IJBPAS, May, 2016, 5(5): 939-942

ISSN: 2277–4998

International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS)

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

SARCOIDOSIS WITH ATYPICAL PRESENTATION

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ABSTRACT

Sarcoidosis is a multisystem granulomatous disease with unknown etiology. Typical feature of pulmonary sarcoidosis in CT scan is bilateral and symmetric lymphadenopathies. We present an atypical pulmonary sarcoidosis in 39-year-old woman with history of bronchial asthma that present with pleurtic chest pain and worsening of dyspnea and cough since 3 month befor admission. Chest CT scan showed patchy alveolar opacities, predominantly in lower lob,s with paratracheal and bihilar lymphadenopathy. Serum ACE(angiotensin converting enzyme) level was in normal range. Surgical lung biopsy demonstrated noncaseating granuloma compatiable with sarcoidosis.

Keywords: ACE, alveolar opacity, sarcoidosis.

INTRODUCTION

Sarcoidosis is a multisystem granulomatous disease with unknown aetiology that affect any organ,with more than 90% pulmonary and mediastinal involvement [1,2]. Patients may be asymptomatic or symptomatic. symptoms include: cough, chest pain, fatigue, dyspnea and fever [2,3]. Although sarcoidosis can affect patients of any age, sex, or race, it typically affects adults less than 40 years old, and the incidence peaks in the 3rd decade of life (ages 20–29 years). In most studies, a slightly higher rate of occurrence has been found among women than men, across racial and ethnic groups

[2,4]. diagnostic character is the presence of noncaseating granuloma in biopsy(4)distribution of pulmonary parenchymal sarcoidosis in CT scan is typically bilateral and symmetric,and mainly central,predominantly upper lobs rather than peripheral and lower lobs6 [2,5].

Typical and Atypical Features of Pulmonary Sarcoidosis at High-Resolution CT (2)

Typical features Lymphadenopathy: hilar, mediastinal (right paratracheal), bilateral, symmetric, and well defined Nodules: micronodules (2–4 mm in diameter; well defined, bilateral); macronodules (≥5 mm in diameter, coalescing) Lymphangitic spread: peribronchovascular, subpleural, interlobular septal Fibrotic changes: reticular opacities, architectural distortion, traction bronchiectasis, bronchio-lectasis, volume loss Bilateral perihilar opacities Predominant upper- and middle-zone locations of parenchymal abnormalities Atypical features Lymphadenopathy: unilateral, isolated, anterior and posterior mediastinal Airspace consolidation: masslike opacities, conglomerate masses, solitary pulmonary nodules, confluent alveolar opacities (alveolar sarcoid pattern) Ground-glass opacities Linear opacities: interlobular septal thickening, intralobular linear opacities Fibrocystic changes: cysts, bullae, blebs, emphysema, honeycomb-like opacities with upper- and middle-zone predominance Miliary opacities Airway involvement: mosaic attenuation pattern, tracheobronchial abnormalities, atelectasis Pleural disease: effusion, chylothorax, hemothorax, pneumothorax, pleural thickening, Calcification Pleural plaquelike opacities Mycetoma, aspergilloma In our case lower lobs involved by patchy alveolar opacity

Case report

A 39 year-old-woman with asthma history since 3 years ago and diabet mellitus type 2 referred to our clinic with weight loss,fever and pleurtic chest pain and worsening of dyspnea since 3 month ago.

Her vital sign was: Respiratoy Rate=24/minute, Pulse Rate=92/minute, Temperature=37, Blood Pressure=130/70mm/hg.

In lung physical examination generalize wheeze and bibasilar fine inspiratory crackle heared.

Chest CT scan showed paratracheal and bihilar lymphadenopathy with lower lobs patchy alveolar opacity (figure 1). spirometry was severe restrictive pattern.

Laboratory investigation showed: Hb=12g/dl, Hct=43%, white blood cell count=7000/mm3, latelet=195000/microliter,

ESR=55, ACE level=13 (with normal range 8-65) and PPD was negative.

Fiberopthic bronchoscopy (FOB) performed that was normal. bronchoalveolar lavage(BAL) was performed for acid fast bacilli(AFB) and fungal infection that was negative. Because patient poor cooperation transbronchial lung biopsy (TBLB) was not down. Finally thoracoscopy and lung biopsy performed that revealed numerous non caseating granulomas consistent with sarcoidosis. prednisolon prescribed with 40 mg daily for 1 month and then slowly tapered off.

After treatment symptoms reduced and treatment continued for 6 month. Six month after steroid thrapy CT scan showed normal (Figure 2).

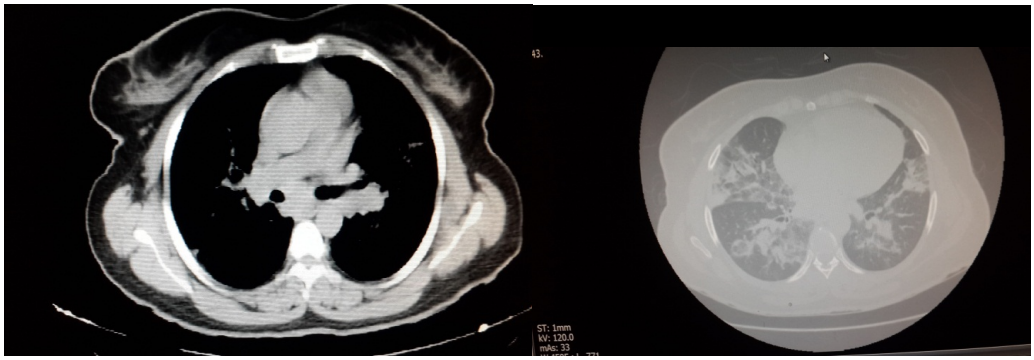

Figure 1

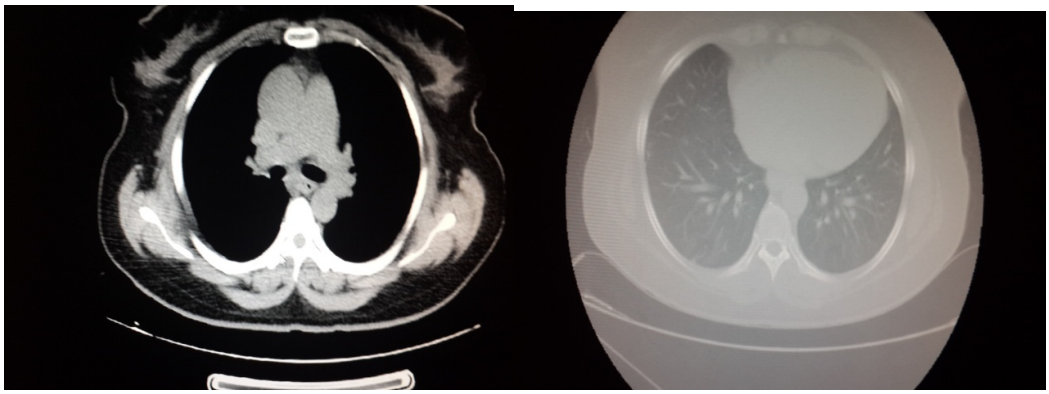

Figure 2

DISCUSSION

The most patients with sarcoidosis present with bilateral hilar and right paratracheal lymphadenopathy and parenchymal infiltiration with predominant in upper and mid lung zones [2,6]. Some patients may be present atypical finding, such as nodular or alveolar patchy opacity.this imaging pattern differential diagnosis include: metastatic disease to the lung, amyloidosis, lymphoma and bronchoalveolar carcinoma [2,6]. The

incidence of this appearance of sarcoidosis in HRCT is estimated approximately 1/5%. To achieve a timely diagnosis and help reduce associated morbidity and mortality, it is essential to recognize both the typical and the atypical radiologic manifestations of the disease, take note of features that may be suggestive of diseases other than sarcoidosis, and correlate imaging features with pathologic findings to help narrow the differential diagnosis2.

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