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CASE REPORT

VENLAFAXINE– INDUCED INTERSTITIAL LUNG DISEASE: A CASE REPORT

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ABSTRACT

Interstitial lung diseases are chronic conditions characterized by fibrosis of the interstitial tissue of the lungs. The spectrum of aetiology is wide, with certain drugs being one of them. Certain antipsychiatry medications have been reported to cause lung toxicities. Venlafaxine is a drug that is used for the treatment of depression. The conditions like asthma and eosinophilic pneumonia have been observed as adverse effects following venlafaxine therapy. The patient being reported is a case of major depressive disorder and was on long term treatment with venlafaxine. She developed chronic cough and dyspnoea and was diagnosed to have interstitial lung disease. Drug induced interstitial lung disease is a rare adverse effect of venlafaxine. This case, hence, highlights the consideration of venlafaxine as a cause for drug induced interstitial lung disease, as well as its cautious use in the management of psychiatric patients with underlying lung disorders.

INTRODUCTION

Venlafaxine is used in the treatment of major depressive disorders. It acts by blocking the reuptake of both norepinephrine and serotonin. An increase in diastolic blood pressure has been noted with this drug. Though there have been reports of lung toxicity, interstitial lung disease (ILD) following venlafaxine therapy has rarely been reported.

CASE REPORT

A 48 year old lady presented to Medicine OPD with complaints of dry cough since 1 year, which has been progressive over the past 3 months and associated with exertional dyspnoea. There was no diurnal variation. There were no other associated or systemic symptoms. She used to take cough suppressants containing dextromethorphan as over the counter medication when the cough gets severe. However, there was no major relief of symptoms. She has been taking treatment for depression with venlafaxine (75 mg/ day) for the past 5 years. However, for the past 3 months, her psychiatrist had increased the dosage to 150mg/ day. She also used to take lorazepam 2 mg in case of decreased sleep, but not regularly. She is not a hypertensive, diabetic or asthmatic; and is not on any other regular medications. She is a non-smoker and a homemaker with no occupational exposure.

On examination, she was conscious, oriented and afebrile; with a heart rate of 80 beats/ minute and blood pressure 110/70 mmHg. Her respiratory rate was 20 breaths/ minute with saturation 92% in room air. There was no clubbing. Respiratory system examination revealed bilateral basal fine crepitations. Air entry was bilaterally equal. Other systemic examinations were normal. Chest Xray showed bilateral reticular pattern (Figure 1). Her complete blood counts, renal and liver functions, electrolytes, HbA1c, TSH, ECG and ECHO heart were normal. Antinuclear antibody profile, rheumatoid factor, anti-cyclic citrullinated peptide antibody and viral markers for HIV, HBsAg and anti HCV were negative. Mantoux test was also negative. High-resolution computed tomography (HRCT) of thorax showed patchy ground glass opacities with interlobular septal thickening and fibrotic changes, suggestive of nonspecific interstitial pneumonia type ILD (Figure 2). Her pulmonary function test showed restrictive pattern. Bronchoalveolar lavage

was not done as the patient did not consent to it.

On the basis of the history, examination findings and investigation reports, the diagnosis of drug induced ILD was considered, with venlafaxine being the culprit drug. The dose of venlafaxine was tapered and stopped; and escitalopram was started. Oral prednisolone at 1 mg/kg/day was initiated which was tapered and stopped over a period of 1 month. On review after 1 month, she was symptomatically better, with improvement in chest Xray. She was prescribed fluticasone inhaler; but was lost for follow up after that.

DISUSSION

Certain antipsychiatry medications are known to have adverse effects on the lungs. ILD has been reported with antipsychiatric drugs like paroxetine, quetiapine, sertraline and risperidone[1,2].The incidence of lung toxicity with venlafaxine is rare. There have been incidences of asthma, interstitial pneumonitis and eosinophilic pneumonia associated with venlafaxine therapy [3-6]. These cases had features suggestive of hypersensitive pneumonitis. A similar case of ILD was noticed by Oh et al [7].

Our patient was on long term regular treatment with venlafaxine for her depressive condition. She neither had any connective tissue disorder nor occupational exposure. She was not on any other medications. She became symptomatic after 4 years of venlafaxine treatment, with symptoms of dry cough progressing when the dosage increment was done. The temporal relation between the onset of the disease and drug initiation is suggestive of drug induced ILD. The cessation of the drug and administration oral steroids resulted in symptomatic improvement. The incidence of a similar case in the past further strengthened our diagnosis..

CONCLUSION

Only a handful of cases have been notified regarding lung toxicities with venlafaxine; and to the best of our knowledge only 1 case of venlafaxine induced ILD has been reported. This case emphasises on the consideration of venlafaxine and other similar antipsychiatry drugs as the probable causes of drug induced ILD, as well as and their cautious usage in patients with ILD.

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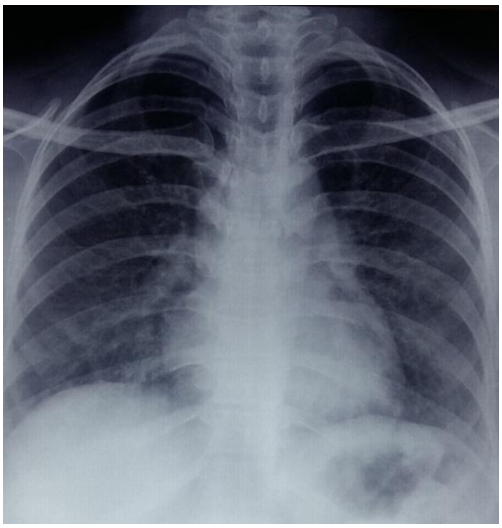

Figure 1. Reticular pattern on bilateral lung fields

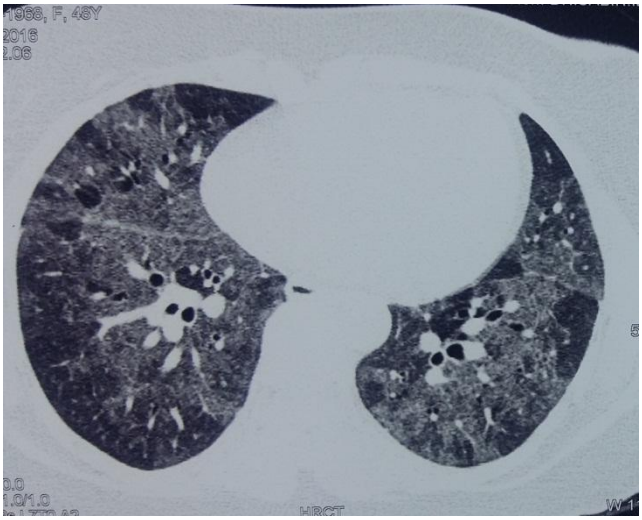

Figure 2. Nonspecific interstitial pneumonia type ILD on HRCT thorax