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Plumonary Candidiasis in a sixteen year old Zambian African Girl

CASE REPORT

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INTRODUCTION

Pulmonary Candidiasis is amongst the rare fungal infections of the bronchopulmonary system encountered on the African continent. Although a few cases of the disease have been reported in certain areas of the continent, none has been described in Zambia.

CASE HISTORY

The patient is a sixteen year old girl who was admitted to Kitwe Central Hospital for the first time with clinical complaints of productive cough, chest pain, difficulty in breathing, general body weakness and joint pains of two months duration.

EXAMINATION

Ill-looking girl, toxic, restless, sweating profusely, mildly anaemic and slightly dehydrated. The lips were dry and covered with painful sores. The tongue was dry, coated and covered with thrush on its posterior portion. The tonsils were inflamed and enlarged. Respiration was rapid, 36/min., pulse rate was 110/min, blood pressure was 110/70 mm Hg. and body temperature was 38°C. Physical examination of the chest revealed bilateral diminution of breath sounds and diffuse crepitations over both lung fields. Examination of the heart and the other body systems did not reveal any significant physical abnormalities.

INVESTIGATIONS

Chest X-ray – Postero-anterior View: Bilateral patchy areas of infiltration (Figs. 1 and 2).

Sputum Examinations for A.A.F.B. negative on four occasions.

Sputum culture – No pathogens isolated on three occasions.

Sputum examination for fungal hyphae and Mycelliae: Yielded Candida species on three occasions.

Heaf test : was negative.

HAEMOGRAM – HB	–	7.5 G%
W.B.C.	–	13,600
Polymorphs	–	60%
Lymphocytes	–	34%
Monocytes	–	1%
Eosinophils	–	5%
Platelets	–	257,000
E.S.R.	–	70 mm

BLOOD

Cultures for fungal organisms	– Negative
Cultures for bacterial pathogens	– Negative
Widal Test	– Negative

FIG. I

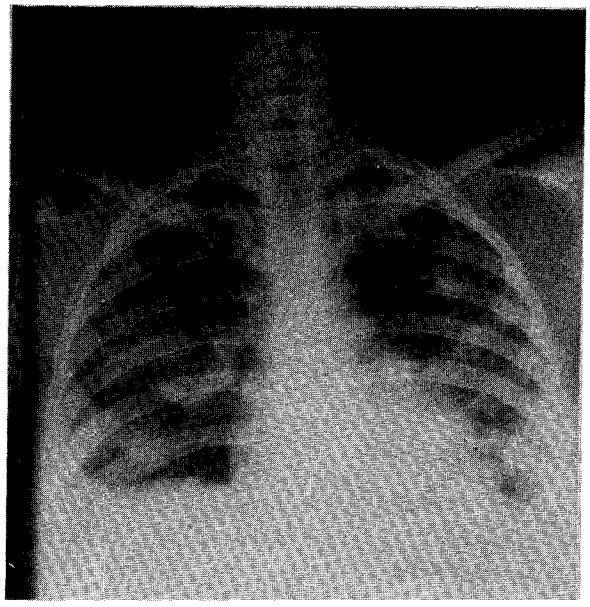
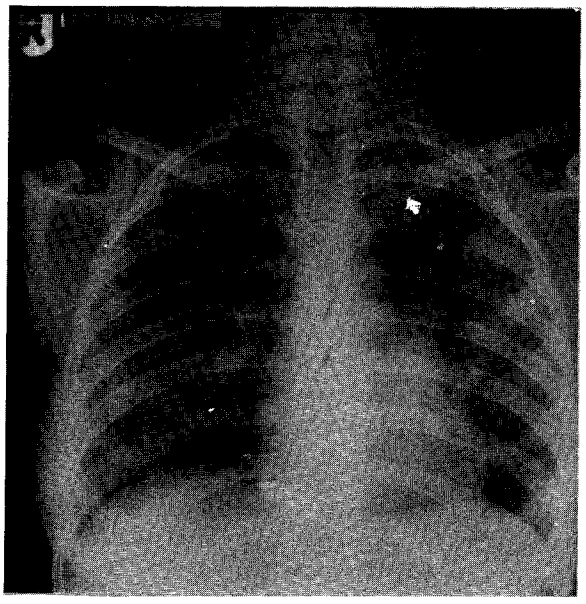


FIG. II



C.S.F.	–	No fungae or other bacteria were isolated.
L.F.T.	–	Normal
Liver Biopsy	–	Free of any fungal lesions
Bone Marrow	–	Did not reveal any abnormality
Stool & Urine	–	Normal

TREATMENT

The patient was put on Mycostatin, 500,000 International units orally eight-hourly for four weeks. Clinical, Radiological and Mycological assessment after four weeks of anti-mycotic treatment revealed marked improvement. Post-treatment chest X-ray showed clearing of the patchy pulmonary consolidation (Fig. 2) and sputum examination did not reveal any more fungi hyphe or mycelliae.

DISCUSSION

Pulmonary candidiasis is more common in the American continent than in Europe or Africa. In Africa, as well as Europe and Asia, the disease may be limited to certain individuals under the following circumstances:

Malnutrition associated with debility
Diabetes Mellitus
Prolonged administration of broad spectrum antimicrobials
Prolonged corticosteroid therapy
Congenital and valvular heart disease.
Immunosuppressive therapy

Under these conditions, candida albicans, which is a normal inhabitant of the oral mucosa, the intestines and the urogenital tract may attack other parts of the body and cause systemic candidiasis.

SUMMARY

A case of bronchopulmonary candidiasis has been described for the first time in Zambia.

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