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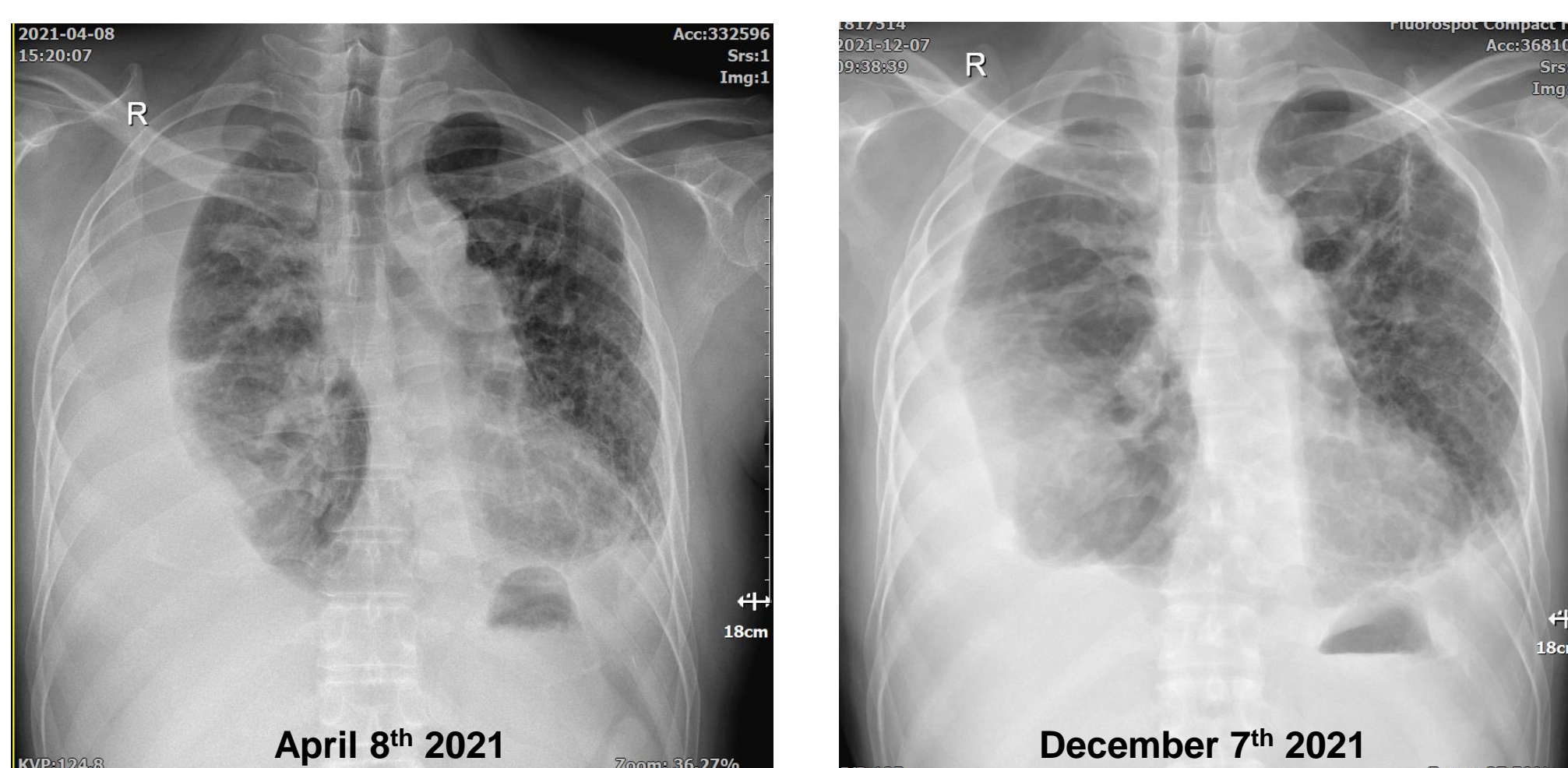
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## BACKGROUND

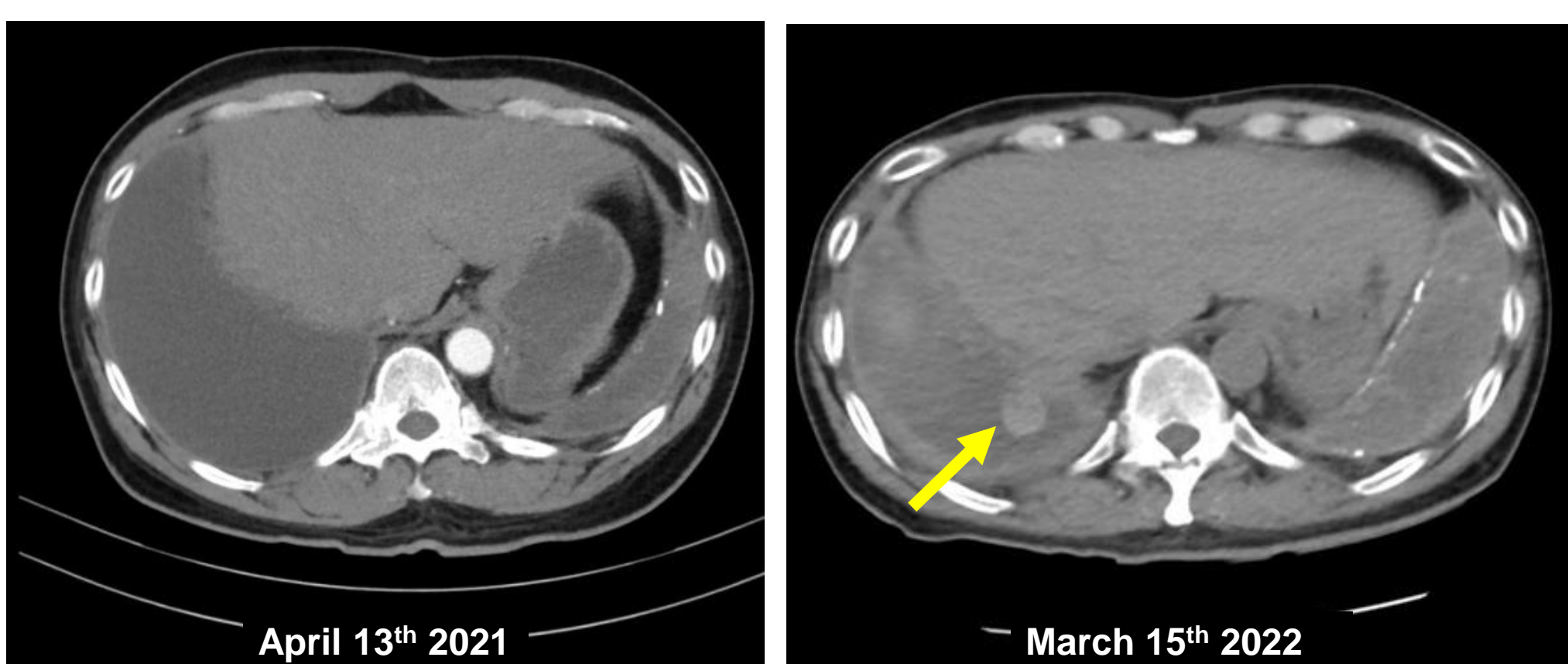
Pleural aspergillosis is an uncommon manifestation of aspergillosis, that present in less than 5% of pleural effusion cases. Active or previous tuberculosis, bronchopleural fistulae, pleural drainage and lung resection are considered as the main predisposing conditions for *Aspergillus* infection in the pleural space. Pleural thickening has been described as an early manifestation of pleural aspergillosis. The diagnosis of pleural aspergillosis is confirmed by demonstration of the organism in pleural fluid or biopsy. However, this case has a high risk of mortality, mostly due to late or missed diagnosis or lack of effective treatment.

## CASE REPORT

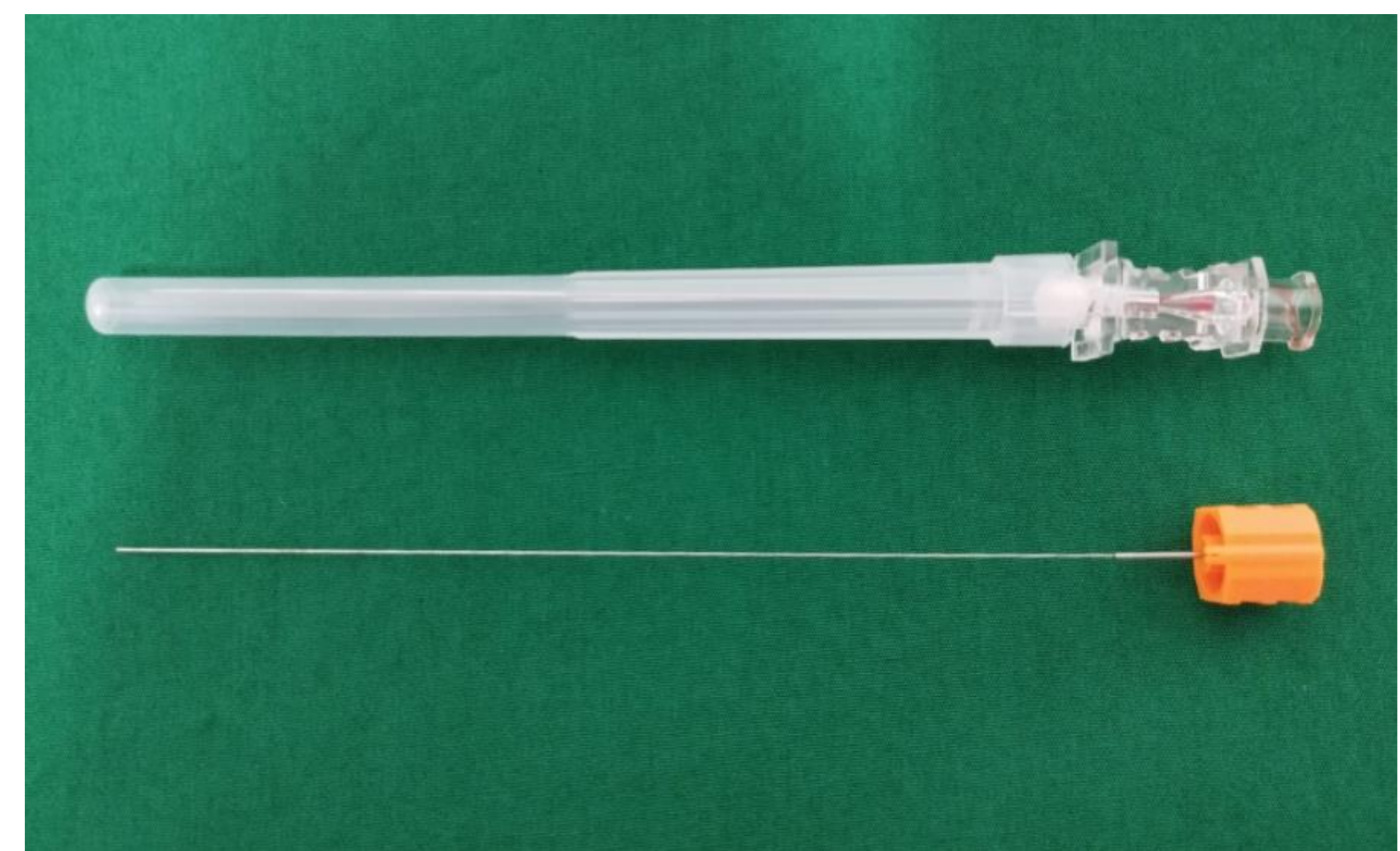
A 52-years-old male with the history of haemochromatosis with deferasirox for 3 years and previously treated as clinical lung tuberculosis (TB) for 1 year, came with chronic cough, dyspnoea and weight loss. Sputum acid-fast bacilli and potassium hydroxide smear were negative. High Resolution CT Thorax showed pleural effusion with multiple pleural calcification and thickening on lower hemithorax. Serial CT showed new multiple nodular lesion in the right pleura. Traction bronchiectasis, centrilobular, paraseptal emphysema, and bilateral lung honeycombing consistent with previous TB history. The patient was suspected as mesothelioma. Bronchoscopy showed hyperaemic and oedema of mucous membrane on right upper lobe. Pathological anatomy result from bronchial washing showed no malignancy. He underwent Trans Thoracic Needle Aspiration (TTNA) US-guided and cytological result showed necrotic debris, connective tissue fibers, and rod-shaped material *Aspergillus* fungi that consistent with aspergillosis.



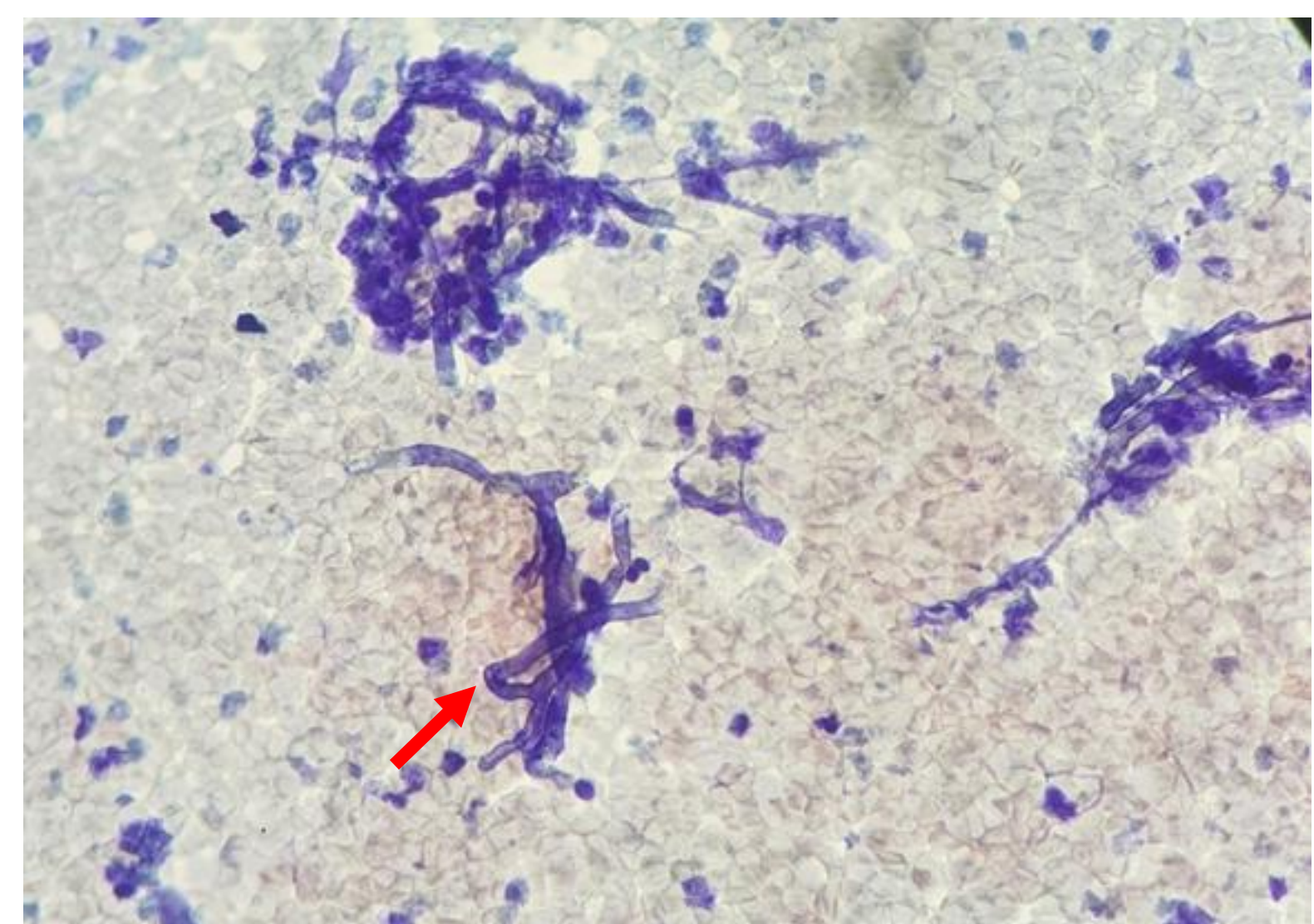
**Figure 1. Serial chest radiograph showed decrease of right pleural effusion**



**Figure 2. Serial CT Scan thorax showed new multiple nodular lesion in the right pleura**



**Figure 3. Needle used for TTNA-US guided size 25G x 3,5"**



**Figure 4. Aspergillosis (PAP stain, 400x) showing rod-shaped material *Aspergillus* fungi**

## DISCUSSION

Pleural disease associated with fungal infection are uncommon. Several causes including tuberculosis, malignant diseases, granulocytopenia, and the use of corticosteroids, cytotoxic agents, and multiple antibiotics have been implicated in the development of aspergillosis. In this case the patient with the history of haemochromatosis with deferasirox for 3 years and previously treated as clinical lung tuberculosis (TB) for 1 year. The symptoms are fever, dispnea, productive cough or haemoptysis. This patient has chronic cough, dyspnoea and weight loss. Presumptive diagnosis can be made from colonies of hyphae are seen in the pleural fluid or in histologic sections (pleural biopsy), but it should be confirmed by culture. This patient underwent Trans Thoracic Needle Aspiration (TTNA) US-guided and cytological result showed necrotic debris, connective tissue fibers, and rod-shaped material *Aspergillus* fungi that consistent with aspergillosis. Systemic antifungal agents such as oxiconazole, voriconazole, and micafungin have therapeutic benefits. Decortication or pleuropneumonectomy is associated with a high rate of postoperative complications.

## CONCLUSION

Pleural aspergillosis is a rare manifestations of aspergillus infection. *Aspergillus spp.* infection should be considered in the differential diagnosis of such cases, particularly for those with a chronic lung disease.

## REFERENCES:

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