



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1069477>Available online at: <http://www.iajps.com>**Case Report****A CASE REPORT ON PULMONARY TUBERCULOSIS WITH  
OBSTRUCTIVE AIRWAY DISEASE AND DILATED CARDIAC  
MYOPATHY****M. Farjana<sup>1\*</sup>, Bandla Aswani<sup>2</sup>, P. Anusha<sup>3</sup>, T. Sailaja<sup>4</sup>, K. Supriya<sup>5</sup>**

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**Abstract:**

*Pulmonary tuberculosis (PTB) is a contagious, infectious disease that attacks lungs. It is caused by mycobacterium tuberculosis. Obstructive airway diseases (OAD) is a long term lung disease that causes cough and breathlessness. The main risk factor for the development of OAD is smoking and dilated cardiac Myopathy (DCM) which is a myocardial dysfunction causing heart failure in which ventricular dilation and systolic dysfunction. We report a case of a female patient of age 75 years was admitted in a medical emergency department of Santhiram general hospital with shortness of breath and cough since 10 days, difficulty in passing urine, constipation, and occasional fever. On examination of x-ray and ECG, there was an impression of dilated cardiac myopathy. Based on subjective and objective evaluation the patient was diagnosed with old pulmonary tuberculosis (PTB) with obstructive airway disease (OAD) with dilated cardiac myopathy (DCM). Patient was treated with the medications like T.dytor plus, T.Pansec, T.Ab.phylline, T.Cardace, Syp.Dulphalac, Inj.Febrinil, Syp.Aristozyme. Patient was discharged by stabilizing all the conditions.*

**Key Words:** *Pulmonary tuberculosis, Obstructive air way disease, Dilated cardiac myopathy.*

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Please cite this article in press as M. Farjana et al., A Case Report on Pulmonary Tuberculosis with Obstructive Airway Disease and Dilated Cardiac Myopathy, Indo Am. J. P. Sci, 2017; 4(11).

**INTRODUCTION:**

Pulmonary tuberculosis (PTB)-It is a contagious, infectious disease that attacks lungs. It is caused by mycobacterium tuberculosis. Symptoms like cough, fever, night sweats, weight loss. TB is an air borne pathogen it can spread through the air from person to person Treat the PTB with antibiotics, but patient must finish all the medications. (1, 2).

Obstructive airway diseases (OAD) - It is a long term lung disease that causes cough and breathlessness. The main risk factor for the development of OAD is smoking. It is a progressive disease that not only affects breathing but also causes weight loss, nutritional disturbances and muscle problems. (3, 4)  
Dilated cardiac myopathy (DCM)-It is a myocardial dysfunction causing heart failure in which ventricular dilation and systolic dysfunction. Symptoms include dyspnea, fatigue, and peripheral edema. Caused by infections, toxins, and metabolic, genetic or connective tissue disorders. (5, 6).

**CASE REPORT:**

A 75 year old female patient from nandyal was presented to the medical emergency department of Santhiram general hospital with shortness of breath and cough since 10 days, difficulty in passing urine, constipation, and occasional fever. On physical examination the patient was anemic, pallor, oedematous feet. Vitals are normal. The patient was a known case of pulmonary tuberculosis (PTB) since 3 years with regular medications for 6 months. She was suffering with heart failure since 5 years. On laboratory investigations of blood revealed the abnormal values of total WBC 4,400 cells/mm (polymorphs-69%, lymphocytes-20%, eosinophils-8%, monocytes-3%, basophils-0%) platelets+1,90,000 cells/mm, decreased serum sodium( 122meq/L),and potassium (3.7meq/L) and raised serum creatinine levels(1.35mg/dl) and decreased serum proteins(4.7g/dl).On examination of x-ray and ECG,there was an impression of dilated cardiac myopathy. Based on subjective and objective evaluation the patient was diagnosed with old pulmonary tuberculosis (PTB) with obstructive airway disease (OAD) with dilated cardiac myopathy (DCM).Patient was treated with the medications like T.dytorplus(torsemid&spiranolactone) 5mg OD, T.Pansec (pantaprazole) 40mg OD,T. Ab. Phylline (acebrophylline) 100mg BD ,T.Cardace (ramipril) 2.5mg OD, Syp.Dulphalac (lactulose) 25ml OD, Inj.Febrinil (paracetamol) 300 mg/ml I.V sos,Syp.Aristozyme (diastage 50 mg & pepsin 10mg/5ml) TID.The patient was stayed in hospital for 15 days.After 15 days patient was discharged by stabilizing all the conditions.

**DISCUSSION:**

Pulmonary tuberculosis (PTB) is a contagious bacterial infection that involves the lungs it may spread to other organs.PTB is caused by bacterium mycobacterium tuberculosis.PTB is contagious and it easily spread from an infected person to some one else through air droplets. The primary stage of TB does not cause symptoms. When symptoms are started, they includes breathing difficulty,chest pain,cough(mucooid),coughing up blood,excessive sweating especially at night,fatigue,fever,weight loss,wheezing.(7,8,9).

Obstructive airway disease (OAD) is a category of respiratory disease characterised by airway obstruction.OAD results from narrowing of the smaller bronchi and larger bronchioles, because of excessive contraction of the smooth muscle. Types of OAD include asthma, bronchiectasis, bronchitis and chronic obstructive pulmonary disease. The signs and symptoms of OAD may include shortness of breath, wheezing, chest tightness, chronic cough that may produce mucus that may be clear white, yellow or greenish. Bluish discoloration of the lips or fingernail beds(cyanosis),frequent respiratory infections,lack of energy,weight loss,swelling in ankles feet or leg.(10,11,12,)

Dilated cardiac myopathy(DCM) is the most common type,occurring mostly in adults 20 to 60.It affects the heart's ventricles and atria,the lower and upper chambers of the heart,respectively.frequently the disease starts in the left ventricle the heart's main pumping chamber.the heart muscle begins to dilate and becomes thinner, consequently the inside of the chambers enlarges. The problem often spreads to the right ventricle and then to the atria. As the heart chambers dilate the heart muscle does not contract normally and cannot pump blood very well as the heart become weaker heart. The symptoms of DCM include shortness of breath, swelling of legs, fatigue, weightgain, fainting, palpitations, dizziness, blood clots in the dilated left ventricle because of pooling of the blood if a blood clot breaks off it can lodge in an artery and disrupt blood flow to the brain causing a stroke a clot can also block blood flow to the organs in the abdomen or legs., chest pain or pressure, sudden death. (13, 14, 15).

PTB standard treatment -Isoniazid, rifampin, pyrazinamide and either ethambutol or streptomycin. OAD standard treatment-Bronchodilators, beta 2 agonists and anti cholinergics, phosphodiesterase inhibitors, beta blockers.DCM standard treatment-ACE inhibitors, angiotensin-2 receptor blockers, beta

blockers, diuretics, digoxin, blood thinning medications.(7,10,13).

The patient was presented with chief complaints of shortness of breath and cough since 10 days, difficulty in passing urine, constipation, and occasional fever. Particularly based on laboratory investigations patient was diagnosed with pulmonary tuberculosis with obstructive airway disease with dilated cardiac myopathy. In this present case, the patient was managed with drugs like Dytorplus (torsemide & spiranolactone) 5 mg is a loop diuretics, it is used to treat high blood pressure, fluid retention. Pansec (pantaprazole) 40 mg is a proton pump inhibitor; it is used to treat difficulty in swallowing, stomach ulcer, heart burn, GERD, and other acidity related disorders. AB-phylline (acebrophylline) 100 mg is a bronchodilator; it is given in conditions like COPD, bronchial asthma, bronchitis, sinusitis. Cardace (ramipril) 2.5 mg is a ACE inhibitor, it is used to treat hypertension, myocardial infraction, stroke, cardiovascular death. Dulphalac (lactulose) 15ml is a laxative, it is used to treat chronic portal systemic encephalopathy, chronic and habitual constipation. Febrinil (paracetamol) 300mg/ml is a NSAID, it is used to treat pain and fever, acute gout, migraine. Aristozyne (diastage 50 mg + pepsin 10 mg/5ml) it is used to treat digestive disorders, accumulation of gas in stomach, gastric problems, supplement treatment for pancreatic diseases.

### CONCLUSION:

PTB is a contagious and it required proper management. In this present case the patient was suffered with OAD and DCM which may negatively impact the quality of life of the patient. For these type of critical conditions we required careful management to avoid the complications here the patient was rationally managed.

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