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DELAY IN THE DIAGNOSIS OF PULMONARY TUBERCULOSIS THE POINTS THAT WE CAN IMPROVE AS PUBLIC HEALTH

Amanda Rodrigues da Silva Lira
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
https://lattes.cnpq.br/1025620177864654

Ana Carolina Cherobini Scherer
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
http://lattes.cnpq.br/6893746275906596

Bárbara Fontes Macedo
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
http://lattes.cnpq.br/1136248483103950

Mariana Kaefer Seganfredo
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
https://lattes.cnpq.br/3405358516067867

Milena Maciel Mayerle
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
https://lattes.cnpq.br/2122137737216369

Raissa Gallina Bregolin
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
https://lattes.cnpq.br/3648006622085314

Taíne Eede
Universidade do Vale do Taquari - Univates,
Medicine course
Lajeado - RS
http://lattes.cnpq.br/9014400410620809

Abstract: Introduction: Pulmonary tuberculosis (TB) is the most frequent and relevant form in Brazilian public health as it has a higher transmission rate. Currently, it is still difficult to reduce the incidence of TB in the public health sphere, this situation becomes even more alarming when the diagnosis is made late, when the disease is already serious, resulting in greater mortality and perpetuation of the chain transmission. Knowledge of the factors associated with delay in diagnosis can be important to identify possible strategies to reduce it. Objective: To report the case of a patient who, despite having a classic clinical picture of pulmonary TB, had her diagnosis correct late. Methodology: This is a case report with an observational and descriptive study. Case report: Female patient sought care from a pulmonologist due to persistence of clinical symptoms and erroneous diagnoses and treatments. She was later diagnosed with pulmonary TB. Discussion: TB's main causative agent is Mycobacterium tuberculosis, which is transmitted directly by aerosols when talking, sneezing or coughing. Symptoms of the infection include afternoon fever, cough, night sweats, weakness and weight loss, but the patient rarely seeks a healthcare facility at the onset of symptoms, which are attributed to a poorly cured flu, smoking bronchitis or another clinical situation. The delay in diagnosis is related to public health services and the patient themselves. Another associated barrier is the low degree of suspicion by health professionals and low adherence by professionals to TB control programs. Final considerations: The reported case raises the question of how we can improve the understanding of this very prevalent disease, considering that the patient had a classic clinical picture of pulmonary tuberculosis and the hypothesis was not even raised in three different consultations in the public health network.

INTRODUCTION

Tuberculosis (TB) is a pathology caused by species of the Mycobacterium tuberculosis complex. Its transmission occurs through the inhalation of aerosols from the cough, speech or sneeze of a person affected by pulmonary or laryngeal TB. It is estimated that a person with a positive sputum smear test can infect 10-15 people within a year. With the beginning of adequate treatment, transmission gradually decreases and after 15 days, it is generally reduced. The immunity of the M. tuberculosis carrier has great relevance in the progression to active tuberculosis. Generally, patients with active TB present with a persistent dry or productive cough, afternoon fever, night sweats and weight loss. The pulmonary form has as differential diagnoses silicosis, fungal infections, neoplasms, bacterial infections, other mycobacterioses, autoimmune diseases, pulmonary embolism, among others. Tuberculosis must be suspected when there are cases of fever or prolonged cough with no apparent cause, consumptive syndrome, pneumonia with slow resolution. The bacteriological examination is one of the most used in the diagnosis and monitoring of those with the disease, and can be carried out using direct sputum smear microscopy, detecting 60-80% of cases of pulmonary TB in adults.

In Brazil, the bulletin for the year 2023 reports 78,057 new cases per 100,000 inhabitants in the year 2022, demonstrating a drop in the number of diagnoses of the disease. In relation to the effective treatment of TB, in 2021 the cure percentile was 66.5% of diagnosed cases, observing a reduction of 12.7% compared to the 2016 rates (76.2%). However, after a reduction in tuberculosis mortality between 2011 and 2020, 2021 presented the highest TB mortality rate since 2010. Furthermore, 2021 saw an increase in treatment interruption to 14% and a decrease in the percentage of cure in people with sensitive TB. Therefore, the need for early diagnosis and adequate treatment to reduce the disease transmission chain is reiterated.

GOAL

Report the case of a patient who was diagnosed with pulmonary tuberculosis late. This report has the impact of showing that, even with a classic clinical picture of pulmonary tuberculosis, the disease was neglected by health institutions.

METHODOLOGY

This is a case report with an observational and descriptive study. Data were obtained through analysis of medical records and laboratory tests performed by the patient.

CASE REPORT

Patient ESS S, female, 19 years old, without comorbidities. She sought care in the Emergency Room (ER) due to a dry cough for 4 months, diagnosed with bronchitis and treated with macrolides and oral corticosteroids. He later sought care at a Basic Health Unit (UBS) due to the same complaint that evolved into a productive cough, light yellow sputum, and was prescribed expectorant medication. Days later, the patient returns to the ER with a persistent productive cough, presenting chest pain, significant weight loss, loss of appetite, asthenia and hemoptysis. A chest x-ray was then requested, which showed a cavitated lesion in the right upper lobe. Suspecting pneumonia, the doctor prescribed amoxicillin, loratadine and nebulization. Without improvement, the patient sought private care with a pulmonologist. In the anamnesis, physical and imaging examination, the first diagnostic hypothesis was pulmonary TB. A sputum AFB test was requested, where

the second sample came back positive with two crosses. The patient was referred to UBS to undergo treatment with Rifampicin, Isoniazid, Pyrazinamide and Ethambutol (RHZE regimen) for 6 months.

DISCUSSION

The main causative agent of tuberculosis is Mycobacterium tuberculosis, which most commonly affects the lungs and is a prevalent problem in global public health. The TB agent is transmitted directly through aerosols when talking, sneezing or coughing. And its characteristic infectious symptoms include afternoon fever, cough, night sweats, weakness and weight loss. The delay in diagnosis is related to public health services and the patient himself, due to low adherence to the manual of recommendations for tuberculosis control and because the person who presents the aforementioned symptoms rarely seeks a health unit at the beginning of the condition, often associated with poorly cured flu, smoking bronchitis or other causes. Another associated barrier is the low degree of suspicion by healthcare professionals, who often neglect early diagnosis because they do not associate the symptoms with the pathology.

On the other hand, those cases of adequate diagnosis contribute to the low rate of effective treatment, due to low medication adherence, as it involves multiple medications and a long period of treatment, in addition to the recommended follow-up exams. Such situations have consequences for patients who have TB, due to the damage caused by having a late diagnosis, that is, as the bacteria colonizes the lung, in the future, if untreated, it can evolve into hematogenous dissemination and progress to forms extrapulmonary TB.

FINAL CONSIDERATIONS

In view of the above, there is a need to train health professionals in the signs and symptoms of TB and reinforce active search activities in the community. It is also necessary to demystify the disease through information in different social spaces, thus reducing barriers to accessing health services, increasing adherence to treatment and, consequently, avoiding late diagnosis and treatment of pulmonary tuberculosis and its implications for the health of the patient and the community.

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