

Fibre Optic Bronchoscopy in IDCH – Beginning and Experiences

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Summary :

A total number of 850 patients have undergone fiberoptic bronchoscopy but only 217 patients came for follow up subsequently with histopathological report. This indicates that most of the patients are reluctant to come for follow up. This may be due to improper motivation or may be due to ignorance. Patients who came for follow up are mostly male. This signifies that males are more aware than females.

Of the 217 patients, the distribution of lesion is almost same on Lt. and Rt Lung though in many situation lung pathology is more common in Rt side (due to length of Rt principal bronchus).

In IDCH it was found that predominant malignancy is squamous cell carcinoma, small cell carcinoma is next to squamous cell carcinoma.

Introduction :

The diagnostic armamentarium for respiratory disease has continued to expand tremendously. Newer techniques and modifications of established procedures provide constantly expanding diagnostic opportunities to increasing number of patients¹. Of all the innovative techniques that have been introduced in recent years for the diagnosis of pulmonary disease; none had greater impact than fibre optic bronchoscopy². With the introduction of fibre-optic bronchoscope since 1964, the practice of pulmonary medicine was radically changed³.

When used alone; it is superior to conventional rigid bronchoscope for routine use⁴. There is low incidence of complications, when using the fibrescope alone under topical anaesthesia and further more, the services of an anaesthetist are not required. The instrument can be introduced through oral or nasal passages; a rigid bronchoscope tube or in the acute care situation, through an endotracheal & tracheostomy tube. In skilled hands patients acceptance is good⁵.

The main advance achieved with this remarkable instrument is the ability to visualise and sample,

bronchial pathology very much more peripherally than is possible using rigid telescopes. Further more this facility, together with long flexible instruments and radiological control, allows sampling of peripheral lesions well beyond visibility⁶.

Fiberoptic bronchoscopy was introduced in department of medicine, IDCH from January, 1996. In this paper an attempt is made to see the pattern of Malignancy diagnosed histopathologically and complications during the procedure.

Aims & Objectives :

- To see the pattern of malignancy in patients undergoing bronchoscopy
- To see complications during the procedure.

Material & Methods :

Types of Study : Retrospective

Subjects : All the patients who has undergone the procedure during Jan -96 to Nov. 97.

Study Procedure :

The registrar book where patients were recorded was taken & data's were taken from the book & analysed statistically.

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Results :

Table-I, Shows the total number of patients who had undergone the procedure. Total number of cases were 850; of them only 217 patients came back for further follow-up. Of the 217 patients 197 were male (90.78%) & 20 patients were female (9.20%).

Table-I
Distribution of Sex of positive lesions

Sex	No. of patients	Percentage
Male	197	90.78
Female	20	09.22

Table II showing distribution of visible lesions in the various parts of the respiratory tract. 105 patients (48.38%) had Rt. sided lesion; 110 patients (50.69%) had Lt. sided lesion; only 2 patients (0.92%) had lesions in trachea.

Table-II
Distribution of lesion in the respiratory tract

No. of patients	Right lung	Left lung	Trachea
217	105	110	02

Table III, shows results of histopathology of biopsy materials. 113 patients (52%) had squamous cell carcinoma. 33 patients had small cell carcinoma (15.2%). 5 patients had adeno carcinoma (2.3%). 5 patients had large cell carcinoma (2.3%) 4 patients had broncho - alveolar cell carcinoma (1.84%). 57 patients had no malignancy in histopathology (26.26%).

Table-III
Showing histopathological results

Types	No. of Patients	Percentage
Sq. cell carcinoma	113	52
Small cell carcinoma	33	15.2
Adeno carcinoma	05	2.3
Large cell carcinoma	05	2.3
Others (Broncho alveolar cell carcinoma)	04	1.84
No. Malignancy	57	26.30
Total	217	100

Table IV, showing the complications during procedure. 845 (99.41%) patients did not have any

complication. Some patients experience cough during the procedure. 4 patients (0.47%) had profuse hemoptysis requiring emergency management. One patient needed endotracheal intubation & assisted ventilation. No mortality was found in the series.

Table-IV
Showing the complications

Name of Complication	No. of patients	percentage
No. Complication	845	99.41
Hemphlysis	4	0.47
Total	849	

Discussion :

A total number of 850 patients have undergone fiberoptic bronchoscopy; but only 217 patients came for follow-up; subsequently with histopathological reports. Of them few had normal bronchial tree in FOB. Few were referred cases from other centres. But most of the cases were reluctant to come for follow-up. This may be due to improper motivation or may be due to ignorance.

Patients who came for follow-up mostly males. This signifies that males are more aware than females.

Of the 217 patients; the distribution of lesion is almost same on Lt. and Rt. lung though in many situation lung pathology is more common on Rt. side (due to short length of Rt. principal bronchus)⁶.

In IDCH the predominant malignancy was sq. cell carcinoma. Small cell is the next. This is similar with other series¹.

Experiences :

So far we have done 850 patients

Our experience is :

- It can be done as an out patient procedure;
- Complications are minimum;
- Patient can go home immediately after the procedure;
- Safest & reliable method for diagnosis of suspected radiological shadow in CxR.

Complication :

- 845 patients did not have any complications;
- Only cough during procedure;

- Profuse Haemoptysis in 4 patients required emergency management;
- One patient needed endotracheal intubation with artificial ventilation

Conclusion :

Bronchoscopy to be done in any chest complain having inconclusive, radiological opacity not responding with conventional management.

References :

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