

Attending EBUS-TBNA Workshops Improves Yield of Conventional TBNA

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Sir,

Since the invent of fiberoptic bronchoscope by Shigeto Ikada in 1966, the endobronchial procedures have improved leaps and bounds. The procedures like transbronchial needle aspiration (TBNA) are not only simple, but also assist in preventing invasive procedures like mediastinoscopy in establishing diagnosis or staging lung cancers. TBNA's first application via flexible bronchoscopy was described in 1983.¹ But it remains an underutilized procedure, mainly because of low yield. The yield of conventional TBNA (c-TBNA) ranges from 17-100% in myriad studies but is usually 40-50%.² The low yield is mainly because of the inherent characteristic of procedure and that it is a relatively blind procedure. The sampling of mediastinal and hilar lymph nodes (LN) is guided by CT picture and experience of bronchoscopist. The LN

stations usually sampled are lower paratracheal, subcarinal and hilar LN's. The remaining LN's or avoided in unguided c-TBNA due to risk of injuring vessels & structures in vicinity of these LN's.⁴ This blind nature of c-TBNA due to relying on charts & CT images, led to introduction of EBUS guided TBNA in 2003.³

Endobronchial ultrasound (EBUS) guides sampling of these lymph nodes in real time, thus the yield is good, ranging from 89-96%.³ The EBUS-TBNA has gained popularity over past 15 years but the equipment is costly, and procedure is laborious, thus not easily available. However, various workshops regarding training of EBUS are being carried out under aegis of various societies and organizations

We three bronchoscopists at a tertiary care chest centre of Indian Armed forces underwent a 5-day course of EBUS-TBNA prior to necessary clearance and installation of equipment at our centre. Surprisingly, we observed improvement in our yield of c-TBNA procedures post short EBUS-TBNA training. We analyzed the results of 300 c-TBNA procedures carried out pre and post short EBUS-TBNA course. Of the 300 cases who underwent c-TBNA pre EBUS training results were obtained

in 50 cases i.e. 16.7%. The 300 cases analyzed post EBUS training yielded results in 130 cases i.e. 43.3%. Statistical analysis by Chi square test gave a p-value of 0.024 which was statistically significant.

Though attending workshops may only, give a glimpse regarding the procedure of EBUS – TBNA, but attending the same, we feel, lets the bronchoscopist learn about the mediastinal anatomy in a better way. A bronchoscopist is apt in performing routine c-TBNA procedures. Learning EBUS helps him/her to mentally localize the routinely aspirated mediastinal LN's in a better way, thereby improving yield of c-TBNA.

The results of our study prove the same i.e., attending workshops on EBUS helps to improve the yield of routine c-TBNA procedures being carried out in bronchoscopy suits.

References

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