

An unusual occurrence of drug induced non-specific interstitial pneumonia and tracheobronchopathia osteochondroplastica

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Introduction

Nitrofurantoin-induced Non-Specific Interstitial Pneumonia (NSIP) [1] is an occasionally diagnosed disease especially in older women. It may arise as an acute or chronic form. Patients typically present with cough and dyspnoea. Complaints of arthralgia, fever, weight loss and fatigue have also been associated.

Tracheobronchopathia Osteochondroplastica (TPO) [2] is a very rare disease of unknown etiology, which can lead to tracheal stenosis through the formation of osseous nodules overlying the cartilaginous rings of the trachea. It was first described by Wilks [3] in 1854 and since then approximately 400 cases have been reported worldwide [4].

Case report

A 77-year-old woman was admitted to our hospital with a 4-month history of dyspnoea and unproductive cough. She had recently been discharged from another hospital with the diagnosis of lung fibrosis.

On physical examination the patient was slightly distressed with an elevated respiratory rate of 24 breaths / min. Her arterial blood gas taken on air revealed pO_2 of 7,506 kPa and pCO_2 of 4,093 kPa

indicating hypoxaemia and hyperventilation.

Subsequent lung function tests reflected a combined obstructive and restrictive ventilation pattern. Chest X-ray demonstrated diffuse bilateral lung infiltration (Figure 1A). The past medical history revealed that the patient had received long term regular nitrofurantoin as prophylaxis for recurrent urinary tract infections. Unexpectedly her bronchoscopy investigation diagnosed a second very rare disease (Figure 1C).

Discussion

We discontinued the patient's regular nitrofurantoin and commenced a course of prednisolone starting with 60 mg/d, prompting an almost immediate improvement in her clinical symptoms. Two weeks following therapy (prednisolone was reduced to 30 mg) the infiltration demonstrated on Chest X-Ray had completely resolved (Figure 1B) and the lung function tests had normalised. Steroids may be given for up to 6 months. In addition to a drug induced NSIP we found coincidentally an extensive form of Tracheobronchopathia Osteochondroplastica, a very rare benign disease of unknown etiology presenting with multiple osseous nodules overlying the cartilaginous rings of the trachea (Figure 1D). The patient suffered no further breathing problems related to the TPO and therefore no intervention was required.

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Received: November 22, 2017; **Accepted:** December 18, 2017; **Published:** December 22, 2017

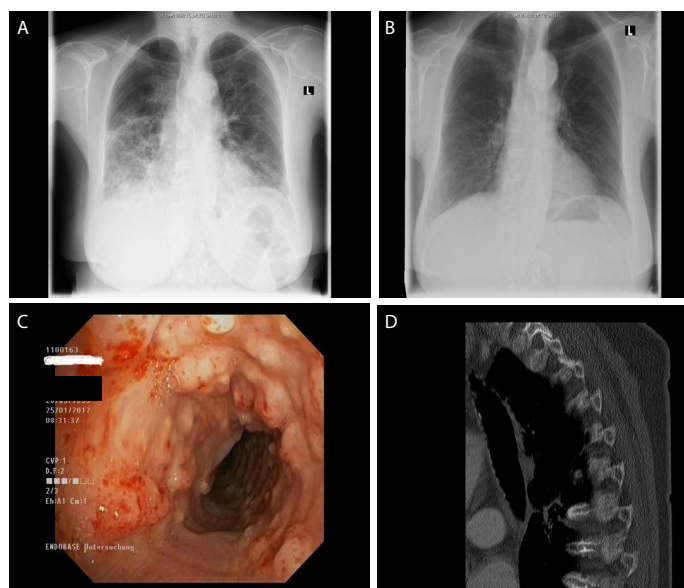


Figure 1. Drug induced Non Specific Interstitial Pneumonia and Tracheobronchopathia Osteochondroplastica