Sir,

An 82-year-old woman presented with complaints of loss of appetite and reduced urine output. Her medical history included hypertension and hypothyroidism. In addition to candesartan cilexetil and levothyroxine sodium, she reported frequent use of nonsteroidal anti-inflammatory drugs. On physical examination, her blood pressure was 160/80 mmHg and pulse was 98/min. Lung sounds were normal. Basal creatinine values were ambiguous. At the time of presentation, her laboratory values were: urea = 139 mg/dL, creatinine = 5.7 mg/dL, glomerular filtration rate = 7.57 mL/min/1.73 m², potassium = 6.7 mmol/L, calcium = 7.8 mg/dL (adjusted), phosphorus = 4.6 mg/dL, venous blood gas pH = 7.21, bicarbonate = 15.2 mmol/L, hemoglobin = 7.9 g/dL, hematocrit 24.3%, and Parathormone (PTH) = 297.2 ng/L. Urgent hemodialysis was performed due to findings of hyperkalemia and hypervolemia. Prominent and calcified tracheal borders were observed on conventional posteroanterior chest X-ray. Computed tomography of the thorax also revealed calcification throughout the tracheobronchial tree [Figures 1 and 2]. Based on the findings of elevated PTH level, anemia, signs of Grade 2 hypertensive retinopathy on fundoscopy, and increased renal parenchymal echogenicity on urinary ultrasound, the patient was diagnosed with chronic kidney disease (CKD). A tunneled hemodialysis catheter was placed and she was enrolled in a chronic dialysis program (3/7).

Tracheobronchial calcinosis is a rare radiological finding in adults, with an incidence of <1%. Various factors have been implicated in its etiology, including sarcoidosis, warfarin use, tracheobronchopathia osteochondroplastica generally manifesting with nodular calcifications, relapsing polychondritis, amyloidosis, and advanced age. Respiratory symptoms related to airway stenosis may occur, such as hemoptysis and dyspnea, or the condition may be completely asymptomatic. Our patient did not have a history of pulmonary disease or respiratory complaints. Other clinical conditions were ruled out with simple tests. Despite the diagnosis of CKD, there was no marked elevation in her calcium, phosphorus, or PTH levels. We believe that tracheal calcification was not primarily associated with CKD but was an incidental finding. In this age group, and especially in females, tracheal calcinosis may be encountered as an asymptomatic and incidental finding. In such cases, clinical and laboratory evaluation should have priority, and prudence is warranted when considering risky invasive procedures.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Diffuse tracheobronchial calcinosis in a geriatric patient with chronic kidney disease

Figure 1: Posteroanterior chest X-ray showing diffuse tracheobronchial calcification with distinct borders

Figure 2: Thoracic computed tomography: transverse sections showing tracheal, carinal, and bronchial calcifications
Letters to Editor

Conflicts of interest
There are no conflicts of interest.

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REFERENCES

1. Fukuya T, Mihara F, Kudo S, Russell WJ, DeLongchamp RR, Vaeth M, et al. Tracheobronchial calcification in members of a fixed population sample. Acta Radiol 1989;30:277-80.

2. Li D, Shi Z, Wang Y, Thakur A. Primary tracheobronchial amyloidosis: Coronal CT scan may provide clues for early diagnosis. J Postgrad Med 2013;59:223-5.

3. Chatterjee K, Sen C. Warfarin-induced tracheobronchial calcification. Indian J Vasc Endovasc Surg 2015;2:84-5.

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Hydropneumothorax following diagnostic bronchoalveolar lavage: A rarest of rare complication

Sir,

A 55-year-old female patient, a known diabetic on oral hypoglycemic agents for the past 2½ years with a history of pulmonary tuberculosis on antitubercular therapy for the last 6 months, presented to our institute complaining of low-grade fever with evening rise of temperature and dry cough with streaky hemoptysis for 15 days, associated with loss of weight and appetite. Contrast-enhanced computed tomography scan of the chest revealed consolidation of the anterior and apicoposterior segments of the left upper lobe. Suspecting persistent disease activity, a repeat bronchoscopic sampling was planned.

After taking consent, the patient underwent bronchoalveolar lavage (BAL) following standard institutional protocol. A volume of 60 ml of normal saline was instilled after wedging the scope in the apicoposterior segment of the left upper lobe. Around 30 ml of the lavage was collected by wall-mounted suction (with the pressure kept below 100 mmHg at all times). It was carried out under light sedation with continuous monitoring. She developed dyspnea, cough, and chest pain, due to which the procedure was abandoned and an urgent chest X-ray was ordered. This revealed a left-sided hydropneumothorax [Figure 1]. The patient was started on high-flow moist oxygen and kept under close monitoring. In view of persistent symptoms with significant tachypnea and hypoxemia, a decision was promptly taken to insert an intercostal chest drain (ICD) for drainage.

Noncontrast computed tomography chest [Figure 2] was done following this which showed no evidence of lung parenchymal injury. Fluid analysis was done which was suggestive of a transudative effusion. Serial imaging showed resolution of the hydropneumothorax with adequate lung expansion, and ICD was removed on the 3rd day (post-ICD).

The BAL report was negative for tuberculosis and pyogenic and fungal infections. Antitubercular therapy was stopped, and she was discharged and followed up in the outpatient department. Her symptoms did not recur, and the chest X-ray did not show radiological progression.

To the best of our knowledge, hydropneumothorax following diagnostic BAL has been reported in only two cases. Hudes et al. [1] had described hydropneumothorax...