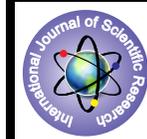


Profile of Patients with Chest Symptoms Referring at A Tertiary Care Hospital



Medical Science

KEYWORDS : waiting period , haemoptysis

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ABSTRACT

The reporting of patients have been known to differ in different symptoms at the health facilities. In this study waiting period of haemoptysis was found to be short while that of low grade dyspnoea was found to be more. 156(78%) individuals with haemoptysis reported within a week of onset while only 82(63%) with chest pain , 42(12.3%) with cough and 86(21.5%) with breathlessness reported to the health facility. 103(51.5%) with haemoptysis , 10(7.6%) with chest pain and 26(6.5%) with breathlessness reported within 24 hours of onset but none with cough.

Introduction

There are mainly five cardinal symptoms with which the patients present to the hospital in respiratory system involvement namely cough, expectoration, breathlessness, chest pain and haemoptysis. The reporting of patients have been known to differ in different symptoms at the health facilities. Haemoptysis is an important chest symptom which is regarded serious by the patients, his family and friends as compared to other chest symptoms. Coughing up of blood makes haemoptysis a frightening event for the patients and alerts the health care workers for prompt management. The quantity of blood may vary from just streaking of sputum to several cupfuls and even massive exanguination. Death is rare but usually results from asphyxiation associated with flooding and choking of tracheobronchial tree.

Materials and Methods

500 individuals with cough, expectoration, breathlessness, chest pain and haemoptysis reported to the department of pulmonary medicine, Rohilkhand Medical College and Hospital, Bareilly were studied during January 2015 to May 2015. All individuals were thoroughly investigated and treated after detailed history and examination. Those with massive haemoptysis and severe respiratory distress were hospitalized in the chest wards and managed accordingly.

Results

The waiting period for the chest symptom is the period between the onset of a chest symptom and reporting of chest symptoms at health facility for the first time. The bar diagram (fig 1) shows the reporting of individuals with different symptoms.

156(78 %) individuals with haemoptysis reported within a week of onset.

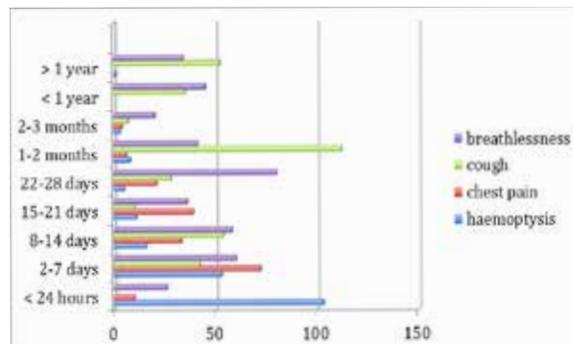


Fig 1

of the total 200 patients with haemoptysis, 12 (6%) reported within 3 hours after the onset of haemoptysis, 18 (9%) within 4-6 hours, 24 (12%) within 7-12 hours and 49 (24.5%) within 13 - 24 hours. Thus 103 (51.5%) individuals reported within 24 hours of the onset. 172 (86%) individuals reported within 2 weeks of the onset whereas only 11 (5%) reported between 1-3 months of the onset which is a very significant response and shows good awareness to sight of blood in sputum.

Of the total 400 patients presenting with breathlessness, 26 (6.5%) reported within 24 hours of the onset, 118 (29.5%) reported within 1-14 days of the onset and the remaining 256 (64%) reported after 1 month of the onset. Similarly, the patients presenting with cough, none reported within 24 hours, 42 (12.3%) reported within a week of onset and 206 (60.5%) patients reported after a month to the health care facility. In 185 individuals reporting with chest pain 10 (5.4%) reported within 24 hours, 72 (38.3%) within 1-7 days of the onset and 10 (5.3%) within 1-3 months. The majority individuals presenting with haemoptysis had a shorter waiting period whereas majority individuals with cough and breathlessness tended to ignore symptoms and had longer waiting periods. (Table 1)

Period	Haemoptysis	Chest pain	Cough	Breathlessness
<24 hrs	103 (51.5%)	10 (5.4%)	-	26 (6.5%)
2-7 days	53 (26.5%)	72 (38.9%)	42 (12.3%)	60 (15%)
8-14 days	16 (8%)	33 (16.5%)	54 (15.8%)	58 (14.5%)
15-21 days	11 (5.5%)	39 (21.0%)	10 (2.9%)	36 (9%)
22-28 days	5 (2.5%)	2 (1.3%)	28 (8.2%)	80 (20%)
1-2 months	8 (4%)	6 (3.2%)	112 (32.9%)	41 (10.2%)
2-3 months	3 (1.5%)	4 (2.1%)	7 (2%)	20 (5%)
< 1 year	-	-	35 (10.2%)	45 (11.2%)
> 1 year	1 (0.5%)	-	52 (15.2%)	34 (8.5%)
Total sample	200	185	340	400

(Table 1)

DISCUSSION

Haemoptysis, a common symptom is the coughing of blood originating from the respiratory tract below the level of the larynx. Haemoptysis is thought to arise from the bronchial arteries, although it may arise from pulmonary arteries if there is trauma or erosion from granulomatous disease or malignancy. 1-3 Infection may cause inflammation of mucosa with oedema, which in turn may result in rupture

of superficial blood vessels. Possible causes for haemoptysis include Chronic lung disease: COPD, TB, cystic fibrosis, bronchiectasis, Pneumoniae, Malignancy, bleeding disorders, Pulmonary embolism, heart failure and Pulmonary-renal syndromes (Goodpasture's syndrome, Wegener's granulomatosis). In most cases haemoptysis is a self-limiting event but in fewer than 5% it may be severe or massive, representing a life-threatening condition that warrants urgent investigations and treatment.

Massive haemoptysis was seen in 12(11.6%) of the cases presenting with blood in sputum within 24 hours massive haemoptysis has been defined as bleeding more than 100ml to 600ml of blood in 24 hours.⁴⁻⁶

The fear from the blood is a strong force that drives individuals to seek medical relief and makes the waiting period of haemoptysis to be shortest. In our study 103(51.5%) individuals of the 200 with haemoptysis reported within 24 hours of the onset and only 11 reported within 1-3 months of the onset. The table also shows that the reporting of chest symptoms within 7 days was the highest 156(78%) in cases of haemoptysis followed by 82(44.3%) in cases of chest pain, 42(12.3%) in cough and 86(21.5%) in breathlessness. Thus the waiting period was shortest with haemoptysis as the presenting symptom and longest with cough and breathlessness as these symptoms were ignored initially by the patients.

CONCLUSION

The haemoptysis even in small quantity is likely to have a serious cause. Just by looking at the frank blood the patient and his/her family members get disturbed and frightened. This is also called as "fortunate symptom". Haemoptysis symptom leads to the earliest consultation from the doctor while the other symptoms are ignored. For this reason, this symptom leads to rapid detection of respiratory etiology and prompt management.

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