythrocyte sedimentation rate. A chest x-ray was done and it showed cavity in left midzone with consolidation along it and multiple reticulonodular shadows on right side. Sputum for Ziehl-Nielson stain and CBNAAT. Report came as Mycobacterial tuberculosis with rifampicin sensitive. Ultrasonography of abdomen was done and it was normal. No peripheral lymphadenopathy was found on examination and patient didn't show any sign and symptoms of neurological involvement. Diagnosis of disseminated tuberculosis was made as



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evidence of tuberculosis was found in lung and perianal region.

Antitubercular medications in the form of isoniazid, rifampicin, pyrazinamide and ethambutol as per the body weight of patient were started. For perianal region wound care was done and patient received stool softener along with antibiotics to prevent wound infection with pain killer like NSAID'S. Bronchodilator, cough syrup and other symptomatic treatment were also given. Patient is in regular follow up in our outpatient department. Patient improved after treatment.

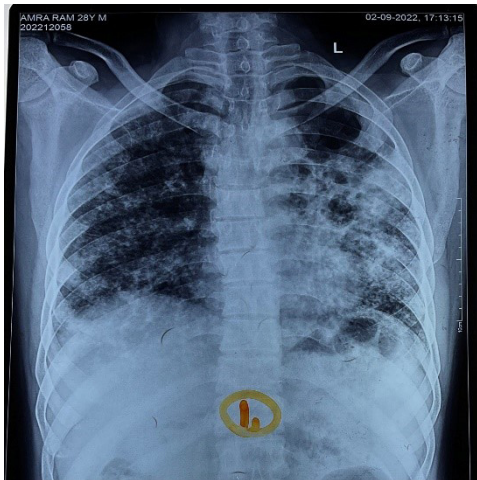


Figure 1

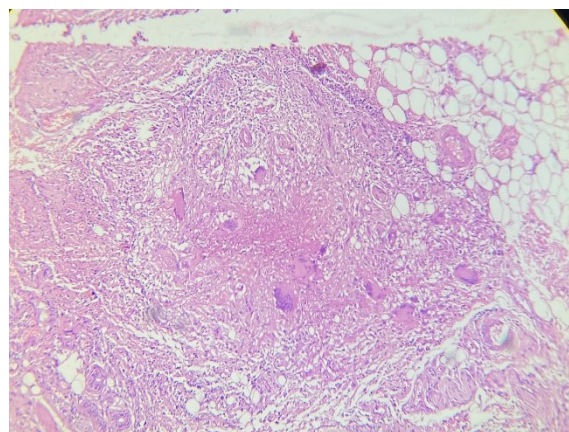


Figure 3

Discussion

Disseminated tuberculosis is a life-threatening condition if early diagnosis and treatment is not done. Miliary tuberculosis refers to tiny discrete foci usually size of 1-2 mm (size millets) distributed in lungs and other viscera. Miliary pattern on the chest radiograph is the hallmark of miliary tuberculosis [4]. It occurs due to hematogenous spread of tubercle bacilli. Risk factors for developing disseminated tuberculosis are immunosuppression (HIV, immunosuppressive drugs), alcohol, chronic liver disease, silicosis, diabetes mellitus and malignancy, adolescent. Male gender affected more frequently than female.

Pathogenesis of disseminated tuberculosis includes massive lympho-haematogenous spread from pulmonary or extra-pulmonary focus, less common is simultaneous reactivation of multiple foci in various organ this kind of reactivation can occur either at the time of primary infection or reactivation of dormant foci. Another form of pathogenesis is re-infection which occur more commonly in endemic areas. Macroscopically numerous small, greyish to reddish brown punctate rounded nodule. Microscopically tuberculous granulomas with or without central caseation. Clinical feature includes constitutional symptoms fever, loss of weight, loss of appetite, dry cough, hepatosplenomegaly, lymphadenopathy, pleural effusion, nervous involvement, ascites, choroid tubercle in eye and rarely skin involvement or anal tuberculosis.

Diagnosis is difficult haematological investigations shows pancytopenia, raised erythrocyte sedimentation rate, chest x-ray shows miliary pattern or cavitation in both lungs, ultrasonography will show hepatosplenomegaly, mesenteric lymphadenopathy, on fundus examination choroid tubercle which is pathognomic for miliary tuberculosis. Sputum microscopy and Cartridge Based Nucleic Acid Amplification Test (CBNAAT) requires to confirm pulmonary involvement. Histopathology sometimes may helpful as it may show caseating granuloma. Some patients may require MRI brain and cerebrospinal fluid examination if neurological involvement present. Treatment includes antitubercular drugs isoniazid, rifampicin, pyrazinamide, ethambutol for 2 months and isoniazid, rifampicin, ethambutol for 7-10 months with total duration up to 12 months. Role of steroid is controversial some literature suggest that steroid can use be in disseminated tuberculosis with meningitis, pericarditis, adrenal insufficiency and refractory hypoxemia.



Figure 2

Conclusion

Diagnosis of disseminated tuberculosis is based on cluster of clinical manifestation, sputum microscopy and chest x-ray, histopathology. Treatment mainly include antitubercular drugs. Involvement of anal region requires surgical intervention with antitubercular drugs. Risk factor should be modified. Some patients may require other measures of treatment.

References

1. Sharma SK, Mohan A, Gupta R, Gupta AK, Singhal VK, Kumar A, et al. Clinical presentation of tuberculosis in patients with AIDS: an Indian experience. *Indian J Chest Dis Allied Sci.* 1997; 39: 213-220.
2. Disseminated tuberculosis: a 10-year experience in a medical centre. *Medicine.* 2007; 86: 39-46.
3. Sharma SK, Mohan A. Extrapulmonary tuberculosis. *Indian J Med Res.* 2004; 120: 316-353.
4. Sharma SK, Mohan A, Sharma A, Mitra DK. Miliary tuberculosis: new insights into an old disease. *Lancet Infect Dis.* 2005; 5: 415-430.