

Pulmonary Sequestration Masquerading as Bronchiectasis in an Adult: A Case of Diagnostic Dilemma and Literature Review

Ann. Ital. Chir., 2026 97, 9: 1536–1543
<https://doi.org/10.62713/aic.4815>

Jianguo Tuo¹, Xiuli Xia², Yu Qiu³, Lifeng Xu³

¹Department of Radiology, Sunan County Ethnic Hospital, 734400 Zhangye, Gansu, China

²Department of Respiratory and Critical Care Medicine, The First People's Hospital of Tongxiang, 314500 Jiaxing, Zhejiang, China

³Department of Radiology, The First People's Hospital of Tongxiang, 314500 Jiaxing, Zhejiang, China

AIM: Pulmonary sequestration is a rare congenital anomaly of the lung characterized by nonfunctioning pulmonary tissue that lacks normal communication with the tracheobronchial tree and receives blood supply from the systemic rather than the pulmonary circulation. Many patients remain asymptomatic for years, resulting in delayed diagnosis until adulthood. We report a case of adult intralobar sequestration (ILS) in which early diagnosis was obscured by bronchiectasis. This case aims to increase clinical awareness and provide insights into clinical strategies to reduce missed diagnoses.

CASE PRESENTATION: A 45-year-old woman initially presented with fever, cough, and right-sided chest pain. Chest computed tomography (CT) showed bronchiectatic changes with infection in the right lower lobe, and her symptoms improved after anti-infective treatment. However, recurrent hemoptysis developed 10 days later. Thoracic aortic computed tomography angiography (CTA) with three-dimensional reconstruction identified an aberrant systemic artery supplying the right lower lobe, confirming the diagnosis of intralobar pulmonary sequestration.

RESULTS: The patient subsequently underwent a right lower lobectomy via video-assisted thoracoscopic surgery (VATS). During the operation, an aberrant artery originating from the aorta was successfully identified and secured with double ligation. Postoperative pathological examination confirmed pulmonary sequestration, revealing marked thickening of the alveolar walls and chronic inflammation. At the 3-month follow-up, the patient had recovered well, with no recurrence of symptoms.

CONCLUSIONS: Pulmonary sequestration should be considered in patients with recurrent localized bronchiectatic lesions, particularly when hemoptysis occurs or response to treatment is incomplete. CTA with vascular reconstruction is useful for diagnosis and preoperative evaluation.

Keywords: pulmonary sequestration; bronchiectasis; VATS; misdiagnosis; case report

Introduction

Pulmonary sequestration (PS) is a rare congenital pulmonary malformation characterized by dysplastic lung tissue that lacks communication with the normal bronchial tree and receives its blood supply from an aberrant systemic artery. According to recent large-scale epidemiological surveillance data, the average prevalence of PS in the Chinese population is approximately 0.42 per 10,000, with a marked upward trend over the past decade [1]. Although PS is congenital, a considerable proportion of patients remain clinically asymptomatic due to the sluggish growth of sequestered lung tissue and the absence of initial communication with the airway. These patients remain asymptomatic until adulthood, when collateral circulation develops or secondary infection establishes communication with the normal airway, leading to infection or hemoptysis as the initial clinical manifestation [2].

From an anatomical perspective, PS is classified into two subtypes: intralobar sequestration (ILS) and extralobar sequestration (ELS). ILS is predominant in adult patients, accounting for more than 75% of all cases, and most commonly involves the posterior basal segments of the lower lobes [3]. In ILS, the sequestered lung tissue lies within the visceral pleura of a normal lung lobe, substantially elevating the risk of recurrent infection in the affected region during disease progression, particularly when communication with the bronchial tree develops through the pores of Kohn or as a result of inflammation. Clinically, this may manifest as cough, sputum production, fever, and hemoptysis [4]. The central challenge in diagnosing PS in adults lies in the nonspecific nature of its clinical presentation. Because the lesion is often accompanied by localized inflammatory changes in the lung parenchyma, initial non-contrast imaging may show a mass-like opacity, cystic changes, or

Submitted: 5 June 2026 Revised: 19 July 2026 Accepted: 30 July 2026 Published: 15 September 2026

Correspondence to: Lifeng Xu, Department of Radiology, The First People's Hospital of Tongxiang, 314500 Jiaxing, Zhejiang, China (e-mail: XU_LIFENG599@163.com).

Editor: Marcello Migliore

Table 1. Differential diagnosis of adult intralobar pulmonary sequestration and key diagnostic approaches.

Differential diagnosis	Key diagnostic approach and diagnostic clues	Representative literature
Peripheral lung cancer	Contrast-enhanced chest CT or CTA with 3D vascular reconstruction can help identify an aberrant artery and distinguish PS from tumor-related neovascularization.	Liu et al. 2023 [6]
Bronchogenic cyst or other congenital cystic lung lesions	CT and MRI (with a histopathological examination when necessary) are helpful in differentiating bronchogenic cysts or other congenital cystic lung lesions from PS.	Ben Makhlof et al. 2025 [7]; Manasrah et al. 2025 [8]
Pulmonary abscess or recurrent pneumonia	Patients presenting with repeated infection at the same pulmonary site or incomplete radiological resolution after treatment should undergo vascular evaluation. Identification of an aberrant systemic vessel on CTA likely indicates PS over isolated pulmonary abscess or recurrent pneumonia.	Singh et al. 2024 [4]; Yuan et al. 2025 [9]
Pulmonary tuberculosis	The diagnosis of pulmonary tuberculosis should rely on microbiological and pathological findings. In the absence of evidence suggestive of tuberculosis, identification of an aberrant systemic feeding artery may support the diagnosis of PS.	Shah and Shah 2019 [10]
Bronchiectasis	Bronchiectatic changes identified on routine CT should not exclude the possibility of PS. When hemoptysis or repeated inflammation is confined to one region, further vascular assessment should be considered to rule out an underlying sequestration lesion.	Kayhan et al. 2012 [11]
Mediastinal or neurogenic tumor	MRI helps evaluate soft-tissue characteristics, while CTA can clarify vascular supply. A mass-like lesion near the mediastinum or spine may mimic a tumor, but systemic arterial supply from the aorta may favor the diagnosis of PS.	Jin et al. 2022 [12]
Pulmonary arteriovenous fistula	CTA provides useful information on vascular morphology. Identification of pulmonary artery–pulmonary vein communication supports pulmonary arteriovenous fistula, whereas detection of systemic arterial supply is more suggestive of PS.	Kaufman et al. 2025 [13]
Bronchiectasis	Recurrent bronchiectasis confined to the right lower lobe, temporary response to antibiotics, recurrent hemoptysis, and CTA demonstrating an aberrant systemic feeding artery are evidence suggestive of intralobar PS.	Present case

Abbreviations: CT, computed tomography; CTA, computed tomography angiography; MRI, magnetic resonance imaging; PS, pulmonary sequestration; 3D, three-dimensional.

localized distortion of pulmonary markings. These findings can easily be mistaken for bronchiectasis, recurrent pneumonia, lung abscess, or even pulmonary tuberculosis [5]. The major differential diagnoses of adult ILS and their key diagnostic approaches are summarized in Table 1 [4,6,7,8,9,10,11,12,13].

With advances in multidetector computed tomography (MDCT) and three-dimensional vascular reconstruction, visualization of the aberrant feeding artery has become the diagnostic “gold standard” for PS [14]. Although digital subtraction angiography (DSA) remains valuable for confirming the diagnosis, three-dimensional computed tomography angiography (3D-CTA) has become the preferred modality for preoperative assessment because it is noninvasive and provides a clear spatial depiction of the relevant anatomi-

cal relationships [15]. Here, we report a case of adult ILS initially masked by bronchiectasis, subsequently confirmed by CTA and successfully treated with video-assisted thoracoscopic surgery (VATS). In addition, we provide an integrated review of the pathogenesis, imaging-based diagnostic approaches, and minimally invasive surgical strategies for adult ILS based on relevant literature from the past decade. Unlike previously reported cases focusing primarily on imaging or surgical management, the present case highlights the diagnostic challenge posed by transient clinical improvement after anti-infective therapy and emphasizes the importance of recognizing recurrent localized bronchiectasis as a potential manifestation of pulmonary sequestration.

Case Presentation

Initial Assessment and Misdiagnosis

A 45-year-old woman was admitted on September 3, 2023, with a 3-day history of fever accompanied by cough and chest pain.

Medical history: Seven days before admission, the patient developed a fever with an unknown peak temperature without an apparent precipitating factor, accompanied by chills, rigors, and right-sided chest pain.

Physical examination: On admission, her body temperature was 38.0 °C, pulse rate was 100 beats/min, respiratory rate was 19 breaths/min, and blood pressure was 117/71 mmHg. She was conscious and alert, although mildly fatigued. No jaundice of the skin or sclera, cyanosis of the lips, or palpable superficial lymphadenopathy was noted. The trachea was midline. Bilateral breath sounds were coarse, without dry or moist rales. Cardiac examination revealed a regular rhythm with a heart rate of 81 beats/min and no pathological murmurs in any valvular auscultation area. Cardiac dullness was within normal limits on percussion. The abdomen was soft and flat, without tenderness. The liver and spleen were not palpable below the costal margin. There was no edema in either lower limb, and muscle tone was normal in all four limbs.

Imaging examination: On the day of admission, non-contrast chest CT, including the heart, was performed (Fig. 1A–C). The scan showed localized bronchiectasis with infection in the right lower lobe. Follow-up imaging after treatment was recommended to exclude PS.

Hematological and biochemical findings: Laboratory tests showed a white blood cell count of $7.1 \times 10^9/L$, a hemoglobin level of 133 g/L, a neutrophil count of $5.4 \times 10^9/L$, a red blood cell count of $4.43 \times 10^{12}/L$, a platelet count of $157.0 \times 10^9/L$, and a C-reactive protein level of 109.5 mg/L. Serum albumin was 43.8 g/L, and blood glucose was 8.18 mmol/L.

Treatment and clinical course: The patient received intravenous piperacillin–tazobactam 4.5 g every 8 hours as anti-infective therapy, along with symptomatic treatment for cough suppression and sputum expectoration. On September 9, 2023, her body temperature had returned to normal. She had an occasional cough but no chest pain. Repeat blood tests showed a white blood cell count of $5.2 \times 10^9/L$, a hemoglobin level of 123 g/L, a neutrophil count of $3.2 \times 10^9/L$, a red blood cell count of $4.26 \times 10^{12}/L$, and a platelet count of $278.0 \times 10^9/L$. Emergency laboratory tests, including liver function, electrolyte, and renal function tests, showed a serum albumin level of 38.0 g/L and an alanine aminotransferase level of 56 U/L. The C-reactive protein level had decreased to 16.6 mg/L. Given her clinical improvement, she was discharged.

Recurrent Hemoptysis and Radiologic Confirmation

Symptom Recurrence and Disease Progression

On September 18, 2023, 10 days after discharge, the patient was readmitted with a persistent cough lasting more than 10 days and blood-streaked sputum for 3 days. On physical examination, her body temperature was 36.6 °C, pulse rate was 89 beats/min, respiratory rate was 19 breaths/min, and blood pressure was 115/75 mmHg. Repeat chest CT demonstrated progression of the right lower lung lesion compared with the previous examination (Fig. 1D–F).

Diagnostic Workup and Confirmation

Bronchoscopy: Bronchoscopy was performed on September 19, 2023. After exclusion of contraindications, the procedure was conducted under general anesthesia with propofol and continuous electrocardiographic monitoring. The patient was placed in the supine position, and a flexible bronchoscope was introduced through the nasal cavity into the tracheobronchial tree. Systematic examination of the trachea, carina, and bilateral bronchi was performed, with particular attention to the right lower lobe bronchus. Bronchial brushing and bronchoalveolar lavage were subsequently carried out for cytological and microbiological evaluation. Fresh blood was observed at the opening of the right lower lobe bronchus; however, cytological examination of the bronchial brushing specimens and bronchoalveolar lavage fluid showed no evidence of tuberculosis or malignancy (Fig. 2).

Thoracic aortic CTA: To further clarify the underlying cause, thoracic aortic CTA with three-dimensional reconstruction was performed on September 21, 2023, using a perspective 32-slice spiral CT scanner (Siemens, Erlangen, Germany, lot number: 59788). The scan was acquired with a tube voltage of 120 kVp, and images were reconstructed using multiplanar reconstruction (MPR) and three-dimensional volume-rendered (VR) techniques. The images clearly demonstrated an aberrant systemic artery, approximately 5 mm in diameter, arising from the thoracic aorta and coursing obliquely upward into the lesion in the right lower lobe. Three-dimensional CTA showed a branch extending toward the paravertebral region of the right lower lobe, consistent with the diagnosis of PS (Fig. 3). Based on the patient's history of recurrent infection and hemoptysis, together with the typical aberrant feeding artery identified on CTA, a final diagnosis of ILS of the right lower lobe was established.

Surgical Management

After multidisciplinary discussion with the thoracic surgery team, surgical intervention was performed on September 27, 2023.

The patient underwent video-assisted thoracoscopic right lower lobectomy with adhesiolysis for pleural adhesions. The procedure was carried out under general anesthesia with the patient placed in the left lateral decubitus posi-

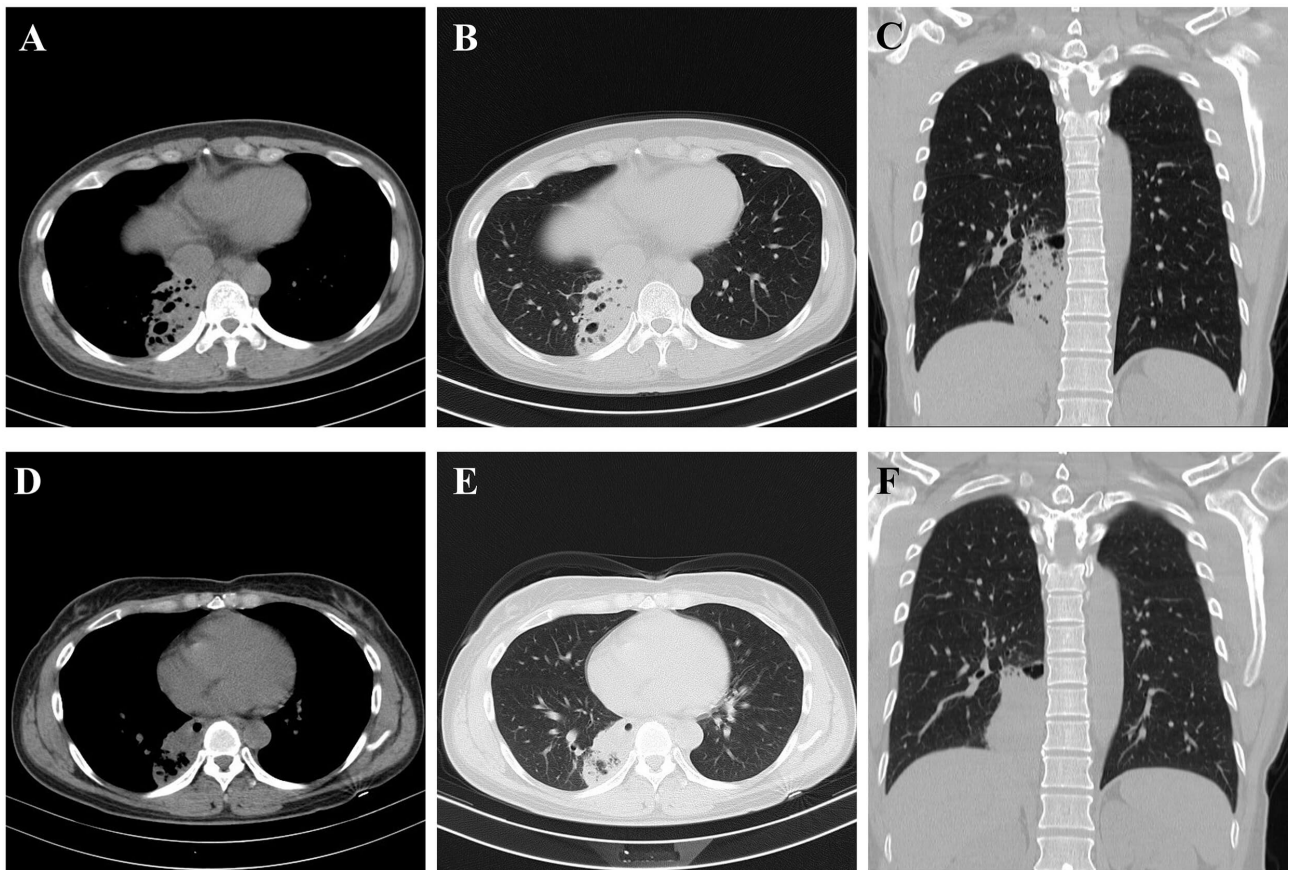


Fig. 1. Serial chest CT findings during initial presentation and disease progression. (A–C) Initial non-contrast chest CT performed at the first admission showing localized bronchiectatic changes with associated infection in the right lower lobe. Axial (A,B) and coronal (C) images demonstrate inflammatory changes involving the posterior basal region of the right lower lobe. (D–F) Repeat chest CT performed after readmission revealing progression of the right lower lobe lesion compared with the initial examination, despite temporary clinical improvement following anti-infective treatment. CT, computed tomography.

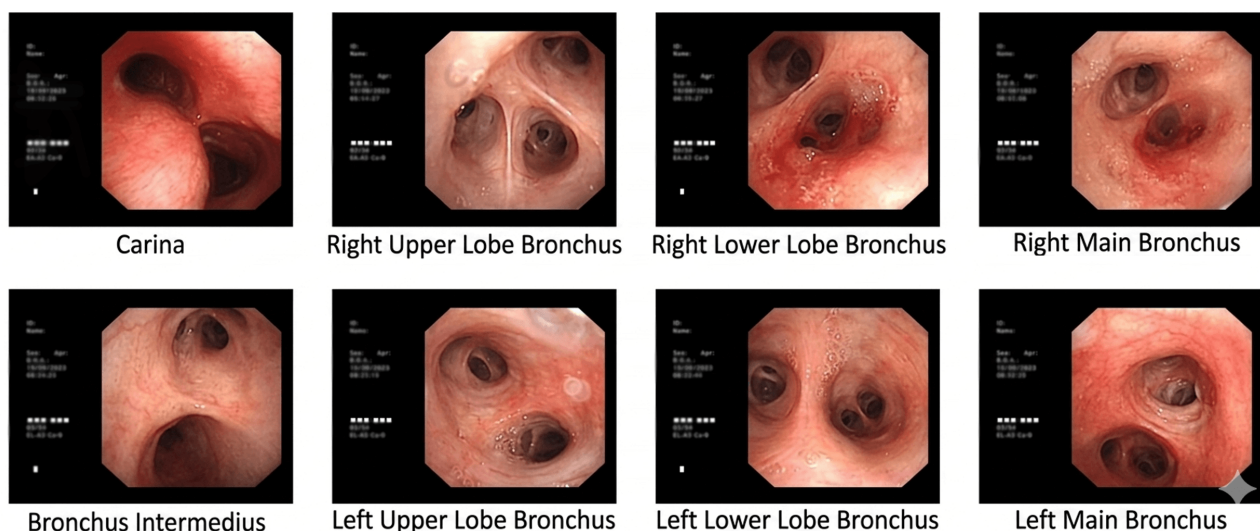


Fig. 2. Bronchoscopic findings in the tracheobronchial tree. Representative bronchoscopic images showing the carina, right upper lobe bronchus, right lower lobe bronchus, bronchus intermedius, right main bronchus, left upper lobe bronchus, left lower lobe bronchus, and left main bronchus. Fresh blood was observed at the opening of the right lower lobe bronchus, whereas no evidence of endobronchial tumor was identified.

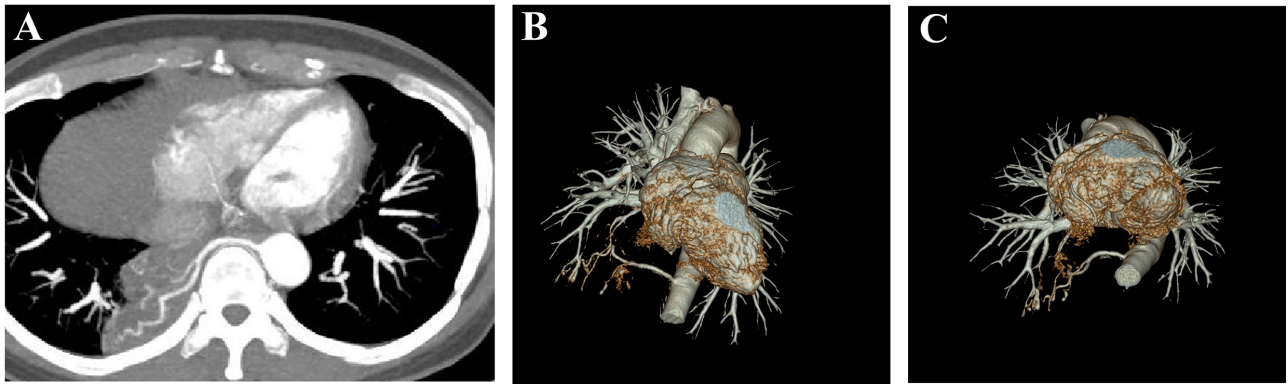


Fig. 3. Thoracic aortic CTA and three-dimensional reconstruction demonstrating aberrant systemic arterial supply. (A) Axial computed tomography angiography (CTA) image demonstrating an aberrant systemic artery arising from the thoracic aorta and supplying the lesion in the right lower lobe. (B,C) Three-dimensional CTA reconstruction showing the origin, course, and spatial relationship of the feeding vessel, supporting the diagnosis of intralobar pulmonary sequestration.

tion. A utility incision of approximately 5 cm in length was made in the right fifth intercostal space along the midaxillary line, with an additional thorascopic port placed in the eighth intercostal space. Intraoperatively, dense adhesions were noted between the right lower lobe, chest wall, and mediastinum. Exploration identified an aberrant systemic artery originating from the thoracic aorta and supplying the right lower lobe. The vessel was managed by proximal double silk ligation followed by division using an endoscopic linear stapler. After adhesiolysis and fissure dissection, the lower lobar pulmonary artery, inferior pulmonary vein, and lower lobar bronchus were sequentially isolated and transected using endoscopic stapling devices, and the right lower lobe was subsequently resected. Hemostasis was confirmed, and a thoracic drainage tube was placed before closure. The procedure was completed without intraoperative complications, and the resected specimen was submitted for histopathological examination.

Postoperative Course

Gross examination of the resected specimen showed cystic and solid changes in the right lower lung tissue, with a firm texture, bronchial dilatation, and the presence of thick secretions. Histopathological examination revealed bronchial dilatation and alveolar wall thickening, accompanied by extensive fibrous tissue proliferation and chronic inflammatory cell infiltration. No evidence of malignancy was identified. The pathological findings were consistent with ILS (Fig. 4A).

On September 28, 2023 (postoperative day 1), the patient reported mild incisional pain. Her body temperature was 37.0 °C, pulse rate was 78 beats/min, respiratory rate was 15 breaths/min, and blood pressure was 124/81 mmHg. She was conscious and in good general condition. No jaundice of the skin or sclera was observed, and no obvious enlargement of the bilateral supraclavicular lymph nodes was palpable. On September 29, 2023 (postoperative day 2),

follow-up chest CT showed postoperative changes, right-sided hydropneumothorax, scattered gas in the right chest wall, and a small amount of left pleural effusion with adjacent pulmonary atelectasis (Fig. 4B,C).

On October 6, 2023 (postoperative day 10), repeat chest CT demonstrated interval improvement in the right-sided hydropneumothorax. The small left pleural effusion with adjacent pulmonary atelectasis had largely improved, and the scattered gas in the right chest wall had been almost completely absorbed (Fig. 4D,E). On December 29, 2023, three months after surgery, follow-up chest CT showed postoperative changes, with a small residual fibrotic focus in the operative field and a small amount of right pleural effusion (Fig. 4F,G). The timeline of the patient's clinical course, diagnostic evaluation, treatment, and follow-up is summarized in Table 2.

This case has been reported in line with the case report guidelines: Case Report (CARE) Guidelines to ensure the accuracy and completeness of the report (**Supplementary Material**).

Discussion

Diagnostic Challenges and Imaging Evaluation

The definitive diagnosis of PS depends on the identification of an aberrant feeding artery arising from the systemic circulation. However, conventional chest radiography and routine non-contrast chest CT cannot clearly delineate these vascular structures. Missed diagnosis of PS is common in many primary or lower-level hospitals, where a contrast-enhanced CT approach is not routinely used or coronal and sagittal reconstructions are not performed, resulting in failure to identify small feeding arteries. This represents one of the major imaging-related causes of missed diagnosis.

A study on “occult PS in adults” has suggested that this type of apparent improvement is a major contributor to prolonged missed or incorrect diagnosis of adult PS [5]. There-

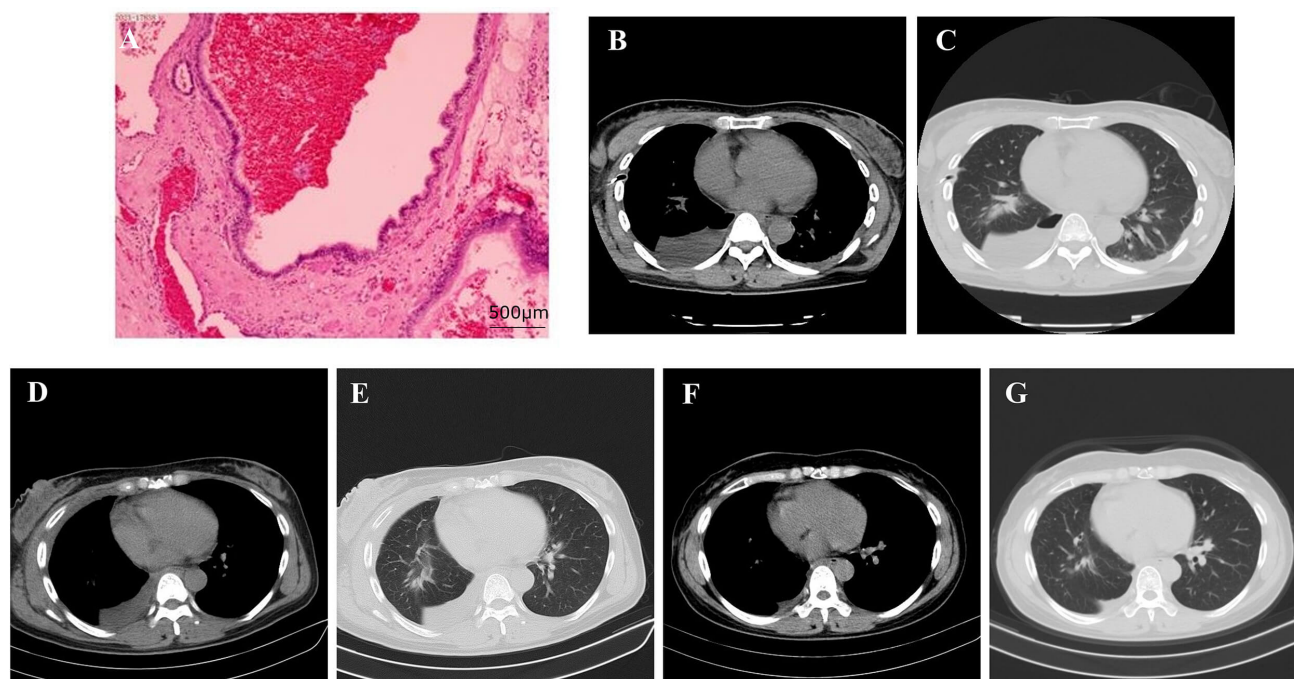


Fig. 4. Histopathological findings and postoperative imaging follow-up. (A) Histopathological examination of the resected specimen showing bronchial dilatation, alveolar wall thickening, fibrous tissue proliferation, and chronic inflammatory cell infiltration, consistent with intralobar pulmonary sequestration (Hematoxylin and Eosin staining). (B,C) Chest CT on postoperative day 2 showing postoperative changes with right-sided hydropneumothorax and residual pleural effusion. (D,E) Follow-up CT on postoperative day 10 demonstrating interval improvement of postoperative changes. (F,G) Chest CT scan performed three months after the surgery showing postoperative changes with residual fibrotic focus and no evidence of recurrence.

Table 2. Timeline of clinical events of the patient.

Date	Clinical events	Diagnosis/Management
Late August 2023	Fever, chills, cough, and right-sided chest pain.	Initial symptoms prompted medical evaluation.
September 3, 2023	First admission; chest CT revealed localized bronchiectasis with inflammatory changes in the right lower lobe.	Diagnosed with pulmonary infection and treated with piperacillin–tazobactam, together with symptomatic therapy.
September 9, 2023	Clinical symptoms improved following anti-infective therapy.	Discharged.
September 18, 2023	Recurrent symptoms and chest CT showed progression of the right lower lobe lesion.	Recurrent localized bronchiectasis raised suspicion of an underlying structural abnormality.
September 19–21, 2023	Bronchoscopy revealed fresh blood originating from the right lower lobe bronchus. CTA with three-dimensional reconstruction demonstrated an aberrant systemic artery arising from the thoracic aorta and supplying the lesion.	Pulmonary sequestration was diagnosed.
September 27, 2023	Video-assisted thoracoscopic right lower lobectomy was performed. An aberrant feeding artery was identified and ligated.	Surgical treatment.
September 28–October 6, 2023	Gradual improvement of postoperative changes.	Recovered.
December 29, 2023	Three-month follow-up showed no recurrent hemoptysis or respiratory symptoms.	Favorable short-term outcomes after surgery.

fore, we suggest that recurrent “bronchiectasis” confined to a fixed anatomical location and showing incomplete radiological resolution after conventional anti-infective therapy should prompt further evaluation for congenital vascular malformations. In terms of optimizing the diagnostic

pathway, the present case illustrates the technical advantage of shifting from empirical exclusion to precise anatomical assessment. Following the recurrence of hemoptysis, repeated courses of anti-infective therapy were discontinued, and thoracic aortic CTA was promptly performed. Al-

though digital subtraction angiography (DSA) has traditionally been regarded as the gold standard, its invasive nature limits its routine clinical use. This case highlights the essential role of 3D-CTA in the diagnosis and management of adult PS. It not only confirms the origin of the aberrant artery noninvasively, but also allows accurate three-dimensional assessment of the vessel diameter and its spatial relationship with adjacent mediastinal structures and the spine.

According to recent radiomics-based standards for imaging evaluation, the construction of such a preoperative “digital map” is critical for precise surgical planning. It enables surgeons to anticipate the safe boundary for vascular division before entering the operating room, thereby minimizing the risk of catastrophic bleeding caused by inadvertent injury to a high-pressure aberrant systemic artery. This has direct practical implications for clinicians planning similar minimally invasive procedures.

Surgical Considerations and VATS Management

Regarding surgical strategy, the present case further supports the safety and advantages of VATS for ILS complicated by dense inflammatory adhesions. In our patient, extensive adhesions were identified between the right lower lobe, chest wall, and mediastinum. Such findings are not uncommon in adult ILS with a prolonged disease course and may increase operative difficulty. In addition, management of the aberrant feeding artery remains the most critical step because it originates from the systemic circulation and is exposed to higher pressure than pulmonary vessels. In this case, the feeding artery was first secured by proximal double silk ligation and subsequently divided using an endoscopic linear stapler. This strategy was selected to enhance vascular control and reduce the risk of bleeding. Preoperative CTA also facilitated intraoperative orientation by defining the vascular anatomy before thoracoscopic exploration.

Recent reports have described hybrid strategies in which the aberrant systemic artery is embolized before surgical resection. For example, in an adult case of ILS treated by VATS after endovascular embolization, Fabbri et al. [16] reported that preoperative embolization may reduce the risk of bleeding during thoracoscopic dissection. Similarly, adult cases treated with endovascular embolization have shown that embolization can be useful for controlling hemoptysis or stabilizing patients before delayed surgery, especially when the feeding vessel is large or the vascular anatomy is complex [17]. Therefore, preoperative embolization may be considered in selected patients with large feeding arteries, complex vascular anatomy, or a high risk of intraoperative bleeding. However, embolization is not mandatory in every case. Previous thoracoscopic series have reported favorable outcomes after VATS resection of pulmonary sequestration, provided that the aberrant feeding artery is clearly identified and carefully controlled during operation [18]. In our

patient, preoperative 3D-CTA clearly delineated the origin and course of the feeding artery, and the vessel was securely managed by proximal double ligation followed by stapled division. Therefore, VATS alone was considered an appropriate surgical approach in this case.

In summary, this paper presents not only a successfully treated clinical case but also a structured review of the diagnostic pitfalls and surgical management of adult ILS, thereby providing useful evidence for its standardized diagnosis and treatment. This report has several limitations. First, as a single-case report, the findings may not be generalizable to all patients with PS. Second, the follow-up period was relatively short, precluding assessment of long-term outcomes. Further studies involving larger cohorts and longer follow-up are warranted to validate these observations.

Conclusions

Adult intralobar pulmonary sequestration may mimic bronchiectasis or recurrent pulmonary infection, particularly when symptoms show temporary improvement after anti-infective therapy. Recurrence in the same anatomical location, persistent radiological abnormalities, or unexplained hemoptysis should prompt consideration of an underlying congenital lesion. CTA with vascular reconstruction is useful for identifying aberrant systemic arterial supply and facilitating preoperative planning. Surgical resection by VATS remains an effective treatment option in symptomatic patients when careful vascular control is achieved.

Availability of Data and Materials

The data analyzed are available from the corresponding author upon reasonable request.

Author Contributions

JGT: Conceptualization, data collection and draft writing; XLX: Clinical data acquisition, literature review and draft writing; YQ: Data interpretation; LFX: Conceptualization, supervision, and project administration. YQ and LFX contributed to the critical revision of the manuscript for important intellectual content. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

This study was approved by the Ethics Committee of The First People's Hospital of Tongxiang (Approval No. 2026-012). Written informed consent was obtained from the patient to approve the publication of any potentially identifying images and clinical information. The study conformed to the provisions of the Declaration of Helsinki.

Acknowledgment

Not applicable.

Funding

This research received no external funding.

Conflict of Interest

The authors declare no conflict of interest.

Supplementary Material

Supplementary material associated with this article can be found, in the online version, at <https://doi.org/10.62713/ai.c.4815>.

References

- [1] Gao Y, Xu W, Li W, Chen Z, Li Q, Liu Z, et al. Epidemiology and prevalence of pulmonary sequestration in Chinese population, 2010-2019. *BMC Pulmonary Medicine*. 2023; 23: 8. <https://doi.org/10.1186/s12890-023-02308-8>
- [2] de Winter-de Groot KM. Natural course of CPAM and pulmonary sequestration: to operate or not to operate, this is the question. *Pediatric Pulmonology*. 2025; 60 Suppl 1: S64–S65. <https://doi.org/10.1002/ppul.27307>
- [3] Asif A, Lilley D, Howard-Walker S, Ajab S, Qadri SS. The diagnosis and surgical management of pulmonary sequestration in adults: a case series from a single centre in the UK. *Indian Journal of Thoracic and Cardiovascular Surgery*. 2024; 40: 91–95. <https://doi.org/10.1007/s12055-023-01589-2>
- [4] Singh B, Kurcab E, Conde K, Simmer PE, Vest MT. Pulmonary Sequestration Masquerading as Pulmonary Abscess. *Cureus*. 2024; 16: e72579. <https://doi.org/10.7759/cureus.72579>
- [5] Wang Y, Ma G, Rao NN, Liu M, Liao J, Wang QY. Pulmonary sequestration associated with pulmonary actinomycosis: A case report and literature review. *Medicine*. 2024; 103: e39981. <https://doi.org/10.1097/MD.00000000000039981>
- [6] Liu X, Wu R, Zhu S, Gu L, Tang Z. Imaging and pathological characteristics, treatment, and prognosis of pulmonary sequestration-A retrospective study of 13 cases. *The Clinical Respiratory Journal*. 2023; 17: 865–873. <https://doi.org/10.1111/crj.13672>
- [7] Ben Makhoul W, Hentati A, Makni S, Graja S, Charfi S, Sellami Boudawara T. Intralobar pulmonary sequestration associated with a bronchogenic cyst in an elderly woman: A case report. *International Journal of Surgery Case Reports*. 2025; 128: 111008. <https://doi.org/10.1016/j.ijscr.2025.111008>
- [8] Manasrah J, Fasfoos A, Jabareen M, Alhroub W, Asbeh YA. Congenital bronchogenic cyst: A case study on early detection and surgical intervention. *International Journal of Surgery Case Reports*. 2025; 129: 111120. <https://doi.org/10.1016/j.ijscr.2025.111120>
- [9] Yuan F, Ying C, Lou Y, Zhu D, Zhai X. Intralobar pulmonary sequestration masquerading as a giant lung abscess in a 16-year-old male: a case report and literature review. *Journal of Cardiothoracic Surgery*. 2025; 20: 435. <https://doi.org/10.1186/s13019-025-03676-4>
- [10] Shah MA, Shah I. Not all hemoptysis is tuberculosis - It could be intralobar bronchopulmonary sequestration. *Lung India : Official Organ of Indian Chest Society*. 2019; 36: 72–73. https://doi.org/10.4103/lungindia.lungindia_425_17
- [11] Kayhan S, Celik B, Belet U, Aydin O. Intralobar pulmonary sequestration as an unusual cause of recurrent hemoptysis. *Journal of Clinical Imaging Science*. 2012; 2: 71. <https://doi.org/10.4103/2156-7514.104304>
- [12] Jin HJ, Yu Y, He W, Han Y. Posterior mediastinal extralobar pulmonary sequestration misdiagnosed as a neurogenic tumor: A case report. *World Journal of Clinical Cases*. 2022; 10: 9340–9347. <https://doi.org/10.12998/wjcc.v10.i26.9340>
- [13] Kaufman CS, Nguyen MA, Bezold A, Chesnutt MS. Pediatric Pulmonary Arteriovenous Malformations in Patients with Hereditary Hemorrhagic Telangiectasia: Screening, Diagnosis, and Management. *Journal of Clinical Medicine*. 2025; 14: 3739. <https://doi.org/10.3390/jcm14113739>
- [14] Zhang SX, Wang HD, Yang K, Cheng W, Wu W. Retrospective review of the diagnosis and treatment of pulmonary sequestration in 28 patients: surgery or endovascular techniques? *Journal of Thoracic Disease*. 2017; 9: 5153–5160. <https://doi.org/10.21037/jtd.2017.10.145>
- [15] Marwah R, Nair JR, Singal A, Talwar I. 3D multidetector CT angiographic evaluation of intralobar bronchopulmonary sequestration. *Journal of Indian Association of Pediatric Surgeons*. 2010; 15: 39–41. <https://doi.org/10.4103/0971-9261.69144>
- [16] Fabbri N, Tamburini N, Galeotti R, Quarantotto F, Maniscalco P, Rinaldi R, et al. A rare case of intralobar pulmonary sequestration: combined endovascular and video-assisted thoracoscopic approach. *AME Case Reports*. 2018; 2: 19. <https://doi.org/10.21037/acr.2018.04.01>
- [17] Benson A, Perry Y, Cantos A, Butani D, Chengazi H. Transarterial embolization of intralobar pulmonary sequestration in adult patients: A case series. *Journal of Clinical Imaging Science*. 2024; 14: 42. https://doi.org/10.25259/JCIS_108_2024
- [18] Wu Y, Ye Z, He Z, He X, Hong X, Chen F, et al. Video-assisted thoracoscopic surgery lobectomy for giant intralobar pulmonary sequestration: A case report. *Medicine*. 2022; 101: e29284. <https://doi.org/10.1097/MD.00000000000029284>

© 2026 The Author(s).

