ORIGINAL RESEARCH PAPER
Volume - 12 | Issue - 02 | February - 2023 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

EVALUATION OF PATIENTS WITH HEMOPTYSIS WITH PULMONARY INFILTRATES ATTENDING TO PULMONOLOGY DEPARTMENT IN TERTIARY CARE HOSPITAL , NANDYAL

Pulmonary Medicine

Dr. Mudda Vinay Kumar Reddy Final year Post graduate.Dept. of Pulmonary Medicine

Dr P. Chakradhar Professor And Hod, Dept. Of Pulmonary Medicine, Santhiram Medical College And General Hospital, Nandyal.

ABSTRACT

Background: The word "hemoptysis originated from Greek word "haima which means "blood and "ptysis which means "spitting . It is the symptom per se and not the disease but alarms and frightens the patient that they had serious illness. It adds psychological and economical burden to the patient. Hemoptysis is defined as coughing out of blood from the lung parenchyma or tracheobronchial airway as a result of pulmonary or bronchial haemorrhage. It can arises in the tracheobronchial tree from glottis to alveoli. **Aim And Objectives:** To study the causes of hemoptysis in patients admitted at Santhiram General Hospital, nandyal.**Materials And Methods:** A three month hospital-based descriptive study. This study includes 50 cases of Hemoptysis for data collection who are attending to Santhiram medical college and General Hospital. A detailed clinical history of the patient will be taken regarding the present and past illness. **Results:** 1.In this study 72% of patient were males and 28% of patient were females. 2.62% of the patients were 30-50 years of age. 3.Most common etiological factor for hemoptysis was tuberculosis. **Conclusion:** Hemoptysis is a non-specific but dangerous symptom of underlying disease that should be investigated for better treatment and outcome. Pulmonary tuberculosis is still remain a major cause of hemoptysis in India. Both active pulmonary tuberculosis and post tuberculous sequelae can cause hemoptysis. In our study pulmonary tuberculous sequelae is the most common cause of hemoptysis, that gives importance to the control of tuberculosis.

KEYWORDS

INTRODUCTION:

Hemoptysis is defined as coughing out of blood from the lung parenchyma or tracheobronchial airway as a result of pulmonary or bronchial hemorrhage.It can arises in the tracheobronchial tree from glottis to alveoli.

Involvement of bronchial artery is responsible for majority of cases and pulmonary artery is the cause in <10% of the cases. Bleeding from bronchial arteries are severe and massive due to high systemic pressure than pulmonary artery bleeding.

Hemoptysis ranges from blood streaking of expectorated sputum to frank blood without sputum.

AIM:

To study the causes of hemoptysis in patients admitted at santhiram General Hospital, nandyal

MATERIALS AND METHODS:

Study Centre: Santhiram general Hospital, nandyal.

Duration Of The Study:
3 months from october 2022 to December 2022

Study Design:
Descriptive Observational Study

Sampling Frame:
Prospective - Patients with Hemoptysis admitted in santhiram General Hospital, nandyal.

Sampling Method:
Consecutive Sampling

Sample Size: 50

Ethical Clearance: Applied Consent:
Informed written consent obtained from all eligible patients.

Subject Selection:
Inclusion Criteria:

1. Willingness for informed written consent
2. Patients with hemoptysis admitted in thoracic medicine ward of SANTHIRAM General Hospital, nandyal.

Exclusion Criteria:

1. Not willing for informed written consent for the study
2. Bleeding from upper respiratory tract

RESULTS

A total number of 50 patients with hemoptysis were included in our study after satisfying the inclusion and exclusion criteria.

Age Distribution:

Age	Frequency	Percentage
<= 30 years	3	6
31 - 40 years	13	26
41 - 50 years	18	36
51 - 60 years	12	24
> 60 years	4	8
Total	50	100

Gener Distribution:

Sex	Frequency	Percentage
Male	36	72
Female	14	28
Total	50	100.0

Comorbidity Status:

Comorbidities	Count	%
CAD	1	2%
CLD, COPD	1	2%
COPD	15	30%
DM	8	16%
DM, CAD	1	2%
DM, COPD	1	2%
NO	23	46%

Causes

Cause of Hemoptysis		Count	%
	Aspergilloma	4	8%
	Bronchiectasis	5	10%
	Carcinoma lung	2	4%
	Lung Abscess	1	2%
	Pneumonia	1	2%
	PT sequelae	20	40%
	Active PTB	16	32%
	Pulmonary Vasculitis	1	2%

DISCUSSION

Analysis of age distribution showed that hemoptysis was commonly

found in the age group 41-50 years (36%) followed by 31 – 40 years (26%) in this study. This Age group was common for both males and females. It is corresponded with a study done by Das which reported as most common age group was 40-49 years (23%) followed by 50-59 years (22%). Age group of 30 to 50 years is common in a study conducted by Rachakonda et al at Guntur, south India which was similar to our study results.

Male to female ratio in the present study was 2.57:1 concluding male were two and half times more susceptible than females for hemoptysis. Bhalla et al found that hemoptysis was 3.57:1 times more common in male than female. Our findings were similar to those found by nawal et al (2.23:1).

Diabetes mellitus was found in 20% of our study population. It was 16% in a study done by Ronald win b et al . 62.5% of massive hemoptysis had diabetes.

Cause of hemoptysis was different in developing countries like India when compared to developed countries. Infections are still a major causative factor in developing countries. Due to changing epidemiology of each disease, cause may vary over a period of time in the same geographical area. Hemoptysis was considered as one of the symptoms suggestive of tuberculosis is now being replaced by other diseases like bronchiectasis, lung malignancy and pneumonia.

Studies done during the 1940s and 1950s in developed countries showed tuberculosis was the most common cause of hemoptysis. Abbot OA done a study in USA (Atlanta) reported as Tuberculosis was a most common cause for hemoptysis in 22% of patients closely followed by bronchiectasis (21%) and malignancy (21%) which were ranked second position. Subsequent studies in developed countries during 1977-1985, 1974-1981 and 1980-1995 demonstrated decreasing trend of tuberculosis from 22 to 1%. Pulmonary tuberculosis is now becoming less important cause of hemoptysis in developed countries.

Study from India by Rao in 1960 reported as tuberculosis was the most common cause of hemoptysis. This scenario remains unchanged as evidence from this present study (72%) and other published studies from India. In our present study pulmonary tuberculosis (active and sequelae) was the most common cause of hemoptysis and it contributes to 72% of patients. Out of this 72% active pulmonary TB contributes 32%. Remaining 40% were PT sequelae patients. 79.2% of patients with hemoptysis were diagnosed was tuberculosis in a study by Prasad et al on 2009 and by Singh et al on 2016. Reports from other developing countries also projects pulmonary tuberculosis remains the most common cause of hemoptysis. All the active pulmonary tuberculosis patients in our study were confirmed microbiologically from sputum or bronchial wash.

CONCLUSION:

In our study pulmonary tuberculous sequelae is the most common cause of hemoptysis, that gives importance to the control of tuberculosis.

Hemoptysis may occur during anti-tuberculous treatment in patients with pulmonary tuberculosis. Conservative management along with anti-tuberculous treatment is sufficient in these patients.

Most common parenchymal lesion predispose to aspergilloma is cavity produced by tuberculosis in our country. Malignancy is one of the four important causes in our study.

List Of Abbreviations:

TB – Tuberculosis
FB – Acid Fast Bacilli
RNTCP– Revised National Tuberculosis Control Programme
BAE – Bronchial Artery Embolization
COPD –Chronic Obstructive Pulmonary Disease