



Background

EBUS is usually used to sample benign/ malignant mediastinal or peri-bronchial lesions.

We have used it in paravertebral mass lesion and in patients of main stem bronchus occlusion with vascular growths (EBUS-TBNA) where EBLB is risky or leads to bleeding and cEBNA leads to insufficient material for IHC/ molecular analysis and patients was unfit for rigid bronchoscopy procedures under GA.

Case 1

A 63 year male presented with SVC syndrome and vascular RMB mass. EBLB was attempted with moderate bleeding and further sampling withheld. Site was not amenable for blocker placement. Conventional EBNA was done with ROSE with scanty cellularity on ROSE. Cell block was visually inadequate for molecular/IHC analysis in view of absence of core. EBUS EBNA was done using 22G needle from mass and cell blocks prepared along with ROSE, thus confirming diagnosis & enabling further analysis without any further significant bleeding. Further processing revealed it to be squamous cell carcinoma on HPE and IHC.

Images-Case 1

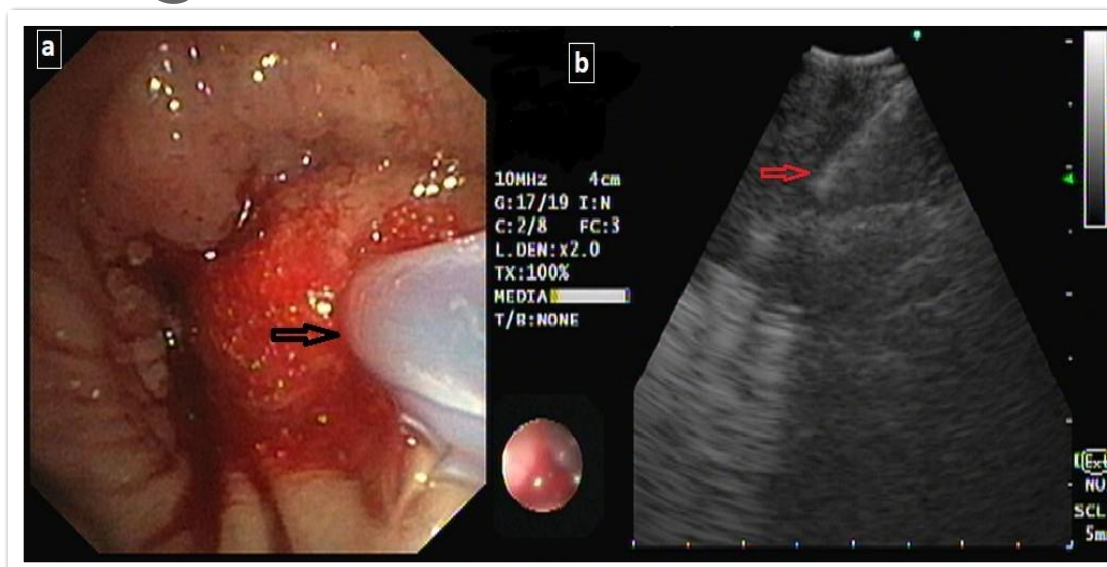


Fig. a) Showing C-EBNA needle (black arrow); b) EBUS needle (red arrow) inside mass lesion.

Case 2

A 48 year smoker male presented with acute onset paraparesis with back pain for several months. He also complained of intermittent streaking and loss of weight. PET-CT revealed high uptake growth encircling trachea posteriorly. MRI revealed features of compressive myelopathy for which surgical intervention was ruled out. Interventional radiology opinion was taken for transthoracic sampling which was refused due to associated risks. Patient was taken up for EBUS screening, growth visualized at lower end with poorly defined borders and sampled which turned out to be NSCLC on histopathological examination. Patient was lost to follow up & IHC /molecular analysis could not be put on sample.

Images-Case 2



Fig. a) MRI spine posterior growth (white arrow); b) growth encircling trachea (red arrow); c) EBUS needle inside lesion.

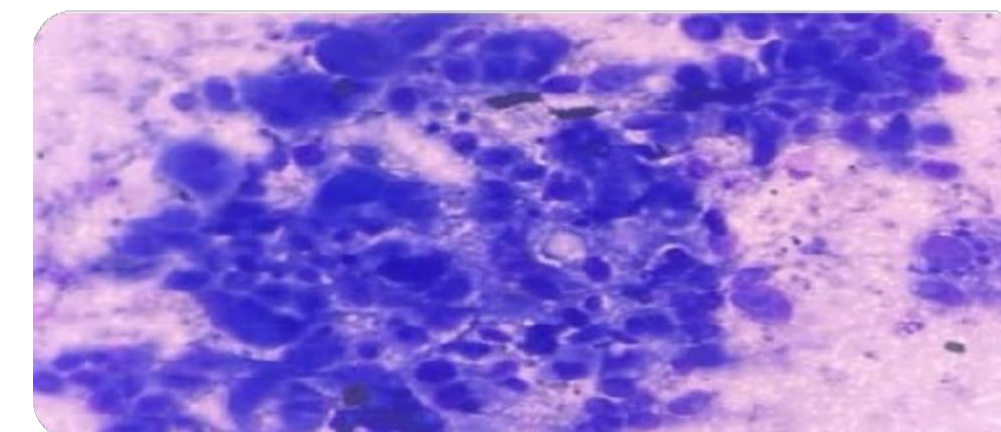


Fig. Slide showing NSCLC features

Conclusion

Rarely, when EBLB is risky, cEBNA fails to yield adequate sample for cell block, and blocker is not feasible. EBUS-EBNA can be used to get adequate sample for IHC & molecular analysis. EBUS can be an additional safe tool for paravertebral masses if transthoracic approach is not possible.