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Perianal Tuberculosis: A Case Report

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Abstract

Anal tuberculosis is an extremely rare extrapulmonary localization of tuberculosis. Digestive localization may occur in less than 1% of cases, and anal tuberculosis is much less frequent and represents less than 1% of all digestive involvement. A rare case of anal tuberculosis was reported in a 44-year-old man who had recently been diagnosed with pulmonary tuberculosis. A biopsy of the perianal lesion and bacteriological data confirmed perianal tuberculosis. Treatment with anti-bacillary drugs for a total of six months resulted in the complete healing of the perianal lesion. In conclusion, tuberculosis should be suspected in the presence of any isolated, chronic anorectal lesion, especially in an endemic country such as ours. A positive diagnosis of anal localization is not always easy, but in our case, the history of active pulmonary tuberculosis associated with the anal lesion facilitated the diagnosis.

Subject Areas

Gastroenterology & Hepatology

Keywords

Perianal Lesion, Anal Tuberculosis, Extrapulmonary Tuberculosis

1. Introduction

Tuberculosis remains a severe risk for individuals, especially in regions of the world where it is highly endemic [1], as is the case in our country, Morocco. Overall one-third of the world's population is currently infected with tuberculosis [2]. Digestive localization of tuberculosis represents less than one percent of all localizations, and even less; anal localization represents less than one percent of all digestive localizations [3]. We report a case of perianal tuberculosis in this paper.

2. Case Presentation

A 44-year-old man presented with a six-month history of anal lesions. His med-

ical history included chronic smoking (15 pack-years), pleuropulmonary tuberculosis recently diagnosed 20 days ago and currently on anti-bacillary antibiotics [rifampicin (R), isoniazid (H), pyrazinamide (Z), ethambutol (E)]. In addition, he had no history of chronic inflammatory bowel disease, sexually transmitted infection (STI) or risky sexual behaviour, or digestive or extra-digestive neoplasia. This patient also had no known history of proctological pathology.

The onset of symptoms dates back six months with the isolated appearance of a peri-anal lesion of little pain, gradually increasing in size, with no proctalgia, perineal discharge, transit disorders or rectal or dysenteric syndrome. The patient also reported a chronic productive cough, with asthenia, anorexia, night sweats and weight loss.

Clinical examination revealed a conscious, cooperative, apyretic patient, hemodynamically and respiratorily stable, with a soft abdomen and no palpable mass or intraperitoneal effusion syndrome. The cardiopulmonary examination was normal, and there were no palpable peripheral adenopathies. Clinical proctological examination in the genu pectoral position revealed a lateral peri-anal ulcer at the 7 o'clock position and 1.5 cm from the anal margin, 2 × 1 cm in diameter, rounded, with clean-bottomed, bright-red, granular margins, painless to palpation, and the presence of sequelae of external hemorrhoids (**Figure 1**). There was no fistula or anal fissure. The rectal examination was normal.

Standard blood tests are shown in **Table 1**. Human immunodeficiency virus (HIV) and syphilis serology tests were negative. The chest X-ray showed a heterogeneous opacity occupying one-third of the left hemithorax, with multiple clearing. It was associated with areolar images with infiltrates and reticulations (**Figure 2**). The recto-sigmoidoscopy was performed, with no detectable macroscopic abnormalities. The pathological examination of anal ulcer margin biopsies revealed an epithelioid granuloma with caseous necrosis and giant cells. The bacteriological culture of the swab from the perianal ulceration confirmed the presence of mycobacterium tuberculosis.

The patient continued his anti-bacillary treatment on a regimen of 2RHZE/4RH, with progressive improvement of the perianal lesion, weight regain, disappearance

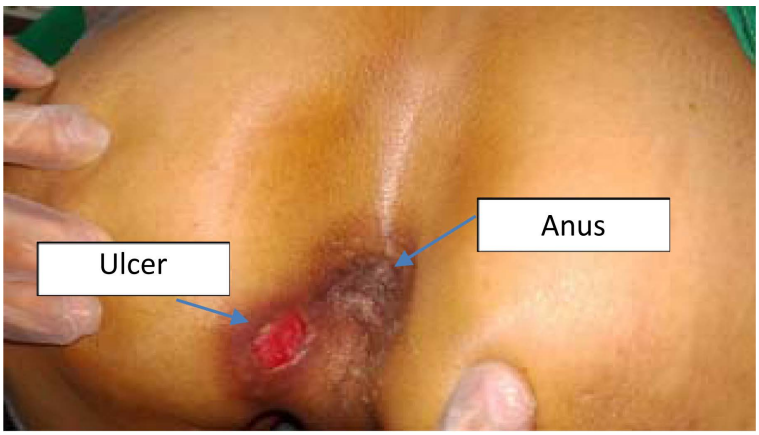

Figure 1. Perianal ulcer.

Table 1. Standard blood tests.

WCB	$13.2 \times 10^3/\mu L$
RBC	4.3 Mil/μL
PLT	$568 \times 10^3/\mu L$
Hb	11.4 g/dl
MCV	83 fl
Urea	0.25 g/l
Creatinine	6.8 mg/l
AST	25 IU/l
ALT	16 IU/l

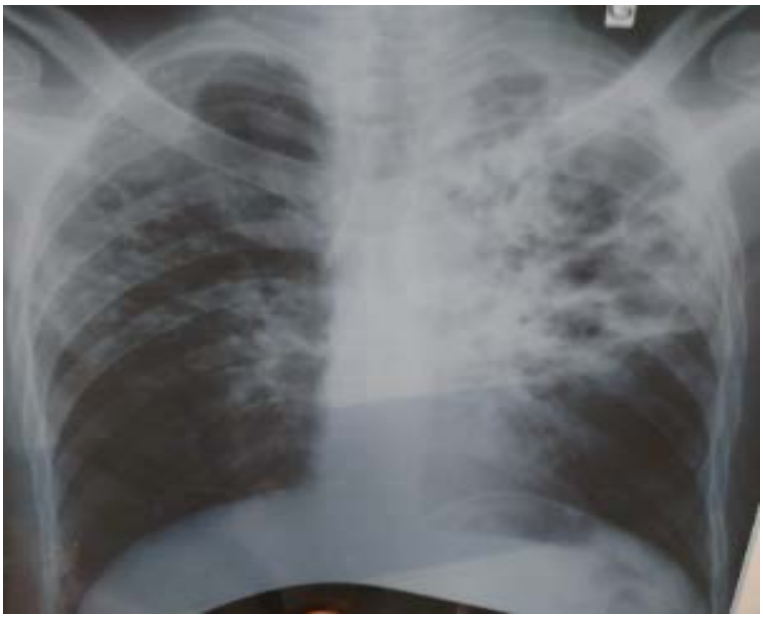

Figure 2. Frontal chest X-ray: lesions suggestive of pulmonary tuberculosis. Standard magnification times.

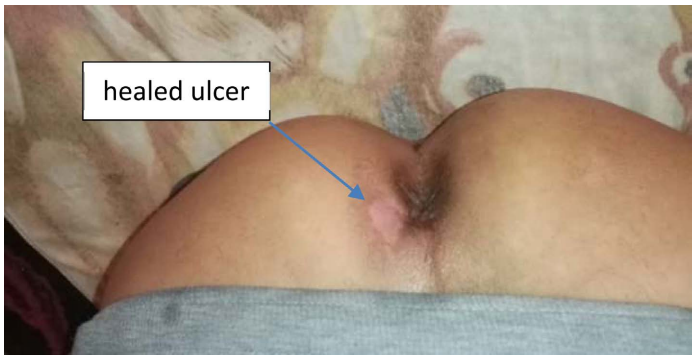

Figure 3. Perianal ulcer scar after anti-bacillary treatment.

of respiratory signs and total disappearance of the perianal ulcer after six months of anti-bacillary treatment (**Figure 3**).

3. Discussion

Anal tuberculosis is a rare type of tuberculosis, representing 0.7% of cases of extrapulmonary tuberculosis [4]. Although most cases occur in immunocompromised individuals, such as those with HIV infection, our case shows that anal tuberculosis can occur without HIV infection [5]. Any part of the digestive system can be affected by tuberculosis and digestive tract tuberculosis makes up 1% of all tuberculosis cases [6]. The most commonly affected part of the intestinal system is the ileocecal region. The involvement of the anus is even less frequently observed [7] [8]. Overall, 1% of gastrointestinal tuberculosis cases are anal tuberculosis [9].

Anal tuberculosis is generally difficult to diagnose [10] [11], but in our case, the diagnosis was facilitated by the patient's diagnosis of pulmonary tuberculosis three weeks earlier. Furthermore, our case raises a question about initial medical management, if the clinical examination had been complete during pulmonary tuberculosis, the personal lesion would have already been present and would have been detected by the patient's general practitioner.

Anal tuberculosis can present in a variety of macroscopic forms, such as ulcerative, verrucous, lipoid and miliary forms, the most common type being the ulcerative form, as was the case with our patient. Several differential diagnoses may be considered depending on the clinical presentation of anal tuberculosis, among them Crohn' disease with anoperineal localization, anal fistula, lymphogranulomatosis venereum, actinomycosis, perianal abscess, anal fissure, immunodeficiency states, sexually transmitted infections (chlamydia, gonorrhea and syphilis) and anorectal cancer [12]. The differential diagnoses considered in our patient were STIs, Crohn's disease and immunodeficiency. However, a history of pulmonary tuberculosis under treatment facilitated the positive diagnosis in our case.

4. Conclusion

Anal tuberculosis is a rare manifestation of extrapulmonary tuberculosis. However, it should be considered in the presence of any isolated chronic anorectal lesion, especially in a tuberculosis-endemic country such as Morocco. A positive diagnosis of anal localization is not always easy, but in our case, the history of active pulmonary tuberculosis associated with the anal lesion facilitated the diagnosis.

Ethical Considerations

Published with the written consent of the patient.

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Conflicts of Interest

The author declares no conflicts of interest.

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