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CASE REPORT/CAS CLINIQUE

Disseminated histoplasmosis caused by *Histoplasma capsulatum* var. *duboisii* in a non-HIV patient in Burkina Faso: Case report

Histoplasmose disséminée due à Histoplasma capsulatum *var.* duboisii *chez une patiente immunocompétente au Burkina Faso : observation d'un cas*

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Burkina Faso;
Mycological diagnosis;
Fluconazole

Summary Histoplasmosis is a fungal infection due to *Histoplasma capsulatum*. The African form of this mycosis, caused by *Histoplasma capsulatum* var. *duboisii*, remains rare. We report a case of disseminated African histoplasmosis with skin, lymph nodes, bones and viscera localizations. The 22-year-old patient was HIV-seronegative and was considered immunocompetent. The presence of *Histoplasma capsulatum* var *duboisii* in ulcerations and a nodule pus aspiration was confirmed by direct microscopic examination and by culture. The medical treatment was based on fluconazole. Even though a regression of the symptoms was observed, the patient died. In disseminated African histoplasmosis, an early laboratory diagnosis must be carried out for accurate treatment.

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MOTS CLÉS
Histoplasmose disséminée ;
Patient immunocompétent ;
Histoplasma capsulatum var. *duboisii* ;
Burkina Faso ;
Diagnostic mycologique ;
Fluconazole

Résumé L'histoplasmose est une infection fongique due à *Histoplasma capsulatum*. La forme africaine de cette mycose, causée par *Histoplasma capsulatum var. duboisii*, est encore relativement rare. Nous rapportons un cas d'histoplasmose africaine disséminée avec localisations cutanées, ganglionnaires, osseuses et viscérales. La patiente âgée de 22 ans était séronégative vis-à-vis du VIH et était immunocompétente. La présence de *Histoplasma capsulatum* var. *duboisii* dans les ulcérations et ponction de nodule a été confirmée par l'examen mycologique direct et la culture. Le traitement médical a reposé sur le fluconazole. En dépit d'un amendement des signes cutanés observé, la patiente est décédée.

Introduction

Histoplasmosis is a mycosis due to a dimorphic fungus (*Histoplasma capsulatum*) which is described in two varieties: var. *capsulatum* and var. *duboisii*. Histoplasmosis caused by *Histoplasma capsulatum* var. *duboisii* is known as African histoplasmosis because its geographic occurrence is limited to Africa [6,7,12,14,15]. Disseminated case of African histoplasmosis remains rare [10,13]. We hereby report a disseminated case of this African histosplasmosis involving the skin, lymph nodes, bones and viscera in a HIV-negative adult and a review of literature on similar cases.

Case report

A 22-year-old Burkinabe woman was admitted with lumbago, sciatica pain and fatigue for nine months followed by nodules and generalized weakness for 3 months. The vital signs of the patient included a temperature of 38.3 °C, a heart rate of 140 beats/min and respiratory rate of 34 cycles/min. Physical examination disclosed a conjunctival pallor, facial lesions (2—6 mm) evoking *molluscum contagiosum*, .nodules (1—4 cm), sometimes soft sometimes fistuled spreaded over the tegument. Palpation of lymph nodes showed axillar (5—6 cm), cervical (5—7 cm) and inguinal (1 cm) adenopathies bilaterally. Paralumbar mass had evolved into a cold abscess (12 cm × 10 cm) (Fig. 1). Neurological examination found monoplegia of the left lower limb and a monoparesis of the right lower limb. Remaining body parts were without pathological findings. Laboratory tests revealed hemoglobin level at 7.4 g/dL, sedimentation rate of 100 mm/hour and C-reactive protein of 1000 mg/L. Bacterial culture of pus and search for acid-fast bacilli were negative. HIV serology, which was done 3 times, was also negative. A multifocal computed tomography showed: absence of brain abnormalities; bilateral pleural effusion and abundant intra-abdominal effusion; a vertebral fracture of L1 and L2 and a decrease of the posterior wall at L1-L2. Direct examination of a nodule pus stained with Giemsa showed large yeasts (8-15 μm) with a thick wall and a narrow budding, consistent with *Histoplasma capsulatum* var. *duboisii* (Fig. 2). Fungal culture grew *Histoplasma* sp. (Fig. 3).

The patient was treated with fluconazole (800 mg/d) and was given four blood transfusions for the management of the persistent anemia. After four months of treatment, regression of skin lesion is observed but anemia and impaired general condition persisted and the patient died.

Discussion

The disseminated form caused by *H. duboisii* in our patient is manifested as cutaneous lesions, lymph nodes and bones involvements. The appearance of cutaneous lesions, which dispersed over the whole integument, is described in the

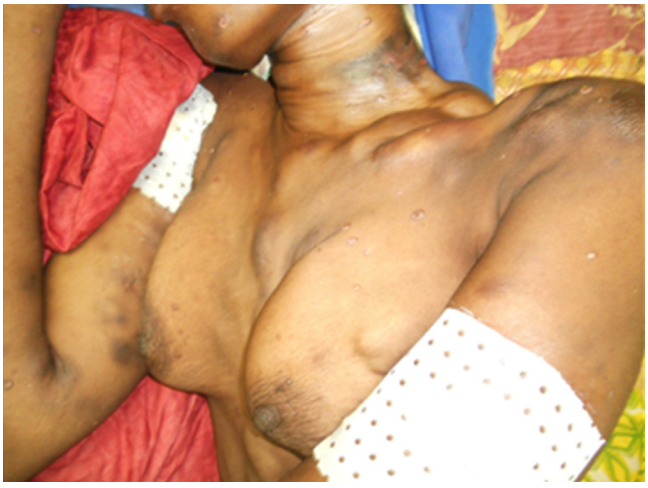

Figure 1 Aspect of disseminated cutaneous lesions of histoplasmosis in the patient.
Lésions cutanées disséminées de l'histoplasmose chez notre patiente.