

## Orificial Tuberculosis in an Immunocompetent Careworker

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Orificial tuberculosis has rarely been reported, especially in immunocompetent patients. It accounts for almost 2% of cases of cutaneous tuberculosis (1). The disease is characterized by one or more painful ulcerations involving mucous membranes and peri-orificial areas.

### CASE REPORT

We report here the case of a 28-year-old Afro-Caucasian woman who presented with multiple ulcerations affecting both buccal and genital mucosa. The patient is a medical resident working in an infectious disease department in Accra, Ghana, West Africa. She first noticed inflammatory nodular lesions inside her mouth, which broke up one month later, becoming painful and ulcerated. At that time, she prescribed herself amoxicillin + clavulanic acid treatment (1 g three times a day for 7 days), despite which her condition worsened, with fever, asthenia and weight loss (3 kg in one month). She was therefore referred to the tropical diseases department in Bordeaux, France. At admission, her core temperature was 39°C. Clinical examination disclosed bilateral axillar inflammatory lymph nodes, 1 cm in diameter, associated with infra-centrimetric cervical adenopathies. Painful ulcerations were noted in the buccal (Fig. 1) and genital mucosa (Fig. 2), with different clinical manifestations. Three aphthoid lesions of less than 1 cm diameter were noted in the buccal mucosa, whereas there were multiple very painful ulcerations ranging in size from less than 1 cm to more than 2 cm in the genital area. Laboratory examinations were within normal limits, except for C-reactive protein at 40 mg/l. Serologies for sexually transmitted diseases, including syphilis and human immunodeficiency virus type 1 (HIV-1) and HIV-2, were negative. PCR for human herpes virus type 1 and type 2, cytomegalovirus (CMV) and Epstein-Barr virus (EBV) from biopsy samples were negative. A vulvar biopsy disclosed pyoepithelioid granulomas, although Ziehl-Neelsen staining was



Fig. 1. Painful aphthoid lesion of the mouth.



Fig. 2. Multiple painful ulcerations of the genital mucosa.

negative. Cultures and PCR from lymph node biopsy were positive for *Mycobacterium tuberculosis*. A thoraco-abdominal computed tomography scan revealed multiple cervical adenopathies without pulmonary and genital involvement. The patient was started on anti-tuberculosis treatment, with rifampicin, pyrazinamide, isoniazid and ethambutol for a total of 2 months, followed by an additional 4 months' therapy with isoniazid and rifampicin. One month after initiation of therapy, buccal and genital ulcerations, as well as other clinical symptoms, completely resolved. Six months later, the patient's local and general condition remained unremarkable.

### DISCUSSION

Orificial tuberculosis usually results from autoinoculation of the infectious agent in patients with advanced internal tuberculosis of the lungs, gastrointestinal or genitourinary tract. Haematogenous or lymphatic dissemination from another active source of tuberculosis has also been described (2). Classically, oedematous reddish or yellowish nodules appear in the oral or genital mucosal. These nodules progress rapidly to painful circular or irregular ulcers with undermined edges and soft consistency, as seen in our patient. Although the diagnosis may be easy to make in patients with evident visceral tuberculosis, it can be challenging in very rarely reported immunocompetent patients with no history of internal tuberculosis (3, 4). As a marker of advanced internal involvement, orificial tuberculosis may indicate a poor prognosis, even when anti-tuberculous therapy is instituted (5). In our case, there was no evidence of internal genital

or pulmonary involvement and the lesions remarkably cleared after one month of therapy. This may be an indicator to distinguish between two forms of the disease, depending on associated visceral involvement. One hypothesis that may be advanced in our case is that of a professionally hospital-acquired contamination, although it is unclear how these ulcers developed in an immunocompetent health worker with no evidence of visceral tuberculosis. Further haematogenous and lymphatic spread may have occurred, resulting in lymph node involvement.

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