

Candida Parasitosis Infection of the Lung: A Case Report

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Abstract: *Candida pneumonia is a rare and challenging infection of the lung because of lack of established, reliable clinical criteria for making the diagnosis. We report a case of 34 year old female who developed candida parasitosis pneumonia. There was no evidence of immunodeficiency. Bronchial washings confirmed the diagnosis of pulmonary candidiasis. This patient achieved a favorable outcome within 14 weeks treatment with fluconazole.*

Keywords: pulmonary candidiasis, pneumonia bronchial washings fluconazole

1. Introduction

Candida is a part of normal oropharyngeal flora and upper respiratory tract and vagina. Candida pneumonia, however is rare infection of lungs most commonly seen as a part of disseminated candida infection associated with predisposing clinical circumstances such as a long term antibiotic use, hematologic malignancy or severe immunosuppressive states^{1,2}

The majority of Candida pneumonia cases are secondary to hematological dissemination of Candida organism at distant site, usually the gastrointestinal tract or skin³. The diagnosis of pulmonary candidiasis is difficult because there is no clinical or radiological presentation. Moreover presence of Candida in sputum or other respiratory tract infection often represents contamination⁴. A definitive diagnosis of candida pneumonia relies on pathologic findings of pathological findings of pulmonary parenchymal invasion in histopathological samples^{5, 6}. Furthermore, candida pneumonia has high morbidity and is often fatal

2. Case Report

A 34 year old female patient, presented with complaints of low grade fever for 7 months, cough with minimal expectoration on and off for 4 months with no history of comorbidities and no history of addictions

On examination patient had grade 2 clubbing and Respiratory System did not reveal any abnormal findings

The patient was treated as bacterial pneumonia initially

Blood investigations revealed

Hemoglobin	10.8
Total counts	9400
Differential counts	Neutrophil 62 Lymphocyte 29

	Monocyte 6 Eosinophil 3 No basophils
ELISA - HiV HbsAgAntiHCV	Negative
BT/CT	1'20"/2'40"
Renal function tests	Normal
Liver function tests	Normal

Bronchoscopy was normal and no obvious intrabronchial growth was seen, bronchial washings revealed the following

MGIT (liquid culture for Mtb)	Negative
CBNAAT for M tb	Negative
AFB smear	Negative
AFB culture (LJ medium)	No growth seen
Fungal culture	Candida parapsilosis

Fungal culture sensitivity report

Azoles - Voriconazole	Sensitive
Fluconazole	Sensitive
Echinocandins - Micafungin	Sensitive
Caspofungin	Sensitive
Other antifungals - Flucytosine	Sensitive
Amphotericin B	Sensitive



Chest xray at presentation suggestive of multilobar consolidation



Serial chest xrays during and end of treatment

Treatment: patient received 3 months of fluconazole and was monitored regularly

3. Discussion

Candida is widespread in the environment and a common human commensal. The diagnosis of pulmonary candidiasis is still controversial and the detection of primary fungal infection requires a lung biopsy⁷. However in routine practice, lung biopsies can be used for the management of patients with suspected candida infection⁸.

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