Gastric Sarcoidosis: A Case Report

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Abstract

Sarcoidosis is a multisystemic disease characterized by chronic non-caseating granulomas of unknown origin. Gastric involvement due to sarcoidosis has been reported rarely. Our patient is a 48-year-old man with involvement of both lung and stomach.

Gastric sarcoidosis should be considered in patients with sarcoidosis who have gastric symptoms, and also while the similar gastric symptoms may also be seen in gastric carcinoma and peptic ulcer patients, gastric sarcoidosis should also be considered in the differential diagnosis of these diseases.

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Introduction

Sarcoidosis is a multisystemic disease characterized by chronic non-caseating granulomas of unknown origin. Although it may be seen in all age groups, gender and races, it is more frequent in women under 40 years. The prevalence of the disease is approximately 1-40/100000 (1). The most frequent organ involvements are lung and thoracic lymph nodes. However skin, eye, liver, spleen and other organ involvements can also be seen (2,3).

In the gastrointestinal system, stomach is the mostly affected organ in sarcoidosis (4,5). The involvements of oesophagus, colon, rectum and appendix have also been reported (6). The gastric involvement, although usually accompanies pulmonary and hilar lymph node involvements, may also be seen solely.

Gastric involvement due to sarcoidosis is uncommon and symptoms due to gastric involvement of sarcoidosis may imitate many gastric diseases, primarily gastric carcinoma and peptic ulcers.

In this report, a patient with sarcoidosis who has gastric and pulmonary involvement is presented.

Case Report

A 48-year-old man who admitted to the outpatient clinic of Department of Chest Diseases, Cukurova University, School of Medicine in March 2001 had cough and a spoonful white-yellow sputum for the last three months; and had exercise dyspnea and fatigue for the last two months. In addition to this, he had epigastric dyspepsia within the last year.

He had smoked 25 pack-year, and he had neither pulmonary, nor chronic systemic disorder previously.

In his physical examination, both pulmonary and other systemic

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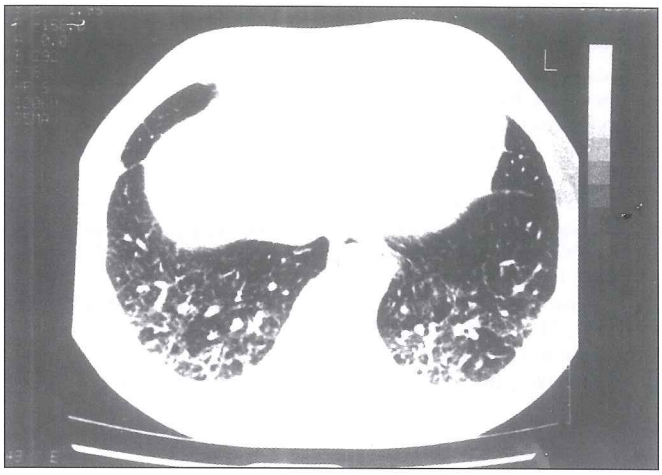

Figure 1. *Ground glass opacities especially at the lower lobes and interstitial small nodules.*

examinations were normal except the epigastric tenderness in palpation. Also, laboratory evaluations were normal, except a high erythrocyte sedimentation rate of 50 mm/hr.

The chest X-ray of the patient revealed an increase in the reticular pattern at both lower zones of the lungs. There were ground glass opacities especially at the lower lobes and interstitial small nodules at the thorax computerized tomography (Figure 1).

The fiberoptic bronchoscopic evaluation of the patient revealed no endobronchial lesion. Transbronchial parenchymal biopsy samples, taken from the right lower lobe, have been reported as non-caseating granulomatous inflammation, compatible with sarcoidosis (Figure 2).

Because the contrast gastroduodenal X-ray, performed due to epigastric pain and weight loss, revealed mucosal fold thickening, the endoscopic examination was performed where intense hyperemia at the gastric mucosa and oedema at the antral mucosa were seen. The biopsy specimens of gastric

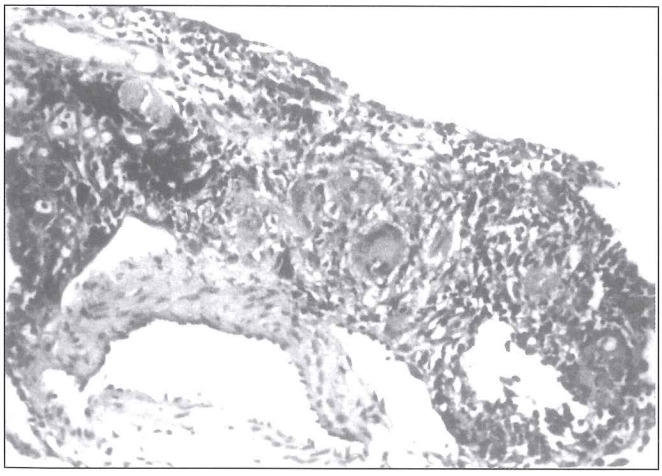

Figure 3. *Perivascular, non-necrotizing granuloma formation consistent with sarcoidosis in a bronchoscopic biopsy specimen. A Schaumann body within a giant cell is seen. (Hematoxylin–EosinX200).*

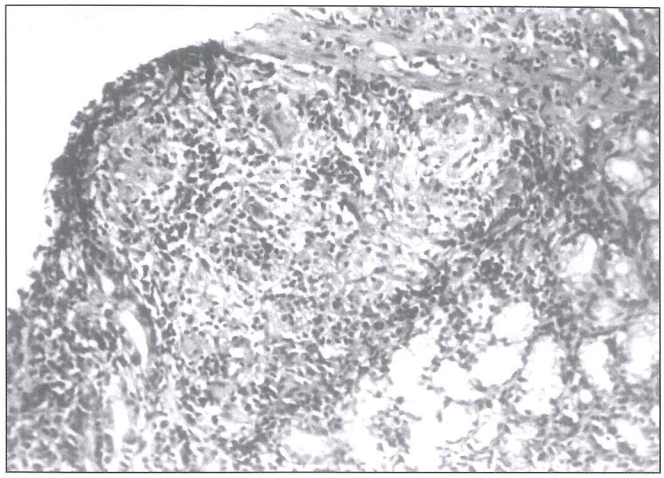

Figure 2. *Endoscopic biopsy showing non-necrotizing granuloma within the mucosa. Epithelioid histiocytes, lymphocytes, and a few giant cells are seen. (Hematoxylin-Eosin X200).*

mucosa were reported as non-caseating granulomatous inflammation, compatible with sarcoidosis (Figure 3).

Discussion

Although sarcoidosis mostly affects hilar lymph nodes and pulmonary parenchyma, as it is a multisystemic disease, extrapulmonary organ involvement may be present at diagnosis or may develop during the disease process in patients with pulmonary sarcoidosis. Extrapulmonary organ involvement is relatively important due to its affects in the prognosis and the choice of therapy (7).

In patients with gastric sarcoidosis, the clinical, radiological and endoscopic findings are quite variable (8). Although epigastric pain, nausea, vomiting and bleeding may be present in symptomatic patients, asymptomatic patients were reported rarely (9). In patients with gastric sarcoidosis radiological presentation may be normal, however mucosal nodularity, and appearance resembling linitis plastica can be seen and these findings may lead to confusion in differentiating from carcinoma (10). Moreover in patients with disseminated sarcoidosis that hilar, paraaortic and mesenteric lymph nodes and liver involvement are present, tuberculosis should be considered in differential diagnosis. Histological differentiation from Crohn's disease, secondary syphilis, linitis plastica, Menetrier's disease, hypertrophic gastropathy associated with *H. pylori* or mucosa-associated lymphoid tissue lymphoma can be difficult (11,12).

Gastric sarcoidosis is diagnosed by endoscopic biopsy. In the treatment of the disease, H_2 receptor blockers and antacids may be given, however in one study it is reported that with steroid therapy, 66% symptomatic improvement was achieved. Whenever gastrointestinal bleeding or pyloric stenosis develops, surgery is required (5,8,9).

In our case, methylprednisolone with dose of 1 mg/kg/day was prescribed due to combination of gastric and pulmonary involvement. After that, we lost the contact with patient.

In conclusion, sarcoidosis is a multisystemic disease. Altho-

ugh gastric sarcoidosis is a rare manifestation, it may be seen solely or together with pulmonary sarcoidosis. Whenever gastric symptoms develop in patients with sarcoidosis, gastric involvement should be considered and because of the similar symptoms, gastric sarcoidosis is also taken into account in differential diagnosis of many gastric disorders.

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