Reviewer's report

Title: A Rare Presentation of Chronic Necrotizing Pulmonary Aspergillosis; a case report

Version: 1 Date: 24 November 2011

Reviewer: Susana Carreira

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

INTRODUCTION

1 – The introduction should include some more relevant information:
• CNPA corresponds to an indolent process of lung destruction caused by the Aspergillus fungus, generally the A. fumigatus.
• The main risk factors are: chronic obstructive pulmonary disease, sequelae of tuberculosis, pulmonary resection, radiation-induced pulmonary fibrosis, pneumoconiosis, cystic fibrosis, pulmonary infarction and sarcoidosis. Other immunosuppression conditions, such as diabetes mellitus, malnutrition, alcoholism, connective diseases and prolonged corticotherapy, are also situations of increased risk1,2,4.
The chest X-ray may reveal unilateral or bilateral infiltrates with or without cavitation and pleural thickness, especially in the upper lobes and in the upper segments of the lower lobes. In 50% of the cases an aspergiloma occurs simultaneously.1,2,4,5

The definite diagnosis is made through the histological demonstration of tissue invasion by the fungus and the growth of Aspergillus species in a culture2,7.

Due to the difficulty in confirming the diagnosis, the following diagnosis criteria were established and together are highly indicative of CNPA: characteristic clinical and radiological findings, elevation of inflammatory markers (CRP, ESR) and either serological results positive for Aspergillus or the isolation of Aspergillus from respiratory samples. Active tuberculosis, non tuberculosis mycobacteriosis, cavitary histoplasmosis and coccidiodomycosis should be excluded2,7.

Galactomannan and PCR (Polymerase Chain Reaction) in bronchoalveolar lavage, as well as cutaneous sensitivity tests for Aspergillus do not have a confirmed interest in diagnosis2,7.

The ideal treatment duration has not yet been defined and depends on the extension of the disease, the patient’s response to treatment, the base disease and the patient’s immunological condition. At times, a lifelong therapy may be required9.

CASE PRESENTATION

1 - It sounds better: A 64 year-old female patient, retired teacher, non smoker with a background history of epilepsy presented to our respiratory clinic in May 2008 with a six month history of productive cough (What were the characteristics of the sputum?) associated with three episodes of haemoptysis. She had no constitutional symptoms.

2 – When the hypothesis of tuberculosis was being investigated, how did the chest x-ray look? Did she do other diagnostic tests, at this time?

3 - It sounds better: At a primary care clinic the hypothesis of tuberculosis was considered, but the Mantoux was negative and the three sputum acid-fast bacilli samples were negative too (and what about the cultures?).

4 – What were the antibiotics? You should better explain the point of the initial investigation and treatments.

5 – It was not necessary to put the blood pressure, just vital signs. It sounds better: On examination, the patient was emaciated (body mass index of,,,), hemodynamically stable, afebrile, eupneic and with peripheral oxygen saturation (SpO2) of 98% (FiO2 21%). She didn’t have clubbed fingers, palpable cervical lymph nodes or oral thrush.

6 – I don’t understand the respiratory examination.

7 – It sounds better: Her initial investigation showed a normocytic normochromic anemia (Haemoglobin of 10.3 g/dL) with normal white cell and platelet counts.
What about C-reactive protein and erythrocyte sedimentation rate?

8 – At any time was thoracocentesis performed? If it wasn’t, you should say why (was the pleural effusion too small?).

9 – It sounds better: “Subsequently, a bronchoscopy was performed, showing an oedematous and white coated bronchial tree mucosa; the right lower lobe mucosa had an infiltrate appearance. The mycological bronchoalveolar lavage culture was positive for Aspergillus niger. What about the mycobacterial cultures? Weren’t the Bronchial biopsies performed?

10 – You should better explain how the diagnosis was made and you shouldn’t say “she was relatively well”.

11 – It sounds better: After 2 months of treatment, clinical and radiological improvements were registered.

DISCUSSION

1 – It sounds better: The radiological findings of bilateral pleural effusion with lower lung fields involvement were not typical of CNPA.

2 – How long after the onset of the symptoms was the diagnosis made?

3 – It sounds better: The atypical presentation delayed the diagnosis.

4 – It sounds better: The identification of Aspergillus in the pleural biopsy would have been confirmatory. This investigation wasn’t performed given that the mycological bronchoalveolar lavage culture was positive for Aspergillus niger.

5 – It would be interesting to comment the fact that the agent was the Aspergillus niger and not the most common (Aspergillus fumigatus).

BIBLIOGRAPHY


**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare that I have no competing interests