Editorial:

BRONCHIAL BIOPSY AND FIBER OPTIC BRONCHOSCOPY

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Fiber optic Bronchoscopy is still a relatively new procedure, which is carried out at only a few centers in Pakistan. While the number of patients requiring this procedure is increasing day by day, the number of well equipped centers and trained human resource is still much less than required. At this juncture of time when newer modalities, like Electromagnetic navigation guided Bronchoscopy, have revolutionized the diagnostic yield in most peripheral tumors, EBUS and Auto Floreescence Bronchoscopy have become routine procedures in most Bronchoscopy suites in the world. Yet, only a few centers in Pakistan are doing Transbronchial biopsy.

The main indication of bronchial biopsy is bronchial neoplasm and most bronchial biopsies are taken to either confirm or differentiate neoplasm from inflammatory diseases. Due to very tiny nature of biopsy, at times histopathologist is unable to further classify from Small cell or Non Small cell carcinoma. At such occasions Immunohistopathology and tumor markers can help a lot. Bronchogenic carcinoma is so polymorphic in nature that at times it is really impossible to classify in definite types.

In this issue of journal, a paper, “Study of histopathological patterns of bronchial biopsies taken in patients suspected of suffering from Bronchogenic carcinoma” by Fazli Maula et al, is included. The problems enlisted above are also evident from this paper. Still, out of total bronchoscopies, only 31% were biopsied and 45 % of biopsied proved malignant.

As the state of art Bronchoscopy services are not available at all big hospitals of the country, similarly the Histopathology services available are also not much of a help for clinician. Unluckily, in a usual histopathology report depicting malignancy, very important information like adequacy of specimen, severity of dysplasia and clear cut diagnosis are not mentioned. Similarly in reports depicting inflammation, comments on mucosa, sub mucosa and cartilage are usually not present.

Bronchial biopsies are very tiny and at times it is difficult to give proper diagnosis on such samples, but we clinicians need to develop a habit that if such cases are resected and bigger specimens have enlightened us with a diagnosis, such information must be passed to the histopathologist for future guidance.

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Diagnostic yield has always been the priority of all Bronchoscopist and many innovations and gadgets have been introduced to improve it. Transbronchial biopsy TBB and Transbronchial Aspiration TBA have an important role in improving diagnostic yield. A recent study has shown 92% diagnostic yield in macroscopically visible tumor with endobronchial biopsy and 50% yield in peripheral tumors less than 3 cm with help of TBA and TBB.

Fiber Optic Bronchoscopy is a very safe procedure and in most recent studies rate of complications is only 1—2 % and that too only minor non life threatening complications even with Transbronchial biopsy. It can be performed safely and is well-tolerated even in asthmatic subjects.

The incidence of various types of lung cancers being reported from various centers of Pakistan is same for last 20 years; Squamous cell carcinoma being the leading one followed by small cell, Adenocarcinoma, and large cell carcinoma being the minimum. The incidence of Adenocarcinoma is seen rising in the last decade and that too among non smokers. Data from Gulab Devi hospital supports the evidence showing the same pattern among 1156 cases of Bronchogenic carcinoma diagnosed at Gulab Devi Hospital Lahore during 1994 –2003.

References:


