

A Case Report: Pregnancy Complicated by Pulmonary Aspergillosis

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Introduction

Chronic pulmonary aspergillosis (CPA) often caused by *Aspergillus Fumigatus* is a progressive, debilitating parenchymal lung disease manifesting in patients with pre-existing cavitary, structural lung disease or those with subtle immune defects.¹ Its clinical presentation and radiological features overlap substantially with the underlying diseases themselves. Hence, CPA can be easily neglected or misdiagnosed due to its slow and insidious progression ². Delayed or missed *Aspergillus* infection and ineffective treatment are responsible for mortality due to aspergillosis.³

Case Presentation

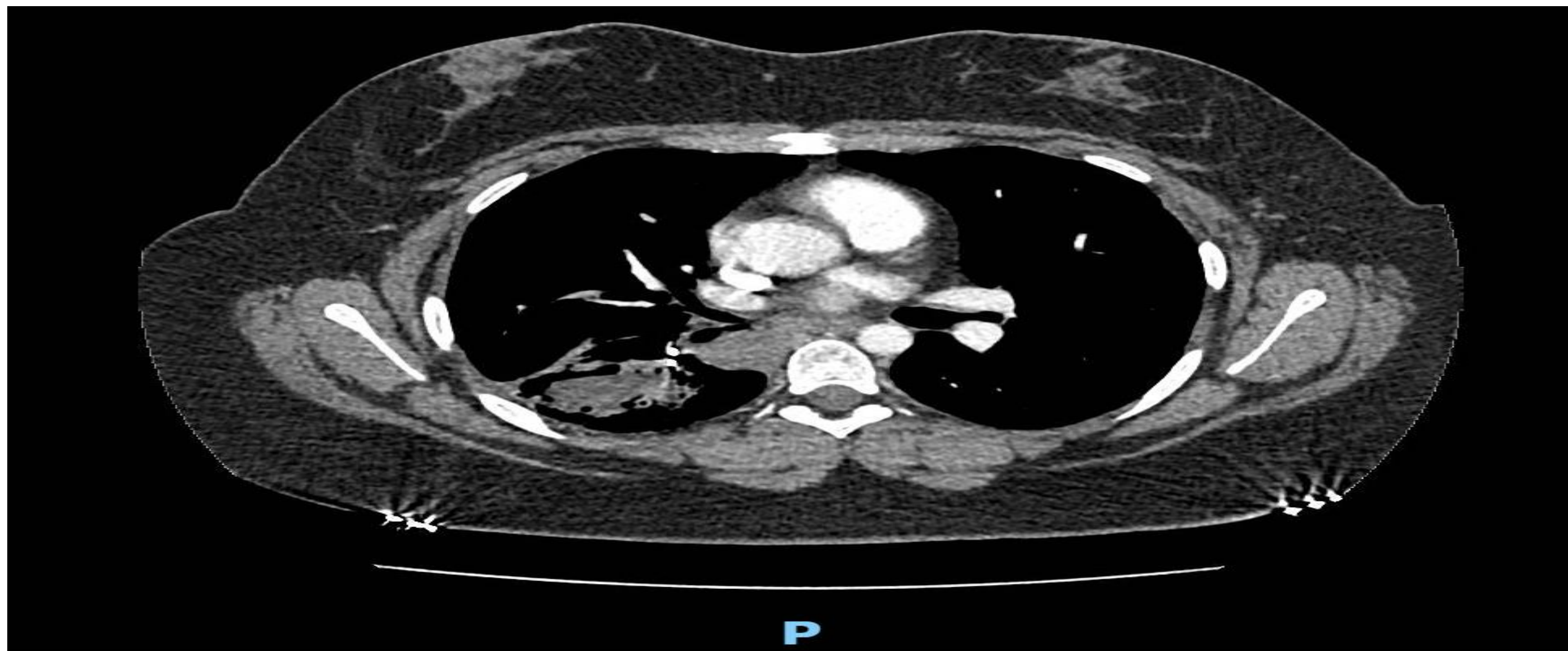
- A 19-year-old, G2P1 woman presented at 22 weeks gestation with worsening breathlessness, pleuritic chest pain and recurrent hemoptysis. She had experienced similar symptoms during a previous pregnancy one year earlier.
- CT thorax post partum revealed right lower lobe pulmonary aspergillosis and *Aspergillus fumigatus* IgG levels were elevated, confirming the diagnosis.
- Her past medical history was notable for bronchiectasis secondary to meningococcal septicemia in early childhood, complicated by pneumonia requiring ECMO. Since then, she has had recurrent chest infections, managed with prophylactic antibiotics.

Management

- Multidisciplinary team (obstetricians, thoracic surgeons, respiratory physicians, infectious disease specialists, and interventional radiologists) involvement.
- Conservative: Antibiotics, tranexamic acid, close monitoring
- Bronchial artery embolization for hemoptysis at 29 weeks
- Healthy baby delivered via planned C-section at 34+2 weeks
- Persistent symptoms
- Oral antifungal therapy initiated postpartum
- Definitive management with successful right lower lobectomy 6 months later

Discussion

- CPA often complicates existing lung pathology; bronchiectasis was a key risk factor in this patient
- Diagnosis is confirmed by imaging and serological evidence
- Pregnancy complicates management: antifungal therapy delayed due to teratogenicity
- Embolization is a temporizing measure; surgery deferred until postpartum
- A multidisciplinary approach was critical in balancing maternal-fetal risks



CT thorax showing Right lung lower lobe Apergilloma

Timeline

Gestation	Intervention
22 weeks	MDT initiated, monitoring
25 weeks	GDM diagnosed
29 weeks	Bronchial artery embolization
34+2 weeks	Planned caesarean section due to recurrent hemoptysis
Postpartum	Voriconazole initiated
6 months postpartum	Right lower lobectomy performed

Conclusion

This case highlights the complexity of managing CPA during pregnancy. Careful, tailored, multidisciplinary coordination enabled:

- Stabilization with embolization
- Planned preterm delivery to mitigate maternal risk
- Safe initiation of antifungal therapy postpartum
- Surgical management remains the definitive treatment post-delivery.

Keywords

Pulmonary aspergillosis, Pregnancy, Aspergilloma, Hemoptysis, Bronchial artery embolization

References

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