

Cutaneous histoplasmosis in a patient undergoing chemotherapy: A case report

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Abstract

This is a 63 year old patient, history of diagnosed vulvar neoplasm, received 7 courses of chemotherapy. Follow-up for Hodgkin's lymphoma refractory to several lines of treatment. The history of the disease dates back 3 days before her admission with the onset of fever syndrome at 39° with a dry cough evolving in a context of preservation of the general condition, which motivates her consultation in the emergency room. She presents two swellings at the level of the foot and the hand budding keratotic, indurated well limited. These two lesions are biopsied. Histoplasmosis is retained as a diagnosis. The infection is caused by the inhalation of spores suspended in the air of *Histoplasma capsulatum*, a dimorphic saprophytic fungus present in soil contaminated by bird or bat droppings. Occurs as filamentous in the environment and in vitro, and yeast-like in tissues at 2-4 μm in size, usually associated with immunocompromised patients, special stains for Grocott and PAS highlight the germ.

Keywords: Vulvar; Neoplasm; Hodgkin's; Lymphoma; Histoplasmosis

1. Introduction

This is a 63-year-old patient with a history of vulvar neoplasm diagnosed and who underwent vulvectomy in March 2023, received 7 courses of chemotherapy. Follow-up for Hodgkin's lymphoma refractory to several lines of treatment.

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1.1. The clinical examination

Conscious patient, GCS: 15/15, without respiratory difficulty, FR 20c/mi with hemodynamic stability: BP 112/50; FC 91 beats/min, at the level of the abdomen painless umbilical swelling, mobile, expulsive to cough, reducible and presents two swellings at the level of the foot and the hand budding keratotic, indurated well limited. (Fig 1). These two lesions are biopsied.

The histological examination shows histiocytic infiltrate at the level of the dermis, uniform oval yeasts associated with inflammatory infiltrate and granulomatous reaction in places. (Fig 2) HE, These yeasts are PAS positive (Fig 3). Histoplasmosis is retained as a diagnosis. The patient is doing well with disappearance of the lesions after treatment.

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Figure 1 Well-limited hand injury

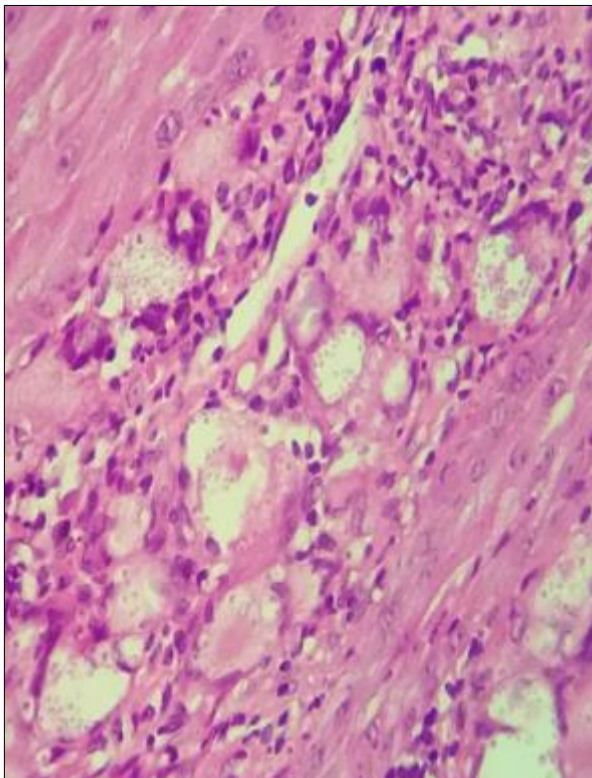


Figure 2 Uniform oval yeasts

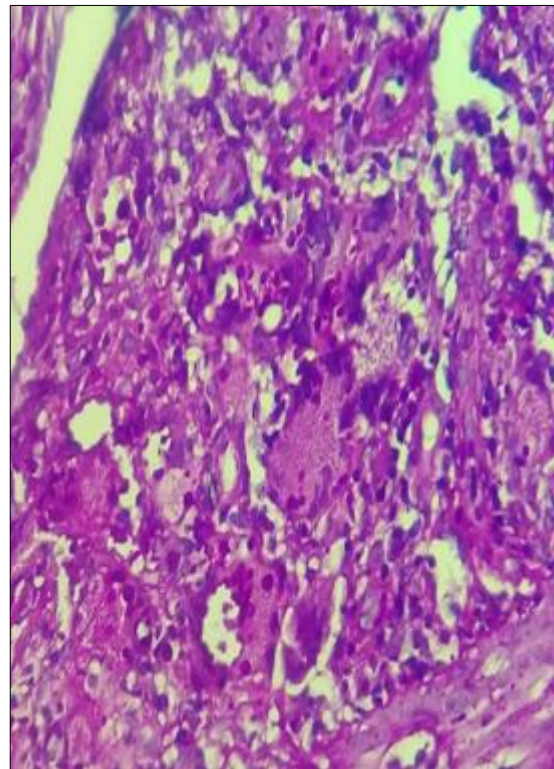


Figure 3 Uniform oval yeasts PAS positive

Infection is caused by inhalation of airborne spores of *Histoplasma capsulatum*, a dimorphic saprophytic fungus found in soil contaminated with bird or bat droppings (1). It occurs as filamentous in the environment and in vitro, and yeast-like in tissues at a size of 2-4 μm , usually associated with immunocompromised patients, special stains for Grocott and PAS highlight the germ.

There are two main varieties of the capsulatum species:

- Variety capsulatum causing American histoplasmosis (four subspecies) most common variant.

- Variety *duboisii* causing African histoplasmosis. Present worldwide, endemic in the Americas, especially in Mexico, Brazil and the Mississippi and Ohio Valley regions of the United States and increasing in Southeast Asia, India and China, due to the favorable climate, quite a few cases also in Africa and Australia. (2,3)

The differential diagnosis is broad and includes other infectious diseases such as disseminated herpes simplex, syphilis, cutaneous tuberculosis, atypical mycobacteria, coccidioidomycosis, cryptococcosis, blastomycosis and leishmaniasis. (2).

2. Conclusion

Histoplasmosis is an opportunistic fungal infection, which usually affects immunocompromised patients, whose anatomopathological diagnosis requires special staining to eliminate other infectious entities.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

The present research work does not contain any studies performed on animals/humans subjects by any of the authors.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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