Title: **A Breath of Hair: Hair Expectoration Unveiling Primary Mature Right Sided Pulmonary Teratoma in a Young Woman**

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ABSTRACT

Introduction

Pulmonary teratomas are exceedingly rare germ cell tumors, particularly when located intraparenchymally and on the right side of the thorax. Even more exceptional is the presentation of trichoptysis—expectoration of hair—a pathognomonic but underreported symptom often obscured by cultural stigma. This case report documents a 23-year-old woman with a mature right-sided pulmonary teratoma, whose initial symptom of hair expectoration was concealed due to sociocultural beliefs, delaying diagnosis and management. The rarity of the tumor's location, combined with its unique clinical presentation and complex surgical course, underscores the importance of multidisciplinary care and culturally sensitive clinical evaluation.

Methods

The patient underwent comprehensive diagnostic workup including contrast-enhanced chest CT, CT-guided biopsy, spirometry, diffusion capacity testing, 6-minute walk test, and cardiopulmonary exercise testing. Imaging revealed a large cystic mass with fat, calcification, and soft tissue components in the right hemithorax, consistent with a mature teratoma. Due to non-diagnostic biopsy results and extensive parenchymal destruction, a right posterolateral thoracotomy was performed. Surgical intervention included en bloc resection of the anterior mediastinal mass, partial pericardiectomy, bilobectomy of the right middle and lower lobes, and wedge resection of the right upper lobe. Postoperative management involved bronchoscopy, chest tube placement, and outpatient monitoring for complications.

Results

Histopathologic analysis confirmed a mature teratoma with no malignant features. All surgical margins were tumor-free, and sampled lymph nodes were reactive. The resected lung tissue exhibited severe chronic bronchiolitis and bronchiectasis, explaining the persistent postoperative air leak. The patient developed empyema thoracis on postoperative day 57, which was successfully managed with tube exchange and targeted

antibiotic therapy. Despite prolonged chest drainage and outpatient follow-up, the patient remained afebrile and clinically stable, with preserved right upper lobe expansion and no recurrence of pleural fluid accumulation. Immunohistochemistry ruled out other differential diagnoses such as lymphangioleiomyomatosis.

Conclusion

This case represents a landmark contribution to thoracic surgical literature, being one of fewer than ten globally documented right-sided intrapulmonary teratomas and only the second reported in the Philippines. It highlights the diagnostic value of trichoptysis, the necessity of culturally informed history-taking, and the importance of preoperative functional assessment in guiding lung-sparing surgical strategies. The successful outcome, despite complex pathology and postoperative challenges, underscores the efficacy of multidisciplinary collaboration in managing rare thoracic neoplasms. This report not only expands the global understanding of pulmonary teratomas but also serves as a clinical blueprint for navigating the intersection of rare pathology, cultural context, and advanced surgical care.