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Polyfistulated Foot Plate: Thinking About Actinomycosis

A Mejouar[1*], F. Hali[1], K. Baline[1], K. Mabchour[2], M. Diouri[2], M. Soussi[3], S. Chiheb[1]

[1]Department of Dermatology and Venereology, Faculty of Medicine and Pharmacy - Hassan II University -Casablanca
[2]Plastic Surgery Department, Faculty of Medicine and Pharmacy - Hassan II University -Casablanca
[3]Myco-parasitology Department, Faculty of Medicine and Pharmacy - Hassan II University -Casablanca

***Corresponding author:** A Mejouar
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Abstract | **Case Report**

Introduction: Mycetomas are chronic skin and subcutaneous progressive disease caused by bacterial agents (actinomycetoma in 60% of cases), or fungal (eumycetoma in 40% of cases). ***Observation*:** This is a 47-year-old patient from a rural background, who has a notion of walking barefoot and pre-eminent trauma with a piece of wood. She has presented, for 20 years, a polyfistulisedmultinodular cupboard of the back of the right foot measuring 10cmx 6cm, firm and painless with white-yellowish grains at the pressure and absence of lymphadenopathy. A first cutaneous biopsy showed polymorphous diffuse granuloma appearance with no sign of malignancy. The bacteriological and mycological study of cutaneous fragments and grains was not contributive. X-ray of the foot did not reveal bone involvement. The patient underwent a large excisional biopsy of the polyfistulised cupboard. The histological study of the operative specimen showed an aspect in favor of actinomycosis. The patient underwent a skin graft and was treated with trimethoprim-sulfamethoxazole 800 mg / 160 mg: 2 cp / d because the patient is allergic to penicillin with a good clinical course. ***Discussion***: We report this case to draw attention to the interest to evoke the diagnosis of actinomycosis before any polyfistulisedmultinodular placard of slow evolution. Actinomycosis is a rare granulomatous bacterial infection. It is an endemic pathology in tropical and subtropical regions. The clinical picture produces a polylobed and fistulizedtumor which releases, through the orifices, filamentous grains of variable color. The diagnosis of mycetomais based on the mycological, bacteriological and histological confrontation. Actinomycetomas generally respond to antibiotics in general. ***Conclusion:*** Mycetoma is a rare disease in Morocco. The often slow evolution is at the origin of a diagnostic delay. Actinomycetomas are sensitive to antibiotic therapy. Prevention is crucial, based on the wearing of protective footwear and the disinfection of wounds.

Keywords: Mycetomas, bacterial, lymphadenopathy, diagnostic, disinfection.

INTRODUCTION

Mycetomas are chronic skin diseases and subcutaneous tissues of progressive evolution caused by bacterial agents (actinomycetoma in 60% of cases), or fungal (eumycetoma in 40% of cases).

CASE REPORT

We report the case of an actinomycoticmycetoma of the foot to emphasize the importance of discussing the diagnosis in the context of any polyfistulised multinodular placard with slow evolution.

This is a 47-year-old patient from a rural background, with a barefoot concept and trauma by a piece of wood. She presented, for 20 years, a polyfistulisedmultinodular cupboard of the back of the right foot (Figure 1) measuring 10cmx 6cm, firm and painless with white-yellowish grains at the pressure and absence of lymphadenopathy. A first cutaneous biopsy showed polymorphous diffuse granuloma appearance with no sign of malignancy.

The bacteriological and mycological study of cutaneous fragments and grains was not contributive. X-ray of the foot showed no bone involvement (Figure 2). The patient underwent a large excisional biopsy of the polyfistulised cupboard.

The histological study of the operative specimen showed an aspect in favor of actinomycosis. The patient underwent a skin graft (Figure 3). In the absence of other visceral locations, the diagnosis of primary cutaneous actinomycosiswas retained.

The patient received trimethoprim-sulfamethoxazole 800 mg / 160 mg: 2cp/d because the patient is allergic to penicillin with clinical improvement.

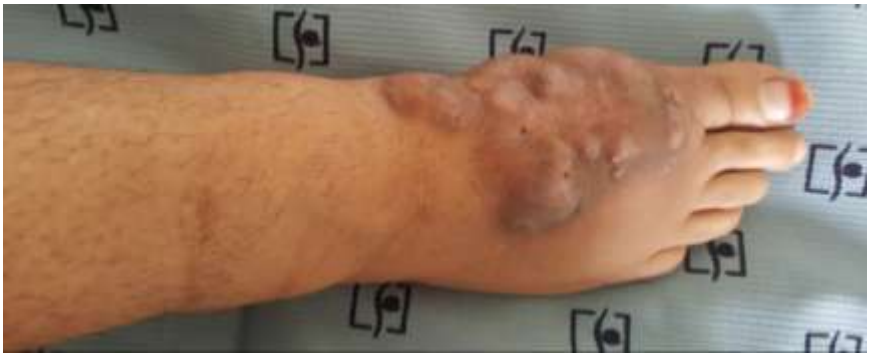

Fig-1: PolyfistulisedMultinodular Closet of the Back of the Foot

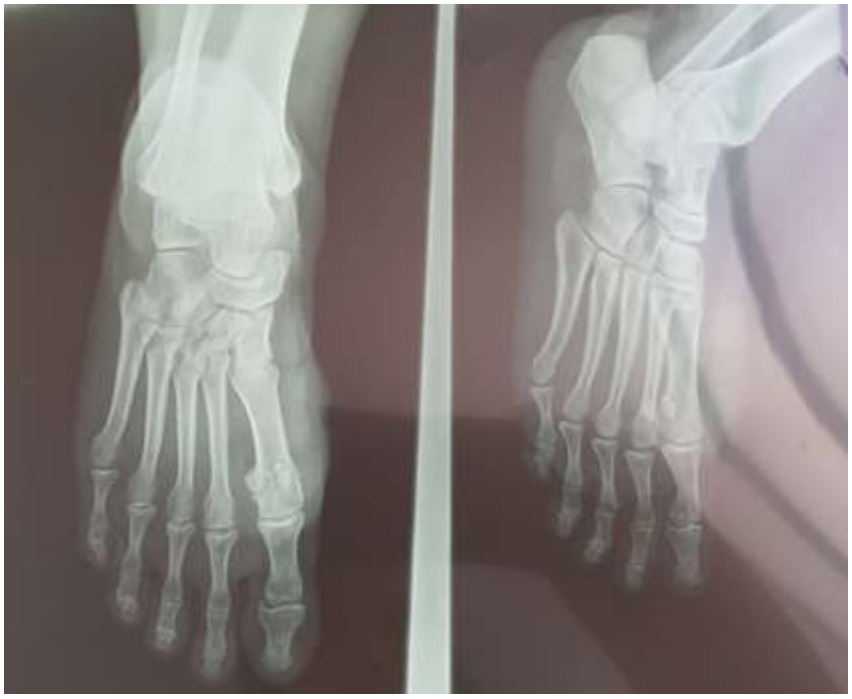

Fig-2: Foot radiography (face and profile)

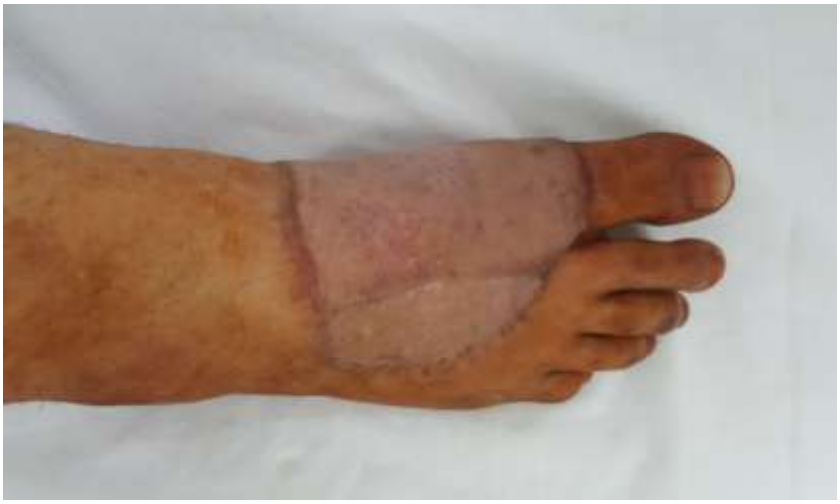

Fig-3: large excision biopsy of the cupboard + graft

Discussion

Mycetoma is a chronic inflammatory disease slowly progressivecaused by a branched Gram-positive bacterium of the genus Actinomyces. Affecting the cutaneous and subcutaneous tissues. It is an anaerobic or microaerophilic gram positive bacillus, filamentous with bulging ends, non-sporulated, saprophyte of the oral cavity, gastrointestinal tract and genital tract of the woman [1-3].

Mycetoma is an endemic pathology in tropical and subtropical regions. It is rare and little known in Morocco, reported as sporadic cases [4]. Actinomycosis occurs most often in three areas of the body: cervicofacial (55% of patients), abdominopelvic (20%) and pulmonothoracic (15%) [5]

The involvement of the lower limbs can occur by secondary involvement, by direct extension or by hematogenous propagation. However, primary actinomycosis of a limb is very rare [6]. Which is the particularity of our observation. Actinomycosis is seen at any age, more commonly in adults (between 30 and 50 years) and is rare in women [7, 8] Contamination is often secondary to skin break-in: contusion, surgery, or trauma that may go unnoticed [9, 10].

The clinical picture is presented as a firm, painless swelling sometimes polylobée slows evolution. Then nodules appear and drain to the skin by multiple fistulas, resulting in a poly-fistulized pseudo-tumor appearance. In the active phase, these fistulas discharge a purulent fluid containing filamentous grains, of different colors depending on the causal, pathognomonic germ of the mycetoma [11, 12]. Regional lymphadenopathies are possible.

Paraclinical diagnosis can be made using imaging (radiography, ultrasound, CT and MRI), cytology (fine needle aspiration), bacteriological culture and anatomopathology (tissue biopsy) [13-15]. The clinical picture is not very suggestive and the bacteriological study is difficult [16].

The lack of demonstration of Actinomyces in the tissue of exeresiscan probably is explained by a self-medication withantibioticwhich the patient would not remember. The most commonly isolated species is Actinomycesisraelii [17].

Actinomyces is usually sensitive to penicillin G, which is the first-line treatment of penicillin V. In case of known allergy to penicillin, as is the case with our patient, it is possible to treat it effectively with appropriate antibiotic therapy: usually sulfamethoxazoletrimethoprim [18] or macrolides (erythromycin), lincosamines (clindamycin), sulfonamides, tetracyclines, rifampicin [19-21], ciprofloxacin or imipenem [22].

The use of surgery is not systematic [23-25]. But the rule in the treatment of actinomycetoma lies in the combination of medical treatment and surgery that is preferable to amputation [26].

Actinomycosis, diagnosed early, progresses favorably with antibiotic therapy, as opposed to fungal mycetoma, which is resistant, recurrent and leads to amputation. In the absence of treatment, progressive bone and visceral involvement is inevitable [27].

Conclusion

Mycetoma is a rare diseas in Morocco. The often slow evolution is at the origin of a diagnostic delay. The treatment is not codified and is often prolonged. Actinomycetomas are sensitive to well-adapted antibiotic therapy. Prevention remains of great interest, based mainly on the wearing of protective footwear and the disinfection of wounds.

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