



CLINICOPATHOLOGICAL PROFILE OF RESPIRATORY DISEASES IN GERIATRIC POPULATION OF SMART CITY DAHOD GUJARAT

General Medicine

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ABSTRACT

We have taken 1234 patients for study in which males were 773 females were 461. 394 patients required inpatient respiratory critical care with community acquired pneumonia, bronchogenic carcinoma, acute respiratory tract infections, acute exacerbation of COPD, bronchial asthma exacerbations and other pleural diseases. 890 patients belong to the age group 65-74 yrs and 344 in 75+ yrs age group. studied demographic patient age, sex distribution above the age of 65 yrs with more prevalence in males. Respiratory diagnosis in geriatric population upper respiratory tract infections percentage diagnosis is higher. Respiratory diagnosis of inpatient respiratory diseases highest is the acute exacerbation of the COPD. In pneumonia community acquired pneumonia high prevalence in age and sex distribution and highest isolated micro organisms is staphylococcus. For pulmonary TB males are higher with isolated new sputum positive cases.

KEYWORDS

Pneumoconiosis, Respiratory diseases, Geriatric, COPD, Bronchial asthma in critical care pulmonary TB, Exacerbation.

INTRODUCTION

Aging has been shown to be associated with gradual decline in many aspects of pulmonary functions, waning of immunity and the immunological mechanisms show a declining efficiency as the antibodies formed much less rapidly in old age than in younger adulthood. This study is to find the current spectrum of respiratory diseases in geriatric population in a tertiary care centre.

MATERIAL AND METHODS

Our aim is to study the clinicopathological profile of respiratory diseases in geriatric population attending a tertiary care centre. In this study 1234 patients were studied in which males were 773 & females were 461. 394 patients required inpatient care. 890 patients belong to the age group 65-74 years & 344 in 75+ year's age group. In this study one case of silicosis with progressive massive fibrosis was found and the case details are as follows: 1. 68 yrs old male presented with breathlessness, fever cough. 2. No history of prior ATT. 3. Smoker for past 30 yrs. 4. occupation-digging wells with compressors/drilling machine/using explosives for rock blasting from age 35 to 52 yrs. 5. Sputum AFB negative. 6. Bronchial wash -AFB negative. 7. CT -chest -hyper dense conglomerate mass of fibrosis suggestive of silicosis with progressive massive fibrosis.

DISCUSSION

In this 1234 patients were studied in which males were 773 and females were 461. The age ranged from 65 to 89 years with a mean age of 70.1 yrs. In this age group of 65-74 yrs there were 890 patients and 344 in the age group 75+ yrs. Respiratory tract infection including URTI [28.44%] Acute bronchitis [8.75%], community acquired pneumonia [4.86] and pulmonary TB [8.58%] constitute 50.63% of the morbidity. Among respiratory infections pulmonary TB stands second. Out of 106 pulmonary TB patients 54 were new sputum positive patients and 24 were new sputum negative patients. In the 26 patients started on category II ATT 14 was due to relapse, 7 due to failure 5 were started due to treatment after default. Diabetes was the most co morbidity found in elderly patients with pulmonary TB present in 36.79%. Elderly patients with constitutional symptoms compared to respiratory symptoms. TB with its sequelae constitutes 18.96% of the morbidity. Community acquired pneumonia is third among respiratory tract infection with diabetes as the commonest co morbidity associated with. Klebsiella pneumonia was the commonest organism isolated found in 29% of the patients of community acquired pneumonia. COPD is next major contributor with 24% of overall morbidity. It is also commonest cause for inpatient care as AECOPD. Among males 98% COPD patients were smokers and in case of females 38% had exposure to passive smoking and 84% had exposure to biomass smoke. Most of COPD patients in this group were in stage 3 and 4 of severity in both males as well as females. Klebsiella pneumonia and pseudomonas aeruginosa were isolated in 28.07%

and 10.53% of the patients with AECOPD. There were 117 patients of bronchial asthma in this study in which females contribute 54.7% and males 45.3% most of the patients were in mild persistent [29.9%] and moderate persistent stage [37.6%] of severity. Total no of patients diagnosed to have lung carcinoma during the period of study was 96 with 58 male patients and 28 females. Squamous cell carcinoma was the commonest histological pattern among all carcinomas with 42.71 and in male it contributed to 47.06% in females adenocarcinoma was the commonest with 64.29% majority of the elderly patients with lung carcinoma presented in stage III [44.44%] and Stage IV disease [33.33%]. Active smoking was the major risk factor present in 92% of the males and in females it is biomass fuel in 67.8% of cases. Out of 40 patients with bronchiectasis 17 were males and 23 were females. Idiopathic pulmonary fibrosis, hypersensitivity pneumonitis and RBILD are three diffuse parenchymal lung diseases diagnosed in this study with 47.06%, 47.06%, and 5.88% respectively. Pleural disease in the early constitutes 2.43% of the total. Infectious causing TB and parapneumonic infections are the commonest etiology with 22 patients followed by 4 cases of malignancy and 4 cases of pneumothorax.

CONCLUSION

Respiratory infections and their complications, consisting of upper respiratory tract infections, acute bronchitis, and community acquired pneumonia, pulmonary TB and its sequelae, constitute the major respiratory morbidity among geriatric population attending this tertiary care center. Upper respiratory tract infections and acute bronchitis is the commonest cause for seeking outpatient care. Pulmonary TB is the second commonest respiratory infection and rank fifth in over all respiratory morbidity. Sequelae of pulmonary TB cause significant respiratory morbidity in the elderly constituting about 10.3% pulmonary TB and its sequelae together constitutes with 18.96%. Among infective disease community acquired pneumonia ranks third. Diabetes is commonest co morbidity associated with community acquired pneumonia. COPD is the second most common morbidity without any gender difference. Active smoking is commonest predisposing factor for COPD in males where it is exposure to indoor pollution in females. AECOPD is the commonest cause of inpatient care. Bronchial asthma constitutes 9.48% of the morbidity. Carcinoma lung constitutes 7.77% squamous cell carcinoma is the commonest type of lung cancer among males and it is adenocarcinoma in females. Active smoking is commonest risk factor for the lung cancer in males where it is exposure to indoor pollution in females. Lung cancer patients in this age group presented in an advanced stage. Idiopathic pulmonary fibrosis is the commonest diffuse pulmonary lung disease in this age group followed by hypersensitivity pneumonitis. Silicosis was the only pneumoconiosis found in this study. Among pleural diseases

infective cause like tuberculosis effusion and parapneumonic effusion was the commonest followed by malignant pleural effusion and pneumothorax.

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