## Serap YAVUZER,<sup>a</sup> Mahir CENGİZ,<sup>a</sup> Hakan YAVUZER,<sup>a</sup> Serap YADİGAR<sup>a</sup>

<sup>a</sup>Department of Internal Medicine, İstanbul University Cerrahpaşa Faculty of Medicine, İstanbul

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Yazışma Adresi/*Correspondence:* Serap YAVUZER İstanbul University Cerrahpaşa Faculty of Medicine, Department of Internal Medicine, İstanbul, TÜRKİYE/TURKEY drserapsahin@gmail.com

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## Chronic Cough as a Complication of Statin Treatment: Letter to the Editor

Statin Tedavisinin Bir Komplikasyonu: Kronik Öksürük

sthma, chronic obstructive lung disease, gastroesophageal reflux and chronic sinusitis are known as the most common ethiological agents of chronic coughing. A rare cause of chronic coughing is the medication with a rate of 0.2-34%.<sup>1</sup> Meanwhile statins have begun to participate in this classification causing interstitial lung disease (ILD).

A 85 year-old female patient was admitted with the complain of dry cough. She has been followed with the diagnoses of hypertension, hyperlipidemia, rheumatoid arthritis (RA). Pretibial oedema and two sided rales on the lower part of the lungs were detected. Hemogram and biochemical findings were normal. Two sided pleural effusion and pattern of interstitial oedema with an heart dilatation were detected (Figure 1). Global hypokinesis of left ventricle with an ejection fraction (EF) of 35% on echocardiography were seen. RA associated with interstitial lung disease and

pulmonary toxicity of methotrexate were ruled out. We detected minimal bilateral pleural effusion and an increase from 35% to 50% in EF with normal physical signs except dry cough after three months. The statin usage was stopped. The patient relieved more significantly. The complete cure of the cough occurred. She had not used any antitussives. After the one year follow up pleural effusion was disappeared (Figure 2).



FIGURE 1: Pleural effusion when using of statin medication.



FIGURE 2: Normal chest radiography after statin medication stopped.

As we exclude the other known causes of chronic caughing and depending upon the debated data in 1990's reporting that statins could also cause coughing, we stopped the statin administration and observed the complete cure of coughing.<sup>2</sup>

Statin induced ILD presents itself in a period of time from days to months with acute or subacute dyspnea. There is no spesific laboratory test or imaging method to diagnose statin related ILD. It can be diagnosed by lung biopsy.<sup>3</sup> Fernandez et al. reported that 1-40/10,000 of the biopsy proven ILD patients were statin induced ILD.<sup>4</sup>

Since the coughing went on despite the treatment of other factors and cured with the stopping of statin, we suggest that coughing was due to ILD caused by statin.

In the cases of chronic coughing the drug induced ILD must be thought in differantial diagnosis after the excluding common causes and statin therapy must be stopped in early stages not to progress irreversible fibrosis.

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