MANAGEMENT OF NON SMALL CELL LUNG CANCER (NSCL) IN DIFFERENT CLINICAL SITUATIONS

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Abstract

This study was done in the period of January 2007 to December 2007, among the Oncologists working in different hospitals of Dhaka city.

The oncologists were interviewed with a set questionnaires regarding Non Small Cell Lung carcinoma in different clinical stages. The total number of respondent was thirty.

It was found from the study that 50% (15) of oncologist recommended post operative radiotherapy and 40% (12) both chemo and radiotherapy in T_2 N_1 M_0 stage of post pneumonectomy patients. 80% (24) oncologist preferred both chemo-radiotherapy in T2 N3M0 stage

Key Words: *Non small cell lung carcinoma, attitude and practice of Bangladeshi Oncologist*

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Introduction

Primary Carcinoma of the lung was uncommon cancer until 1930's. It is one of the insidious and aggressive neoplasm in the whole realm of oncology. The out look is poor for most patients with bronchogenic carcinoma. Despite all efforts at early diagnosis by frequent radioscopic examination of the chest, cytological examination of the sputum, bronchial washing or brushing and the improvement in thoracic surgery, radiotherapy and chemotherapy, the overall 5 years survival rate is on the order of 9% [1]. The overall survival rate of male is approximately 10% for squamous cell carcinoma and adenocarcinoma but only 3% for undifferentiated lesion.

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Despite this discouraging out look, it must never be forgotten that many patients have been cured by lobectomy or pneumonectomy, emphasizing the continued need for early diagnosis and adequate prompt therapy. Indeed, in the uncommon but happy instance of localized solitary tumor less than 4cm in diameter, surgical resection results in up to 40% 5 year survival for patients with adenocarcinoma and large cell carcinoma. About 85%of diagnosed patients die of this disease[2]. As such lung cancer is now considered as a global human problem.

Methodology :

This study was done among 30 Oncologists working in different hospitals of Dhaka city in the period of January 2007 to December 2007.

They were interviewed with some questionnaire like

i) One male patient, aged about 60 years, post pneumonectomy status having T_2 N_1 M_0 stage

ii) A 65 years old man having T_2 N_3 M_0 stage

iii) Chemotherapy protocol for metastatic lung cancer according to 1st line, 2nd line and palliative setting

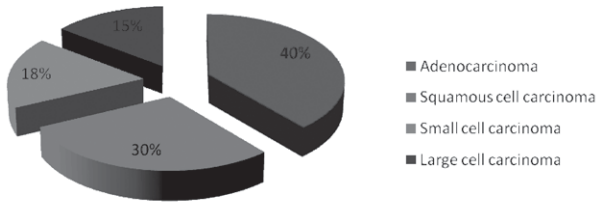

Fig.-1: *Incidence of major histologic types*

Numbers do not sum to 100% because of differences in diagnostic criteria

Table-I

Non small cell lung cancer TNM stage grouping

Occult carcinoma	Tx	N0	M0
Stage 0	Tis	N0	M0
Stage Ia	T1	N0	M0
Stage Ib	T2	N0	M0
Stage Iia	T1		
Stage IIb	T2	N1	M0
	T3	N0	M0
Stage IIIa	T1	N2	M0
	T2	N2	M0
	T3	N1	M0
	T4	N2	M0
			M0
Stage IIIb	Any T	N3	M0
	T4	Any N	M0
Stage IV	Any T	Any N	M1

Used with permission of the American Joint Committee on Cancer (AJCC), Chicago, Illinois.

Table-II

Post-operative treatment options for a case of 60 years (male) with T2N1M0

Treatment	Frequency	Percent
BSC	3	12.0
RT	10	40.0
CT	2	8.0
CT+RT	10	40.0
Total	25	100.0

Table-III

Treatment options for a case of 65 years (male) with T2N3M0

Treatment	Frequency	Percent
BSC	1	4.0
RT	2	8.0
CT	2	8.0
CT+RT	20	80.0
Total	25	100.0

Table-IV

Treatment options for a case of 50 years (male) with M1

Treatment	Frequency	Percent
BSC	1	4.0
RT	2	8.0
CT	2	8.0
CT+RT	20	80.0
Total	25	100.0

Table-V

Standard first line chemotherapy for a patient of 50 years (male) with squamous cell carcinoma (M1)

Treatment	Frequency	Percent
MVP	2	8.0
ICE	2	8.0
Cisplatine-etoposide	8	32.0
Gemicitabine-carboplatine	3	12.0
Paclitaxel-carboplatine	9	36.0
Gemicitabine- cisplatine-paclitaxel	1	4.0
Total	25	100.0

Table-VI

Second line chemotherapy options for the patient after disease progression

Treatment	Frequency	Percent
Single agent vinorelbine	4	14.8
Single agent carboplatine	1	3.7
Single agent docetaxel	6	22.2
Single agent gemicitabine	4	14.8
Combination containing vinorelbine	1	3.7
Combination containing docetaxel	6	22.2
Combination containing gemicitabine-	3	11.1
Targeted therapy Alone	2	7.4
Total	27	100.0

Table-VII

Approximated median survival benefit for the patients after receiving second line chemotherapy

Median survival benefit	Frequency	Percent
0-2 months	2	9.1
2-4 months	5	22.7
4-6 months	8	36.4
6-8 months	6	27.3
>8 months	1	4.5
Total	22	100.0

Table-VIII

Recommended duration of the first line chemotherapy

Duration of CT	Frequency	Percent
Two cycles	4	16.0
Four cycles	9	36.0
Six cycles	11	44.0
Till progressive disease	1	4.0
Total	25	100.0

Table-IX

Objective tumour response is seen in the majority within two cycles

Tumour response	Frequency	Percent
Yes	22	88.0
No	3	12.0
Total	25	100.0

Table-X

Maximum symptomatic response is seen within four cycles

Maximum response within four cycles	Frequency	Percent
Yes	20	80.0
No	5	20.0
Total	25	100.0

Table-XI

Continuing first line chemotherapy beyond six cycles will give better survival at the cost of increased cumulative toxicity

Better survival	Frequency	Percent
Yes	5	20.0
No	20	80.0
Total	25	100.0

Table-XII

Only half of patients will receive second line chemotherapy at a later date

Received 2nd linechemotherapy	Frequency	Percent
Yes	8	32.0
No	17	68.0
Total	25	100.0

Conclusions:

About 80% of oncologist opined for both chemotherapy and radiotherapy in T2 N3 M0 stage of non small cell lung cancer patients. Regarding first line chemotherapy about 30% oncologist suggested that cisplatine and etoposide regimen and 34% recommended paclitaxel and carboplatine regimen. About 50% oncologists responded first line chemotherapy for six cycles. Most of the oncologists (90%) agreed to evaluate objective response after two cycles and maximum symptomatic response will get after four cycles. Almost 60% oncologists responded positively regarding half of patients receive second line chemotherapy. Only 25% oncologists prefer second line chemotherapy with combination containing docetaxel.

Limitation of the study:

This study included only 30 oncologists working at different hospitals of Dhaka city. Due to time and other constrains more respondents could not be included. Oncologists working outside Dhaka were also excluded for the same reasons. It would be more representative if the number of oncologists working at different places of Bangladesh could be increased.

References:

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