Bronchogenic Garcinoma in Babylon of 50 Patients

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Abstract

Lung cancers seem to be increasting in their incidence in our country a study had been made en 50 patients with caracinoma of the lung at marjan teaching hospital in babil. The age groups mestly affected were between (43-87) years and a mean age of 60.5 year. Male to female reatie of (6.1:1) 75% of the patients were advanced at their presentation and 80% were heavy smokers.

Squmous-cell tyo histology was the most common type, Bronchoscopy and sputum cytology were the main methods of diagnosis in our patients. All patients with squamous cell-type carcinoma had recieved radiotherapy and/or chemotherapy.

Introduction

Lung cancer is the leading cause of death due to malignancy in both men and women, and death rate continues to rise in non-small-cell lung ca and in developed countries it is particularly true in women where lung cancer death rate exceed that of breast ca.*(1,2,3) in 1987 it was estimated that lung ca. would kill 136.000 presons in U.S. * (4,5).

Smoking is amajor health hazard and is the dominant cause of lung cancer and COAD 80-90% of cases of lung ca. may be directly linked to active ciggerates smoking (6). In develobed countries smoking is responsible for more than 30% of all cancer deaths including ca.-lung, the smoking habits increased among females and the prevlance rate of smoking habits among female in Baghdad city was 13.3% and it is increased as ago progressed(7,8).

The 5 year survival rate of patients with Ca. bronchus only is (8-12%), this reflect the fact that disease is advanced in most of the patients when 1st. detected, and further more screening regimen does not alter. Mortality rate fromlung Ca. nor offecial recommendations available for screening patients with lung Ca(0,0). We undertooka study on 50 patients with lung Ca. admitted to Merjan Hospital in Babylon Jan. 1992 to Dec. 1993 in oreder to show the varicus clinical and some epidemiologig as pects of Ca.-bronchus.

Patients and Methods

50 Patients admitted to Merjan Hospital with diagnosis of Ca.-

bronchus from Jan 1992 to Dec. 1993. All the patients were clinically assessed and by CXR , U/S and bone survey if indicated blood picture, sputum cytology and Bronchoscopy done, and one patients had mediastinoscopy for the diagnosis. Pleural fluid aspiration, cytology and/or biopsy done in patients whom they have pleural effusion. The main methods for diagnosis are sputum cytology and bronchoscopy, one patients had fine needle caspiration for the diagnosis.

Results

Age incidance the age of the patients were between (43-87) year a mean of (60.5) year.

Sex incidence: 43 were males and 7 were females, a ratio of (6.1:1) 16 out of 50 patients were (Framer) and majority of these patients were heavy smoker over 30 years duration , a number stop their smoking habits, few months prior presentation and as they had become symptomatic.

Symptomatology were described in table No.1 with comparison of the symptoms & manifestation with Al-Alusis series [11,12].

Duration of the syptoms befor the dx is raning from (1 month-2year) and table 2 demonstrate the natural history of lung Ca.

The main methods of diagnosis are sputum cytology and/or bronchoscopy, and sputum cytology done in 18 patients and 6 had positive result for cytology and in a study[13,14] done 102 consequetive patients with histologically proved lung Ca. three samples were examined cytology, the overall sensisity of sputum cytology detecting malignant cells wer 0.8 with an accuracy of 77.4%, and table No. 3 shows the main methods and their +ve results.

The commonest histologic type is squamous cell Ca. and table No.4 shows the percentage of histologic type and table No. 5 shows histologic classification and most frequent histology in Iraq, registered by Iraqi Cancer registry (1986-1988)[15].

The most common sit of site of affection in bronchogenic Ca. is the right lung making about 30 out of 50 patients.

One patient had lung resection at her presentation and 2 years laters, she develops recurrance of symptoms.

Discussion

Lung cancer incidence is constantly and progressively increasing in every country. At the turn of the century only 1% of all deaths were due to this disease & currently the figure has reahed 2.3%[16,17,18]. Tobacco consumption is rising by 2.1% a year in the developing world[18,19]. By an observation it seem that smoking habits is high among farmers, we had noticed that about 36% of our patients were far-

mars, this is in contra distinction to a study[18,19], done before which showed that 87% of the patients were from large cities than in rural areas and this need effective anti-smoking education and at titude to control this health hazard[20,21,22,23].

It seems that the trend of adeno carcinoma of the lung preponderonce is not represented in our studied patients, in addition all the cases of adenocarcinoma of the bronchus recorded were smoker. We had noticed that the patients whom they present with advanced stage and metasttasis have high ESR over 115. Also bone pain and boney metastasis or secondaries noticed in 8% of the studied patients, no predictive value or biohemical test was made in our patients, however, it has beeen suggested, but not clearly proved that normal LDH level are predictive of negative bone marrow examinationin p0atients with small-cell-cancer[24].

No other risk factors a part from smoking were indentified in ourpatients and it has been suggested that exposure to Radon in houses and indoor and outdoor exposure has synergistic action with smoking[25].

No familial incidence were observed in our studied patients, and it has been cocluded that loss of short arm of chromosome No. 3 is a change found consistently in small0cell lung Ca. and occassionally in non-small cell lung Ca.[26]. As 5 year survivaly rate of lung cancer is (8-12%), making lung cancer a serious health problem and this in need for early detection and diagnosis and control, though provision of screening programme for high risk groups to detect early stage lung cancer does not alter mortality from lung cancer nor official recommendation was well documented.

We belive that mang social, econonomic and many other non-medical factors might infleunce the treatment of person given a diagnosis of non-small cell lung cancer especially when optimal therapy is uncertain[27], and this is especially during our present critical circumstances of shortage in medical & non-medical means.

The present value combination C.T. in prolonging survival of patients with wide-spread non-small-cell lung cancer is unceratain, and some recent randomised trials have concluded that such treatment is benficial[28,29] whereas trials have found that the outcome of cytotoxics drug treatment to be no better than best supportive caro[30].

In conclusion Broncho genic carcinoma is still the most common lung cancer in our country smoking is the major health hazard for the development of this type of cancer and any attempts to reduce the incidence of this cancer must be IST, directed at the reduction of this abnormal habit among the population abnormal.

Table -1: Percentage of principle manifestations of lung Cancer in two series

Manifestation	Present Series %	Al-Alusis series %
Cough	96	91
Chest and Shoulder Pain	54	84
-SOB (Short tness of breath)	36	81
* Haemoptysis	24	68
* Clubbing	20	61
Hoarsness	10	7
*Weight loss	28	88
Anorexia	20	-
*Hepatomegaly	20	56
PI. effusion	16	21
Lymphadenopathy	8	32
Bones pain and bone secondaries	8	-
SVCO (superior vena cara obstruction)	6	3.5
Dysphagia	2	3.5
Joints poin (HPOA) (Hyper trophic pulmonary osteo or thropathy)	4	-

HPOA (Hyper trophic pulmonary osteo or thropathy)

Table -2: Lung Cancer 1993 Statistics

		Male	Female
Estimated incidence		100.000	70.000
Estimated deaths		93.000	56.000
5 Y.S. of all stage: (Five years survival) of all stage			
1960 - 1963	White		8%
	Black		5%
1683 - 1988	White		13%
	Black		11%
Natural history of Lung Ca.			

Lesion Originates ——— (years) (1 cm-60% of eventual growth) ——— symptoms

20 months | 2 months

Diagnosis ——— initial clinical visit (1 month)

* 5 Y.S. = five years survival

Table -3: Methods of diagnosis

Procedure	No. done	Positive results
Sputum Cytology	16	6
Pronchoscopy	21	20
Mediastinoscopy	1	1
Pleural fluid study	8	6
* FNA	1	1

* FNA (fine needle aspiration)

Table (4) Percentage of histologic type

Histology	No. done	Positive results
Squamous Carcinoma	26	52
Adeno - Cacinoma	18	36
Small - Cell type	5	10
Undifferentiated	1	2

Table -5: Most Frequent Histology (Results of Iraq Cancer registry 1986 - 1988)

Histology (Ca)	No	Positive results
Squamous	751	39.6
Small Cell	265	14
Adenocarcinoma	230	12.1
Undifferentiated	156	8.2
Large Cell	88	4.6
Malignmt Cells (cytology)	33	1.7
Pan coast	22	1.2
Carcinoid	10	0.5
Other Sarcama	8	0.4
Other	12	0.6
No histology	323	17

Histologically Verified	
Cases	%
1575	83.0

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