

Active Pulmonary Tuberculosis in Nonagenarian- A Rare Case ReportAnand P. Ambali¹, Muddasir Indikar², Santhosh B T³, Kushal Bhangale⁴¹Professor and Head, Department of Geriatrics, BLDE Deemed to be University, Shri B M Patil Medical College Hospital and Research Centre, Vijayapura 586103 Karnataka, India.²Assistant Professor, Department of Geriatrics, BLDE Deemed to be University, Shri B M Patil Medical College Hospital and Research Centre, Vijayapura 586103 Karnataka, India.³ & ⁴Postgraduate student, Department of Geriatrics, BLDE Deemed to be University, Shri B M Patil Medical College Hospital and Research Centre, Vijayapura 586103 Karnataka, India.

Received: 25-07-2024 / Revised: 23-08-2024 / Accepted: 25-09-2024

Corresponding Author: Dr. Anand P. Ambali

Conflict of interest: Nil

Abstract:

Pulmonary Tuberculosis in older people is challenging for clinicians to make a diagnosis in the early stage.

Case Description: An old male patient in 90's presented to our geriatric clinic with history of decreased appetite and exertional breathlessness of 3 months duration. The respiratory system examination revealed tachypnoea, trachea shifted to the right side, and right infra-clavicular crepitations. Chest x-ray PA view revealed a right apical fibro-cavity lesion and sputum for AFB positive.**Discussion:** Diagnosis of PTB in older people is often delayed because of atypical and subtle manifestations. Despite having an extensive lung lesion, this patient had very few or subtle manifestations which may have led to a delay in diagnosis.**Conclusion:** This case highlights regular screening of older people for pulmonary tuberculosis as they may present not present with constitutional symptoms and or atypical symptoms.**Keywords:** Older person, Pulmonary Tuberculosis, Nonagenarian, Atypical.This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.**Introduction**

The pulmonary tuberculosis is still a major communicable disease in India especially among older people (>60 years). The atypical manifestations like absence of fever, reduced cough and sputum production and anaemia are hindrance for the diagnosis in early stage of the disease. [1] The clinician has to evaluate patients thoroughly with chest x ray, Erythrocyte Sedimentation Rate and C - Reactive Protein level assessment which helps in making diagnosis. Sputum examination is not possible in most of the cases; hence X-Ray of chest should be sought for diagnosis especially in the elderly population.

Case History:

An old male in 90's presented to our geriatric clinic with h/o decreased appetite and exertional breathlessness for the last 3 months. His family members gave a history that his activity of daily living has reduced drastically over the last 2 months. He is non-diabetic/hypertensive and not on any drugs for co-morbidities. He is a non-smoker and non-alcoholic. No history of admission in hospital for any respiratory pathology and major disease in the past.

The Examination Revealed: The patient was moderately nourished with Mini Nutritional Assessment score of 17. The other positive findings on physical examination were pallor, sunken eyes, dehydration, coated tongue and bilateral pitting pedal oedema. Respiratory system examination revealed tachypnoea, trachea shifted to the right side, and right infraclavicular crepitations were present while the rest of the lungs fields were normal.

Investigation revealed Hb of 10gm%, ESR of 100mm at the end of 1st hour and CRP 34µ/l. Chest X-ray PA view revealed right apical fibro-cavity lesion (Figure-1). The sputum for AFB by ZN stain second sample revealed positive after 15days of initiation of bronchodilators and expectorants. His blood sugar level and renal function tests were normal, whereas Liver function showed decreased albumin level.

The treatment was initiated as per as Revised National Tuberculosis Control Program guidelines. All the four Anti Tuberculosis drugs were initiated according to the weight of patient.

The patient visited the geriatric clinic once every fifteen days for next three months. During these

follow up days there was improvements in appetite,

activities of daily living and haemoglobin levels.



Discussion

Diagnosis of Pulmonary Tuberculosis in older people is often delayed because of atypical and subtle manifestations, [2] as seen in this patient. The challenge was to get sputum which we got after fifteen days of initiation of bronchodilators and expectorants. Despite having extensive lung lesion as evident on chest x-ray, this patient had very few or subtle manifestations which have led to delay in seeking health services. Breathlessness and decreased appetite were only symptoms in this patient. The patient also had anaemia with risk of malnutrition, estimated using Mini Nutritional Assessment [3]. The under-nutrition is a strong risk factor for developing Tuberculosis and contributes to an estimated 55% of annual Tuberculosis incidence in India [4].

After one month of treatment and during follow up there is improvement in appetite and activity of daily living.

Conclusion

This case highlights delay in diagnosis of active Pulmonary Tuberculosis in elderly population due to atypical symptoms and late presentation.

It is hence recommended that the regular screening by doing chest x-ray for Pulmonary Tuberculosis in older patients presenting with reduced activity of daily living and appetite helps in making diagnosis

especially in developing countries. The constitutional symptoms may be absent as well.

Early diagnosis also helps prevent spread of disease among family members. As per our knowledge and extensive literature search, we are in opinion that this is the first case report of newly detected active pulmonary tuberculosis in nonagenarian.

Acknowledgement: Nil

References

1. Gholamali G, Gholamhossain A, Esfahan A (2007) Comparison of Clinical and Radiology Manifestation of Pulmonary Tuberculosis in Younger and Elderly Patients. *Journal of Medical Sciences (Faisalabad)* 7: 888–91.
2. Abbara A, Collin SM, Kon OM, Buell K, Sullivan A, Barrett J, Corrah T, McGregor A, Hansel T, John L, Davidson RN. Time to diagnosis of tuberculosis is greater in older patients: a retrospective cohort review. *ERJ open research*. 2019 Oct 1;5(4).
3. Guigoz Y, Vellas B, Garry PJ. Assessing the nutritional status of the elderly: The Mini Nutritional Assessment as part of the geriatric evaluation. *Nutr Rev*. Jan 1996;54(1 Pt2):S59-65.
4. <https://tbcindia.gov.in/WriteReadData/1892s/India%20TB%20Report%202020.pdf> page no 50