

Fine Needle Aspiration and Core Needle Biopsy for Diagnosis of Mediastinal Mass in Thailand

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ABSTRACT

Objectives: To evaluate diagnostic accuracy of fine needle aspiration (FNA) and core needle biopsy (CNB) in mediastinal lesions. **Material and Methods:** From October 2006 to September 2015, there were 45 cases of FNA and 87 cases of CNB included in this retrospective study. Results of FNA and CNB were compared with subsequent resection specimen to evaluate sensitivity and specificity of two procedures. Discordant cases were reviewed.

Results: Sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of FNA were 68.42%, 85.71%, 96.30% and 33.33%, respectively. Sensitivity, specificity, PPV and NPV of CNB were 98.63%, 100%, 100% and 93.33%, respectively. There were 13 cases of discordant FNA. Twelve of them were malignant lesions that had been diagnosed as benign on FNA and the remaining case was mature teratoma that had been diagnosed as thymoma on FNA. Seven of 13 discordant FNAs were not representative of the lesion.

Conclusion: Although FNA may yield lower diagnostic accuracy when compared to CNB, but it is still considered a reliable tool for diagnosis of malignant mediastinal lesions. However, this method has low diagnostic yield for benign lesion, especially when the smears are limited by obscuring blood, excessive thickness and low cellularity.

Keywords: Fine needle aspiration (FNA), core needle biopsy (CNB), mediastinal mass, accuracy