

Research Article

CLINICAL PRESENTATION OF LUNG CANCER IN ADULTS: A RETROSPECTIVE STUDY OF 61 PATIENTS FROM A TERTIARY CARE CENTRE IN SOUTH INDIA

***Yogeesha K.S.¹, Vijayamahantesh N.N.¹, Raghavendra Bakki Sannegowda², Nishitha Shetty³, Arunachalam R.¹ and Navin A. Patil⁴**

¹Department of Medicine, Father Muller Medical College Hospital, Mangalore, Karnataka-India

²Department of Neurology, Father Muller Medical College Hospital, Mangalore, Karnataka-India

³Department of Medical Oncology, Tata Memorial Centre, Bombay, Maharashtra, India

⁴Department of Pharmacology, KMC Medical College Hospital, Manipal, Karnataka, India

*Author for Correspondence

ABSTRACT

Lung cancer has been found to be the commonest cancer in India. However, no studies are available on symptomatic presentation and initial diagnosis. Objective was to find the commonest presentation of lung cancer. All newly histologically diagnosed cases of lung cancer in the Father Muller Hospital were collected over a period of six months (August 2013 to January 2014). A retrospective study was done. Symptomatic presentation and the initial diagnosis were assessed. Sixty one incident cases of lung cancer were seen during the study period. In less than 40 age group patients, female predominance (3 out of 4) was observed. Cough was the most common symptom found in (74%) patients, followed by dyspnea (52%). Primary diagnosis was pneumonia in 32 (52%) followed by carcinoma lung (12%). ESR was high (>20mm in 1st hour) in 48 (78.6%). Lung carcinoma should be strongly considered in the elderly patients presenting as pneumonia.

Keywords: Cancer, Epidemiology, Pneumonia, Lung, Carcinoma Lung, Tuberculosis

INTRODUCTION

Lung cancer is one of the most common malignant neoplasms worldwide, accounting for more deaths than any other cancer cause. Although it was considered to be uncommon at the beginning of the century, it has reached epidemic proportions and is currently the leading cause of cancer-related death. It was initially thought to be extremely infrequent in India (Behera, 2012). Lung cancer constituted 14.4% of all cancers as reported in 1957 (Banker, 1955; Nagrath, 1970). As of 1st July 2002 a total of 41,000 lung cancer cases would have been diagnosed as per data from the ICMR Cancer Registry (Behera, 2012). Cigarette smoking is the main risk factor for lung cancer and tripling of the number of cigarettes smoked per day triple the risk, while tripling of the duration of smoking was estimated to increase the lung cancer risk hundred fold (Doll, 1956). The symptoms like fever, cough, expectoration, hemoptysis, fever, weight loss and anorexia are common to both tuberculosis and lung cancer and in India since tuberculosis is rampant and it is not uncommon to find a lung cancer being treated as tuberculosis initially (Behera, 2012). Unfortunately, most adults with lung cancer present with advanced stages of disease.

MATERIALS AND METHODS

This retrospective study was performed using a database with 61 patients of lung cancer who had been diagnosed at our hospital, during August 2013-January 2014. The clinical records of the patients were received for demographic data, smoking history, duration of symptom, symptoms and signs, radiographic findings, histopathology, and clinical staging of lung cancer. Only patients with a confirmed pathological cell type and adequate medical records were included for the analysis.

The Ethical committee of the Institute has approved the study

Research Article

RESULTS

The series included total 61 patients out of which 52 males (85.24%) and 9 females (14.75%). Age distribution of these patients is shown in (Table 1). Most of the patients were in the 40 – 80 age groups. In less than 40 age group patients, female predominance (3 out of 4) was observed. The breakup of both sexes according to their smoking history is shown in Table 1.

Table 1: Demographic profile of cases included in the study

Age	No. of patients		Percentage
	Male	Female	
	52	9	
<40	1	3	6.5%
40-49	11	1	19.6%
50-59	17	1	29.5%
60-69	14	3	27.8%
>70	9	1	16.4%
SMOKING STATUS			
SMOKER	46		75.4%
NONSMOKER	15		24.6%

Cough was the most common symptom found in (74%) patients, followed by dyspnea (52%), fever (27%), and chest pain (25%) (Table 2). Non homogeneous opacity- consolidation (58.13%) was the commonest radiological feature followed by mass lesion (30.9%).

Table 2: Symptoms on presentation

Symptoms	No. of Patients	Percentage
Cough	45	74
Breathlessness	32	52
Fever	17	27
Chest pain	16	25
Haemoptysis	3	5
Others	11	18

Depending on the clinical data and chest radiography, primary diagnosis was put as pneumonia in 32 (52%) followed by carcinoma lung (12%), meningitis and CVA 6 (20%), tuberculosis 3 (5%)[Table 3]. Leucocytosis was seen in 23 (37.7%). ESR was high (>20mm in 1st hour) in 48 (78.6%).

Table 3: Diagnosis at presentation

Diagnosis	No of Patients	Percentage
Pneumonia	32	52
CA Lung	12	20
Meningitis, CVA	6	10
Tuberculosis	3	5
CA Glottis	2	3.3
Coronary Artery Disease	2	3.3
Others	3	5

DISCUSSION

In this retrospective study of 61 patients, we observed that most of our cases belong to 40 – 70 years age group with male predominance. Female predominance was seen in age group less than 40. Smoking was the most common predisposing factor, which included cigarettes, beedis, etc. Similar observation has been reported by other Indian studies also (Jindal, 1978; Notani, 1974; Jindal, 1987; Jindal, 1982; Behera,

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2004). In most of the cases, pneumonia was the preliminary diagnosis at presentation. Upto 52% of the patients were diagnosed as having pneumonia at the time of presentation. So treating the disease wrongly as pneumonia might lead to delay diagnosis of lung carcinoma and poor outcome. Cough was the most common symptom, as seen in most of the other studies (Gulera, 1971). Similar observations have been reported by other Indian studies. Rawat et al also found that the most frequent symptom was cough (72.90%) followed by fever (58.12%) (Rawat, 2009). In a study done by Behera et al the commonest presentation was mass lesion with or without collapse in 68%, 25% had pleural effusion and 16.7% superior venacaval compression syndrome (Behera 1988). But age of the patient, smoking history, mediastinal symptoms like hoarseness of voice, SVC obstruction and dysphagia etc. will favor lung cancer. Physical examination should look for signs of collapse or mass, clubbing, metastatic and non-metastatic complications of lung cancer (Behera, 2012).

One important observation made in our study is the delay in presentation of patients to their attending physician. The delay in seeking treatment was observed to vary from 3-4 months, which is similar to another study (Horn, 2012). At the later stages it might present with metastasis. In a study done by Rawat et al the majority patients (73.29%) were diagnosed in the later stages of the disease (III B and IV) (Rawat, 2009). Majority of the cases were misdiagnosed as tuberculosis and treated at various other centers, thereby causing a delay in diagnosis (Rawat, 2009). However in our study upto 5 % of the patients were misdiagnosed as tuberculosis.

Conclusion

This study has shown smoking as the principle risk factor in the causation of lung cancer among men. Primary lung cancer should always be suspected in a person presenting with unexplained cough and fever, further investigations should be carried out to rule lung cancer. Majority of the cases were diagnosed as pneumonia and treated accordingly, thereby causing delay in diagnosis. This study emphasized to have a strong suspicion and investigate for lung cancer in elderly patients who presents as pneumonia.

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