

A Case Report on Histoplasmosis Infection; A Nasal Lesion Presenting as Nasal Bleeding, a Rare Presentation in Our Part of the World

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Abstract

A case report on Histoplasmosis Infection; a nasal lesion presenting as nasal bleeding.

We present a 68 years old male presenting with intermittent nasal bleeding and nasal discharge for about four months, and a penile ulcer for two months duration. There was a nasal septal perforation with friable edges and a chronic penile ulcer. We did an RNE and biopsy from the nasal septum and from the penile ulcer. The histology reported as granulomatous inflammation, Histoplasmosis. He was started on antifungal treatment.

Keywords: Nasal Septal Perforation; Penile Ulcer; Histoplasmosis

Introduction

Histoplasma capsulatum is a dimorphic fungus found in soil that remains in a mycelia form at ambient temperatures and grows as yeast at body temperature in mammals. The infection causes histoplasmosis. The fungus is found in temperate climates throughout the world, but it is endemic to river valleys in the United States, eastern and southern Europe, and parts of Africa, eastern Asia, and Australia. Contaminated soil can be potentially infectious for years.

In Sri Lanka it is not endemic. It was first detected in Sri Lanka in 1975 and a subsequent skin test survey found positive skin test reactivity in 4% of healthy adults and 6.3% of patients with chronic lung diseases.

Most patients are asymptomatic. Those who develop clinical manifestations are either immunocompromised or are exposed

to a high quantity of inoculum. *Histoplasma* species may remain latent in healed granulomas and recur. Patients commonly present with pulmonary histoplasmosis, but can present with ulcers and granulomas elsewhere. Both sexes are equally affected.

Case Report

A 68 years old male complaints of intermittent nasal bleeding and nasal discharge for about four months, and a penile ulcer for two months duration.

He noticed intermittent nasal discharge and crusting followed by scanty nasal bleeding when clearing his nose. Over the past three months he has noticed a small defect in the nasal septum which has friable edges which bleed with removal of crusts. There was no associated breathing difficulty or whistling noise with breathing.

He had also noticed an ulcer in the penis for two months which has not got cured with usual treatments.

There were no urinary symptoms like dysuria, hematuria or urinary retention.

He has noticed weight loss, malaise, intermittent cough but no episodes of blood in sputum or profuse productive cough.

He did not have abdominal pain, altered bowel habits or mucosal ulcers in mouth or other genital ulcers.

He is on oral hypoglycemic agents (metformin) for about ten years and having regular clinic follow up and has good glycaemic control.

He is a farmer, doing paddy and vegetable cultivation. His sexual history is unremarkable. There is no history of cocaine, cannabis or other substance abuse.

Examination

There was a perforation in the nasal septum with crusting and granulation tissue in the margin; it was about 0.5 to 1 centimeter in diameter. There was scanty bleeding when crusts were disturbed. There were no polyps, masses or other lesions in the nose. Posterior Rhinoscopy was normal.

There was an ulcer close to the edge of glans penis with a necrotic base. Bilateral discrete mobile superficial and deep inguinal lymph node enlargements noted.

Management

Oral Itraconazole 200 mg was started as treatment.

Initially Itraconazole was given twice daily for two weeks and liver function tests repeated at two weeks then to continue for two months.

Then a daily dose of 200 mg was planned to continue for six months. Periodic ophthalmological assessment, blood investigations and liver function assessment were planned on outpatient clinic basis.

The expectant outcome is healing of the penile ulcer with a small scar and healing of the nasal septal ulcer. There was a residual perforation in the nasal septum of about 0.5 centimeter in

diameter which was asymptomatic. If there remains a significant symptomatic perforation, he may need a mucosal graft. Another option is a device closure method; prosthesis to keep the perforation closed. If these interventions fail, enlarging the perforation also can resolve the problems like whistling, crusting and the sense of airflow limitation.

The need for life-long antifungal maintenance therapy was to be considered at six months to prevent relapse.

Discussion

Our patient a 68 years old male presented with a nasal septal wound and a penile ulcer as the most obvious complaints. The duration of symptoms and the constitutional symptoms suggest a chronic inflammatory disease.

Evaluation of findings

In the clinical history, constitutional symptoms, nasal and penile ulcer initially suggested syphilis without much evaluation. The serological tests excluded the possibility of syphilis.

Lymphadenopathy and the lung signs pointed towards chronic lung pathology. He has had a chronic cough, history of smoking, weight loss and chest X-ray signs which pointed towards chronic lung pathology although the penile ulcer did not correlate well with a common cause like a lung carcinoma or Mycobacterium tuberculosis. The reported chest X-ray and the Mantoux test helped to narrow down differential diagnoses.

Initially we regarded the penile ulcer as a different pathology as they were not obviously connected.

The differential diagnosis of Histoplasmosis was not considered initially till the basic blood investigations and the blood picture was available which made a hematological malignancy less likely.

The patient was not acutely ill although a chronic inflammatory disease condition was suspected from the long duration and constitutional symptoms.

We relied on the histology for a definitive diagnostic help.

There were no signs and symptoms to suggest central nervous system involvement, cardiovascular system involvement or gastrointestinal system involvement.

Differential diagnosis:

- Tuberculosis
- Syphilis
- Histoplasmosis
- Sarcoidosis
- Lymphoma
- Lung tumor:

Work up

Basic blood investigations, blood picture, blood culture and liver functions assessed. Expert opinion taken from the consultant surgeon, consultant hematologist, consultant microbiologist and the consultant venerologist.

Examination under anesthesia of the nose and Para nasal sinuses done with rigid nasal endoscopy by the author; a biopsy taken from nasal septum ulcerated edge. At the same time multiple biopsies taken for histology from the penile ulcer by the author with help from the general surgical team.

The chest X ray was sent for reporting by the consultant radiologist.

A computerized tomography of chest, abdomen and cervical lymph node biopsy was contemplated on if the above investigations did not point to a definitive diagnosis.

Histology

- Biopsy from nasal lesion; granulomatous inflammation histoplasmosis.
- Multiple coronal edge biopsy of penis; histoplasmosis [1-5].

Conclusion

Histoplasmosis is uncommon in Sri Lanka and south Asia. Presentation of an ulcer may point to other differentials and may delay the diagnosis. Most of the patients remain asymptomatic, hence are not detected. Therefore, it is very important to treat and follow-up these patients to prevent complications and relapses.

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