Perianal Ulceration by Tuberculosis: A Case Report

M Afzal ud Din

Citation

M Afzal ud Din. *Perianal Ulceration by Tuberculosis: A Case Report*. The Internet Journal of Surgery. 2008 Volume 18 Number 1.

Abstract

It is rare to see a patient with perianal tuberculosis without any previous or active tuberclosis. A case of perianal tuberclosis without pulmonary tuberclosis or gastrointestinal tuberclosis will be discussed here.

INTRODUCTION

It is a well-known historical fact that the incidence of pulmonary tuberclosis has decreased after the advent of modern antitubercular (AT) drugs. Even the incidence of the extrapulmonary form of TB has been rare except in the HIV cases where it is going up. There is a tendency of rise in the number of TB patients due to increase in the incidence of AIDS patients ([1]).

Involvement of the perianal region in tuberculosis is a rare extrapulmonary form of the disease. It comprises less than 10 percent of all perianal diseases and 0.7 percent of all tuberculosis cases. Here we present a case of perianal TB without pulmonary or GIT tuberculosis.

CASE SUMMARY

A 14-year-old female presented to this hospital with history of perianal discharge and ulceration for two months. As per history, it started with a scratch which evolved into a wound and then the wound progressively enlarged. Treatment with local ointment, etc., had not helped the patient.

Systemic examination of the patient was done and revealed an afebrile patient with no lymphadenopathy. Examination of the chest was within normal limits. No mass was palpable in the abdomen. On local examination, a big irregular ulcer 2 by 3cm in size was found in the perianal area. Granulation tissue was found bulging from it. Access to the anal canal was difficult. Pus and mucous discharge was coming from it. CBC and other routine investigations were within normal limits. Chest x-ray revealed no pathology. A colonoscopy was done for evaluation. A few very small ulcers were found in the colon.

The biopsy of the perianal ulcer showed foreign-body type of granulation. There was no evidence of malignancy. The biopsy specimen from the lesion did not show acid-fast bacilli.

By strand displacement assay using specific primers and fluorescent-labelled detector probes, MTB complex from the lesion was found positive. The PPD test on the patient showed a negative reaction.

She was diagnosed as TB and put on treatment for tuberculosis including isoniazid, rifampicin, and pyridoxine.

On follow-up, it was seen that the patient was responding to the treatment and the patient is doing well.

DISCUSSION

Theoretiocally, we know that tuberclosis can affect any organ of the body from skin to brain to gut, etc., but incidence has decreased over the past few decades after the advent of AT drugs and use of pasteurised milk. However, TB of the gastrointestinal tract is still seen in few communities in the developing world. Tuberculosis of the perianal region is very rare. So to diagnose it needs a high index of suspicion. In one hospital study in Hong Kong only 3 cases were reported in 10 years ([2]). In one report from India 19 out of 122 cases of perianal fistula were diagnosed as tuberculous.

It can present as a recurrent fistula, non-healing fissure-like ulcer, perianal warty growth or abscess.

Diagnosis is difficult, especially when it presents there as the first manifestation of tuberculosis. Perianal tuberclosis has also been reported in the case of immunocompromised states like HIV where extrapulmonary tuberculosis is common ([3]).

Extrapulmonary TB is responsible for 15 percent of all cases of tuberculosis. It involves pleura in 25 percent, lymph nodes in 17 percent, genitourinary tract in 15 percent, bones and joints in 14 perecent, meninges in 6 percent, peritoneum in 4 percent and miliary TB is found in 8 percent. TB of the GIT accounts for one percent of all. In the GIT, the ileocaecal junction is the most commonly affected, involvement of jejunum and appendix is uncommon and involvement of anus is rare ([4]). Sultan et al. documented seven cases of anoperineal TB who had associated pulmonary TB ([5]). Akgun et al. reported a case of isolated perianal tuberculosis and they were able to isolate the organism on AFB staining and LJ medium culture ([6]). In an HIV-positive patient in one case report, diagnosis was reached after acid-fast staining and polymerase chain reaction and culture on LJ medium([3]).

TB of the GIT is mostly secondary to foci in the lungs. By ingestion of sputum it reaches the GIT. Other mechanisms have been considered like hematogenous or lymphatic spread. In our patient, no pulmonary focus was found.

There are many forms of perianal TB like ulcerative, verrucous or lupoid. The ulcerative form is most common where an ulcer with well-defined borders and mucopurulent discharge is seen. The verrucous form has a warty pattern extending into the anus. This can be as hemorrhoidal nodule, fistula or abscess ([7])([2]). In our patient no fistula or abscess was seen.

Crohn's disease is an important differential diagnosis. Ulcerative colitis, herpes simplex, syphilis, sarcoidosis, mycosis, amoebiasis, lymphogranuloma venereum and ulcerated neoplasms are other differential diagnoses ([7])([8]).But differentiating from Crohn's disease is difficult as both have a tendency for the ileocaecal region and have granulomas on histopathology; microscopic examination is needed ([6]). Acid-fast staining and polymerase chain reaction may be needed to get the diagnosis. Even cultures are needed to confirm the diagnosis and to get information about the sensitivity.

CONCLUSION

In any case of a perianal ulcer, tuberculosis should be kept in mind in differential diagnosis and should be included in the list of investigations.

References

1. Raviglione MC, Snider DE JR, Kochi A. Global epidemiology of tuberculosis, morbidity and mortality of a widespread epidemic. JAMA 1995; 273(3): 220-26
2. Chung CC, Choi CL, Kwok SP, Leung KL, Lau WY, Li AK. Anal and Perianal tuberclosis, a report of 3 cases in 10 years. J R Coll Surg Edinb 1997; 42(3): 189-190
3. Tabarsi P, Mansouri D, Edrissian O, Alaei A, Amin M, Mirsaeidi SM. Perianal tuberculosis in an HIV-positive patient. Eastern Mediterranean Health Journal, Vol. 12, No. 6; November 2006
4. Aktogu S, Yorgancioglu A, Cirak K, Kose T, Dereli SM. Clincal spectrum of pulmonary and pleural tuberculosis, a report of 5480 cases. Eur Respir J 1996; 9(10); 2031-5
5. Sultan S, Azria F, Bauer P, Abdelnour M, Atienza P. Anoperineal tuberclosis. Diagnostic and management considerations in seven cases. Dis Colon Rectum 2002; 45(3); 407-10
6. Agkun E, Tekin F, Ersin S, Osmanoglu H. Isolated perianal tuberclosis. Neth J Med 2005; 63(3): 115-7
7. Candella F, Serrano P, Arriero JM, Teruell A, Reyes D, Calpena R. Perianal disease of tuberculous origin; report of a case and review of literature. Dis Colon Rectum1999; 42(1): 110-2
8. Schmid ML, McKendrick MW, Lobo A, Leach M. A perianal ulcer. Lancet 1999; 353 (9156); 894

Author Information

Mohammad Afzal ud Din, MBBS, MS, MRCS
Department of Surgery, King Fahad Medical City