In our patient, indirect hyperbilirubinemia plus positivity of the Coombs test suggested anemia as a complication of SLE (autoimmune hemolytic anemia; AIHA). AIHA affects 5%–10% of SLE patients and up to 40% of SLE patients show thrombocytopenia. The concomitant or consecutive manifestation of AIHA and immune thrombocytopenia, which is called Evans' syndrome (ES), is a rare complication, accounting for 0.47% in SLE. The ES could rise alone or in association with other diseases such as autoimmune conditions. The multisystem involvement of SLE occurs in 3%–15% of ES patients during the follow-up. Acute pulmonary involvement in SLE is characterized by a poor prognosis. Indeed, both ALP and DAH could be potentially fatal also because of opportunistic infections, cardiac and renal failure, diaphragmatic dysfunction, and drug toxicity that may occur.

To conclude, in our patient, SLE started with the most life-threatening respiratory and hematological complications. The diagnosis was difficult because of the coexistence of ALP and ES, which is a rare event that quickly worsened the patient's clinical conditions.

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 The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Rupture of occlusion balloon during transbronchial lung cryobiopsy

Sir,

Transbronchial lung cryobiopsy (TBLC) is increasingly being utilized for the diagnosis of diffuse parenchymal lung diseases.[1] The procedure can be performed under rigid bronchoscopy as well as flexible bronchoscopy. It is preferable to have airway protection during the procedure as significant bleeding may occur unpredictably during the procedure. Furthermore, use of an occlusion balloon (such as Fogarty balloon catheter/Arndt endobronchial blocker) is desirable during the procedure to prevent bleeding complications following biopsy. At our center,
we perform TBLC under general anesthesia using rigid bronchoscopy.[2] We commonly use Fogarty balloon catheter to occlude the biopsied segment, after obtaining a biopsy to prevent spillage of blood into the other segments. The most common complications during cryoprobe TBLB are bleeding and pneumothorax.[3] We have been performing biopsies using this technique for 2 years and did not encounter any significant bleeding complications though we have encountered pneumothorax and pneumomediastinum.[4] Recently, we encountered an unusual complication during TBLC.

A 50-year-old male patient underwent TBLC for the evaluation of suspected fibrotic nonspecific interstitial pneumonia/usual interstitial pneumonia. After induction of anesthesia, the patient was intubated with a size 11 rigid bronchoscope and the rigid bronchoscope was placed in the proximal bronchus intermedius. A therapeutic flexible videobronchoscope was then introduced through the lumen of the rigid bronchoscope to perform TBLC using a 1.9 mm flexible cryoprobe. After obtaining two biopsy samples from the right lower lobe lateral basal segment, we checked the position of Fogarty balloon before taking the third biopsy [Figure 1a]. We obtained the third biopsy specimen from the posterior basal segment, and following biopsy, the Fogarty balloon was inflated with 1.5 mL of saline as per the manufacturer’s recommendation. After taking out the third biopsy specimen, when flexible bronchoscope was reinserted, oozing of blood in the right lower lobe basal segments was visualized which was cleared with bronchoscopic suctioning. The Fogarty balloon was seen to be deflated [Figure 1b]. As there was active oozing, we attempted to inflate the balloon with another 1.5 cc of saline and a pinpoint spurt of saline leakage was seen at this point of time, suggesting rupture of the occlusion balloon [Figure 1c]. We immediately removed the balloon and another balloon was inserted and inflated to contain the bleeding.

To the best of our knowledge, this complication has not been reported during TBLC. Intactness and accurate positioning of occlusion balloon are key steps during the performance of TBLC. Displacement of Fogarty balloon can occur during en bloc removal of flexible bronchoscope with cryoprobe and attached biopsy. Rupture of Fogarty balloon during TBLC has not been described and could have occurred in our case due to various possible reasons. Excessive pressure in the balloon can occur if more saline is filled or saline-filled balloon is pushed into a distal segment which has a narrower lumen leading to increased pressure within the balloon. The contact of the inflated balloon with the beveled tip of the rigid bronchoscope can puncture the balloon. Another mechanism is accidental contact of cryoprobe with the Fogarty balloon. In our patient, we suspected a more distal placement of rigid bronchoscope barrel causing balloon rupture though it is difficult to confirm our hypothesis. Although we did not encounter significant bleeding despite balloon rupture, such an occurrence during TBLC may be associated with complications and difficulty in ensuring ventilation in case significant bleeding occurs. As the flexible bronchoscope is not inside the bronchoscope barrel immediately following biopsy, this rupture can lead to spillage of blood on the ipsilateral and even on the other side through the ventilating ports of rigid tracheobronchoscope and lead to marked hypoxemia. Another consequence of balloon rupture can be the immediate transmission of positive-pressure ventilation to the biopsied area possibly increasing the risk of barotrauma. Immediate identification as performed in our case was helpful and significant complications were prevented.

The management options in such a situation include replacement of another balloon or immediate negotiation of the rigid bronchoscope barrel into the contralateral bronchus in case of massive bleeding. Another option of occlusion of biopsied segment includes placement of an Arndt blocker which can be left in place in case of continued bleeding. Our case highlights an important yet uncommon complication during performance of TBLC which can lead to spillage of blood in tracheobronchial tree causing potential intraprocedural hypoxemia.

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