

A RARE VASCULAR CATASTROPHE IN POST COVID PATIENT



Dr Yuvarajan S, Dr Praveen Radhakrishnan, Dr Antonious
Department of Respiratory Medicine
Sri Manakula Vinayagar Medical College and Hospital, INDIA



INTRODUCTION

A pseudoaneurysm is an abnormal dilatation or outpouching of the artery which is lined only by the tunica adventitia. Pulmonary artery pseudoaneurysm (PAP) is a rare vascular phenomenon with high mortality rate. Pulmonary mucormycosis (PM), an underdiagnosed but an increasingly seen entity in the era of chemotherapy and immunosuppression is a disease caused by fungus in the order Mucorales affecting the lung. PAP due to PM is an extremely rare clinical entity with very few cases being reported world wide.

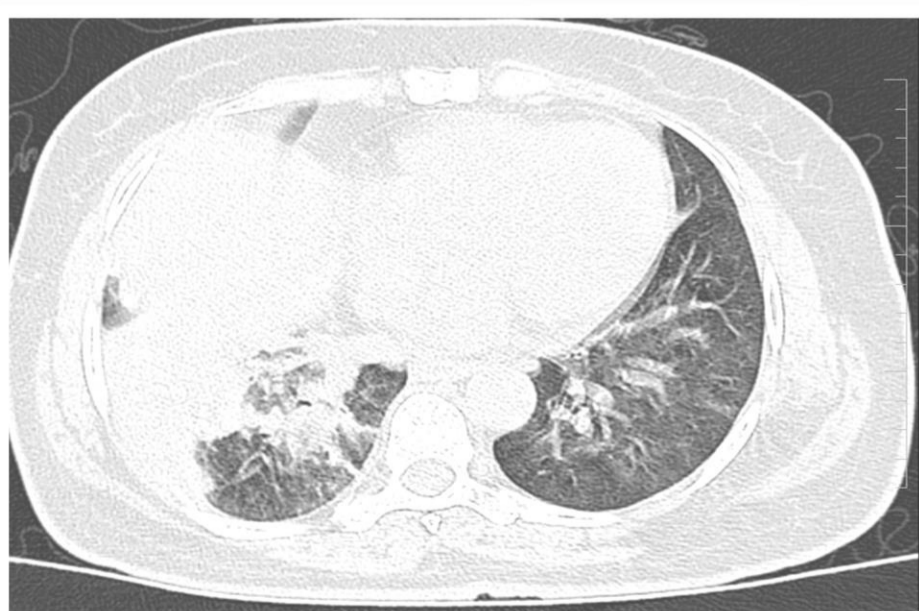
CASE REPORT

52 Year old female who is a known case of systemic hypertension and type II diabetes mellitus had presented with history of breathlessness and cough with blood tinged expectoration since 1 month. She gives no history of fever, loss of weight and loss of appetite with a past history of hospitalization 2 months due to moderate covid pneumonia.

On general examination she had pallor, clubbing with usage of accessory muscles for respiration (RR-33) with PR of 86 beats per minute.

Systemic examination revealed mid inspiratory coarse crepts in the right infra scapular and infra axillary areas, other systemic examination was normal.

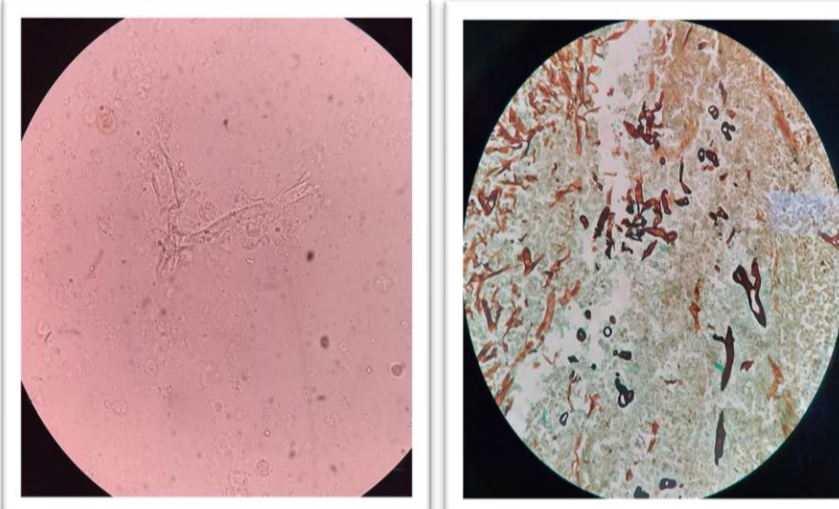
Routine blood investigations showed elevated sugars with leukocytosis (neutrophil predominant).



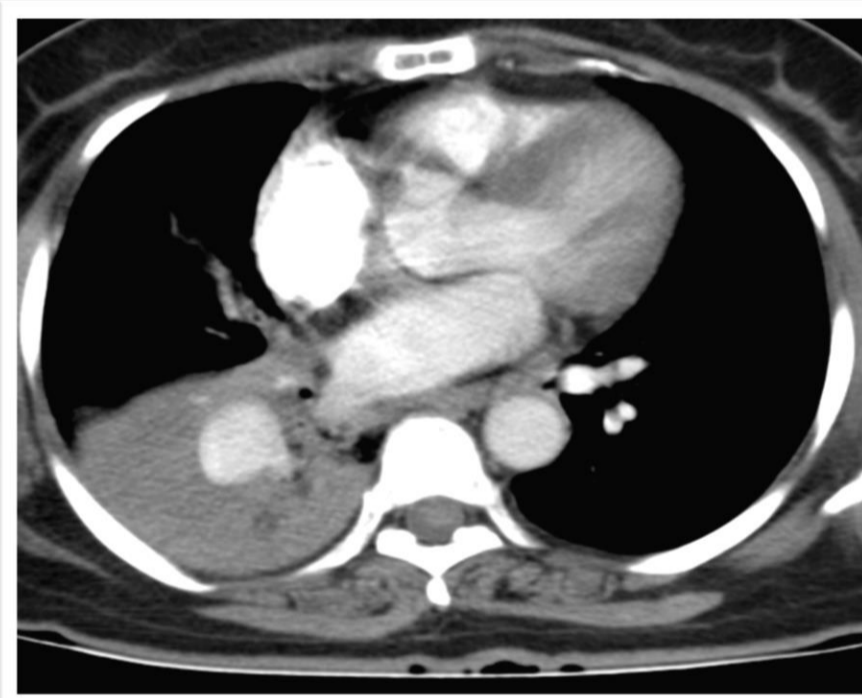
Non contrast CT -Consolidation in Right lower lobe



Smooth globular mass arising from the wall completely obscuring lateral and anterior basal segments



BAL smear microscopy showed ribbon shaped broad aseptate hyphae



Pseudoaneurysm involving right descending pulmonary artery.

DIAGNOSIS :

Pulmonary mucormycosis with pulmonary artery aneurysm presenting as endobronchial mass with hemoptysis.

TREATMENT : Patient was started on Injection Liposomal Amphotericin B (5mg/kg/day) and other supportive measures.

She was also monitored for possible adverse effects like hypokalemia/Acute kidney injury.

CTVS opinion was sought for definitive surgical resection. Lobectomy was done with post op period uneventful.



DISCUSSION :

Fungal pneumonia is a rare acquired cause of pulmonary artery pseudoaneurysm

After trauma, infection accounts for 33% of pulmonary pseudoaneurysms.

Infective causes include pyogenic bacteria like Streptococcus pyogenes, Staphylococcus aureus, Klebsiella and fungus like Mucor, Aspergillus and Candida.

Rhino cerebral is the commonest form of mucormycosis, followed by the infrequent pulmonary mucormycosis

It differs from true aneurysm in that the tunica adventitia is intact and extensive hemorrhage is the outcome.

Mucor has the potential to cause direct invasion of the vessel wall leading to pseudoaneurysm.

CONCLUSION

Pulmonary artery pseudoaneurysm in pulmonary mucormycosis is a very rare clinical entity with limited description in literature.

A high index of clinic-radiological suspicion is required for diagnosis.

High clinical suspicion, Early diagnosis and timely intervention can prevent morbidity and mortality.

ACKNOWLEDGEMENT

The authors would like to acknowledge administration of our Institution and the post graduates of our department for their support and contribution.