

Case Report - An Interesting Case of Nocardia Pneumonia

Dr. A. Adham Rahman

1. History and Examination

A 44 years old gentleman, farmer by occupation, presented with chief complaints of **Fever and Cough with expectoration for 10 days, Breathlessness for 7 days.**

Patient was apparently normal 10 days back then he developed history of Fever, high grade, intermittent, associated with chills and rigors, relieved with antipyretics

H/o cough with expectoration present, Sputum was initially black in color, then was yellowish mucoid, around 15ml/day, not blood stained

H/o breathlessness present, initially grade 3 MMRC which then progressed to grade 4, No orthopnea & PND

Patient was initially treated for the same complaints in outside hospital and was diagnosed to have klebsiella pneumonia and was treated with I.V. Antibiotics amikacin, cefoperazone+sulbactam and T. Azithromycin. But symptoms did not resolve. Patient came here for further evaluation and management.

K/c/o type 2 diabetes mellitus for 2 years on OH agents. Not a known case of SHTN/ CAD / BA/ TB patient. Non smoker and non alcoholic

On examination

Conscious, oriented, Thin built and nourished, BMI-22, No external markers of tuberculosis/ HIV.

Vitals

PR: 96/min, BP: 110/70 mm hg,
RR: 32/min, Spo2: 94 % at room air,
Temp: 100 f Jvp not elevated.

Respiratory system-B/L air entry present, air entry decreased in left infrascapular, interscapular and infraaxillary region Tubular breath sounds and egophony present in above areas. Vocal fremitus increased in above areas.

Other system examination were Normal

2. Investigations

Hb: 11.1, **WBC:** 10600 **PLT:** 3 L, **ESR:** 120
RFT and LFT- Normal
ABG - pH 7.50, **pCO2** 25, **pO2** 91, **HCO3** 17, **Lactate** 1.7
SpO2 94%
URINE R/E - Normal

COVID RTPCR - Negative
USG ABDOMEN - Normal
HIV 1 and 2 - Negative **Test for syphilis-** Negative
Hepatitis B- Negative **Anti HCV:** Negative
ECHO- shows Normal study

Sputum Investigations

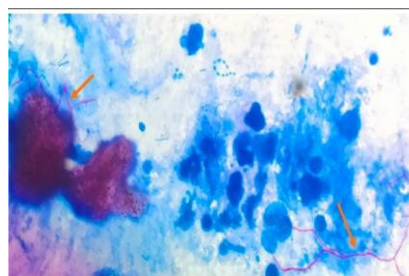
AFB - Negative
CBNAAT - Negative
Malignant cytology - Negative
10% KOH mount - Negative
Gram stain - **Branching filamentous and beaded gram positive bacilli ++**

Probable Nocardial pneumonitis

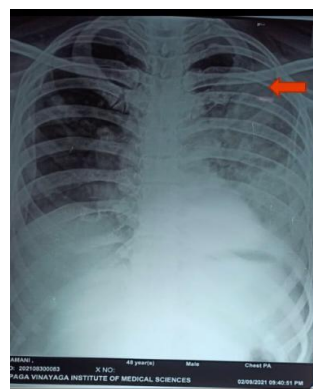
BLOOD C/S -sterile

IMAGES

Microscopy of Nocardia



During admission

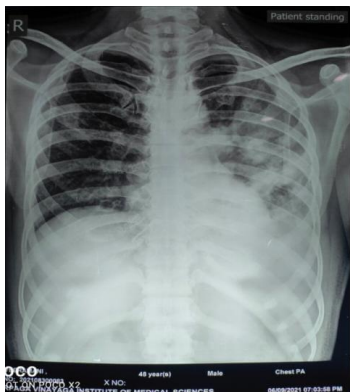


B/L non-homogenous opacity more on left



Cavitating consolidation left LL

During treatment



Infiltrates resolving in upper zone

3. Course and Management

Patient was initially started on O₂ support, IV antibiotics injection piptaz and doxy, bronchodilators and other supportive care continued for 3 days but patient condition worsened and need for O₂ support increased. Sputum analysis showed culture suggestive of Nocardia Pneumonitis.

Patient started on **tab Cotrimoxazole 160/800 mg in therapeutic dose**. Patient improved clinically and radiologically