Role of Fine Needle Aspiration Cytology in Diagnosis of Chest Lesions

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Abstract

Objectives: Fine needle aspiration cytology and biopsy provides a highly accurate diagnostic method which can be performed rapidly with minimal risk. It provides a definitive diagnosis in most patients at low cost with minimal trauma. Aim of this study is to assess the value of fine needle aspiration cytology (FNAC) in the diagnosis of chest lesions.

Methods: FNA specimens from 57 patients with suspected pulmonary neoplasms were subjected to immediate cytology assessment. Direct smears were prepared in the radiology department and fixed in ethanol alcohol in four slides. The cellular content was assessed and, if possible, a provisional diagnosis offered. A second FNA was requested if the initial aspirate seemed of doubtful adequacy. The diagnostic accuracy was examined by review of clinical and radiological data in all patients.

Results: Satisfactory diagnostic material was obtained in 53 patients on a single aspirate and following a second FNA in 4 patients with inadequate specimens. Of the 57 aspirates, 37 were malignant. Most of tumours occurred in the age ranged between (50-59) years old. The male constitute the 2/3rd of malignant tumour. Adenocarcinoma constitute the majority of primary lung cancer 61.8%, this is indicated the benefit of FNAC for diagnosis of peripheral lesions of the chest, as this tumours tend to occur peripherally.

All malignant diagnoses were confirmed on clinical and/or pathological review. FNA accurately distinguished primary small cell and large cell carcinomas in those patients with pathological follow up. Complications were recorded in four (7%) patients, all of them were developed pneumothorax, a chest drain was required in one patient. The others managed conservatively.

Biography:

Bashar Hanna Azar has completed his MBChB from Mosul Medical College, Mosul University Iraq and Postdoctoral studies from Iraqi council of medical specialization Baghdad University School of Medicine. He is the Head of Department of Thoracic and Cardiovascular Surgery, Hawler College of Medicine, Hawler Medical University. He is the Director of Erbil Centre of Kurdistan Board for Medical specialties. He has published more than 10 papers in reputed journals and has been serving as an Editorial Board Member of repute.