Author’s response to reviews

Title: Unsuspected Pneumocystis pneumonia in an HIV-seronegative patient with untreated lung cancer: a case report

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Author’s response to reviews:

Dear Editor,

We are very glad to hear from you. We have corrected the few mistakes the reviewers had kindly pointed out in the original manuscript and have tried our best to modify the discussion according to the helpful suggestions of reviewer 1. We have also replaced the outdated references with newer dates as suggested, and added one more reference to strengthen up our point of view. We are sending back two copies of manuscript, one ¿original¿, with cross-out marks, and lines in red, to show how we revised the manuscript, the other, a ¿clean¿ copy, is the net result of the revision.

In response to referee 2, it is unfortunate that our case report is not to your taste. However, we will try our best to clear off his concerns about the authenticity of our diagnosing the patient as lung cancer based on sputum cytology. According to Dr Irfan Maghfoor, in Lung cancer, non-small cell, accessible at http://www.emedicine.com/med/topic1333.htm, though sputum cytology has a false positive-rate of 1% in non-small cell lung cancer, and discordant results are often observed between cytologic and histologic findings of specimens obtained from bronchoscopy or transthoracic biopsy. In TNM staging, positive malignant cytological results with no lesion seen, could be staged as Tx. These fully illustrate that the diagnosis of lung cancer could be reached solely with positive sputum cytology. As for the quality of sputum specimen and the legitimacy of the pathologist, we thank you for raising such questions which we have failed to address in the manuscript. Though, in fact, in our original manuscript, we have already demonstrated the roles of different authors, showing Prof Gu-yinyin is in charge of the examination and reexamination of the sputum specimens as well as preparation of the pathological background knowledge on lung cancer, BAC and PCP. In fact, as head of our pathology department, Prof Gu is one of the best specialists in lung pathology. The sputum specimens were qualified because the ratio between leucocytes and epithelial cells was over 25:1, and the patient was always producing copious gel-like sputa. As for mucin tests, of course, adenocarcinomas form glands and produce mucin, and mucin production
can be identified with mucicarmine or periodic acid-Schiff staining. However, as not all lung cancer are mucin-producing, such as squamous cell lung cancer, and as discordant results are often observed between cytologic and histologic findings of specimens obtained from bronchoscopy or transthoracic biopsy, we have long stopped performing mucin tests with sputum specimen. We hope our explanations could settle the concern.

In response to referee 1, we are very grateful for your positive remarks and kind suggestions, it is so kind of you to provide an important reference for discussion. We have already corrected the spelling errors removed the outdated data. Yet, I am afraid that we could not bring ourselves to the definitive diagnosis of BAC. With typical clinical symptoms of BAC: copious sputum, progressive and unrelenting dyspnea, radiological findings of diffuse interstitial and pulmonary infiltrates, and hilar adenopathy, and malignant cytological results, a clinical diagnosis of BAC could be reached. But as a distinct form of adenocarcinoma of the lung, the definitive diagnosis of BAC requires evidence of bronchial and alveolar involvement of adenocarcinoma cells from resected or biopsied lung samples. Therefore, in the present case without histological evidence, due to the patient’s critical condition and lack of mechanical ventilation, a clinical diagnosis of BAC could be reached but not a definitive diagnosis of BAC. Based on this theme, we will proceed by highlighting the important roles of large dose dexamethasone at the local hospital in the development of severe cellular immunosuppression which resulted in active PCP in the patient, and we have dwelled on the topic with more supporting materials. In fact, with so many supporting materials at hand, we could have expanded on this topic except for the limitation of space as well as following your suggestion of minor revision. We wish this is exactly what is in your mind and we thank you again for your appreciation of the case report and invaluable advice.

Best wishes!
August 24, 2007