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OLGU SUNUMU CASE REPORT

Coexistence of Sjögren's syndrome and sarcoidosis (Heerfordt syndrome)

Sjögren's sendromu ve sarkoidoz (Heerfordt sendromu) birlikteliği

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ABSTRACT

Individuals with sarcoidosis can exhibit clinical features similar to those of Sjögren's syndrome. Several literature evidence suggest a true coexistence of the two diseases. In this study, we report a case of coexisting sarcoidosis and Sjögren's syndrome.

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Key words: Sjögren's syndrome, Heerfordt syndrome

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ÖZ

Sarkoidozlu hastalarda Sjögren's sendromunun klinik özellikleri görülebilir. Birkaç literatürde bu iki hastalığın gerçek birlikteliği gösterilmiştir. Bu çalışmada sarkoidoz ve Sjögren's sendromunun birlikte görüldüğü bir olgu tartışılmıştır.

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Anahtar kelimeler: Sjögren's sendromu, Heerfordt sendromu

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INTRODUCTION

Sjögren's syndrome (SS) is a chronic inflammatory disease characterized by lymphocytic infiltration of the exocrine glands, mainly the salivary and lachrymal glands; SS presents with persistent dry eyes and dry mouth (kerotoconjunctivitis sicca and xerostomia) and extraglandular and systemic features such as fever, fatigue, muscle and joint pain[1,2]. Sarcoidosis is a systemic granulomatous inflammatory disease of unknown etiology. Pulmonary changes are by far the most common, but any organ or tissue may be involved, including the lymph nodes, eyes, skin, liver, nervous system, salivary glands and heart[3]. Individuals with sarcoidosis can exhibit clinical features similar to those of SS[4]. Sarcoidosis is one of the exclusion entities for the diagnosis of SS[5,6]; however, several clinical observations and literature evidence suggest a true coexistence of the two diseases[7-9].

CASE REPORT

A 41 years old woman with complaints of pain in lower extremities, painless swelling be-

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neath ear and hoarseness for two months. Bilateral facial paralysis developed. She admitted to a rheumatology clinic. Neck US revealed lymphadenopathy (LAP) measuring 20 mm in diameter in left parotis gland and multible hypoechoic nodules in right parotis gland. Parotis gland tissue biopsy revealed lymphocytic infiltrations and granulomatous inflammations. Ziehl-Nielsen staining was negative. Serum levels of anti-SSA: 51 (normal, 0-20), anti-SSB: 21.2 (normal, 0-10), anti-Ds DNA: 24.5 (normal, 0-20), ANA: 1.3 (normal, 0-1). Schirmer's test (both eyes) detected 1 mm of wetting in 5 minutes that proved dry eye. SS was diagnosed on the basis of clinical, laboratory and histological findings by rheumatologists. Treatment with oral methyl prednisolone 16 mg/day was started by them.

Thorax CT showed precarinal and aorticopulmonary LAP with largest one 10 mm in size and right hilar LAP with 22 x 17 mm in diameter (Figure 1). Then she was referred to our center with presumed diagnosis of sarcoidosis. In flexible fiberoptic bronchoscopy (FOB) There were cobblestone appearances of bronchial mucosa in enterance of upper lobes of both right and left lungs (Figure 2). Bronchial mucosa biopsy revealed granulomatous inflammation containing epithelioid histiocytes and Langhans type giant cells, with minimal caseification necrosis. Ziehl-Nielsen staining was negative. The CD4/CD8 ratio in bronchoalveolar lavage (BAL) fluid was 5.5. The serum angiotensin converting enzyme (ACE) level increased to 54 U/L. Gallium 67 scintigraphy revealed panda and lambda signs in hilar and orbital area. Diagnosis of sarcoidosis was based on all these findings.

Cervical US showed cervical and supraclavicular LAPs largest measuring 31 x 14 mm in size. Cranial magnetic resonance imaging (MRI) illustrated a nodule measuring 5 mm in diameter located in right lateral ventricle. Laryngoscopy was done because of hoarseness and it was revealed a nodule measuring 3 mm in diameter in right vocal cord. Hydroxychloroquine sülfate 200 mg/day and methotrexate 10 mg/week treatment added to methyl prednisolone treatment by rheumatologist. Three months after treatmet started, she had sudden loss of vision totally in her right eye. Examination of eye revealed granulomatous panüveitis, periphlebitis, papillitis in right eye. Posterior subtenon triamcinolone injection was applied and methyl prednisolone 80 mg/day, methotrexate 20 mg/week treatment was started in outside clinic. In 6th month of treatment she recovered full vision and thorax computerized tomography showed regression in LAP.

DISCUSSION

In this study, we report a case of coexisting sarcoidosis (Heerfordt syndrome) and SS. In this case there were facial nerve, cerebral, parotid gland, cervical, mediastinal (LAPs), ocular and vocal cord involvement.

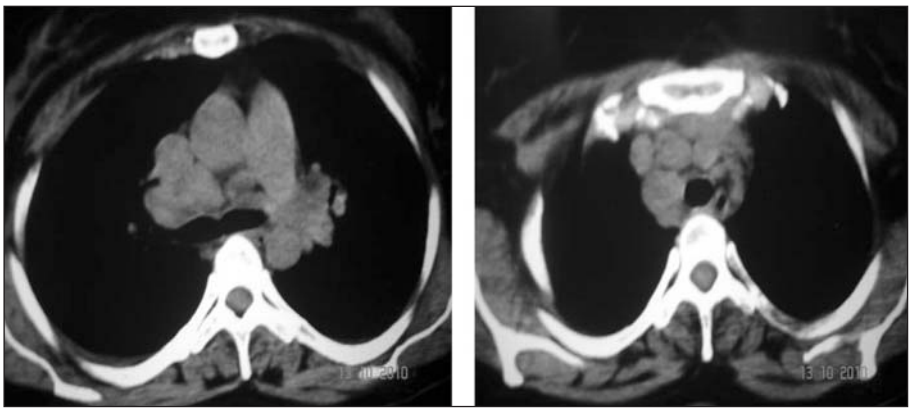

Figure 1. Thorax CT. Precarinal and aorticopulmonary LAPs.

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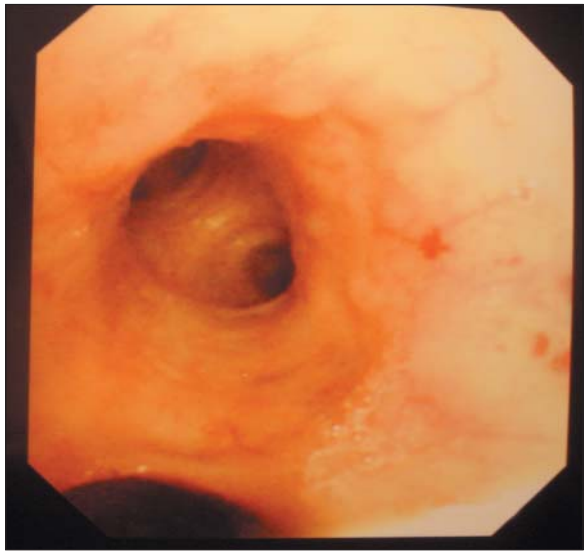

Figure 2. Cobblestone apperance of bronchial mucosa.

SS is a chronic inflammatory disease characterized by lymphocytic infiltration of the exocrine glands, mainly the salivary and lachrymal glands; SS presents with persistent dry eyes and dry mouth (kerotoconjunctivitis sicca and xerostomia) and extraglandular and systemic features such as fever, fatigue, muscle and joint pain[1,2]. The etiology is not known; however, genetic, environmental and hormonal factors have been implicated in the pathogenesis of SS [10-12]. Production of autoantibodies, such as anti-Ro/SSA and anti-La/SSB, is characteristic. Although the key manifestations of SS are dry mouth and dry eyes, SS is a multisystem disease. There is no single diagnostic test that is specific for SS and its diagnosis is based on a combination of clinical, serological and histologic findings.

Sarcoidosis is a systemic granulomatous inflammatory disease of unknown etiology. Pulmonary changes are by far the most common, but any organ or tissue may be involved, including the lymph nodes, eyes, skin, liver, nervous system, salivary glands and heart[3]. Uveitis is the most important ocular manifestation, but conjunctival granulomatosis and decreased lacrimal secretion often remain undetected[13]. Ocular involvement may occur in 11-83% of patients with sarcoidosis, depending on the population as well as on the thoroughness of the ocular examination[14-16]. Neurological symptoms are seen in about 5% of patients, but the incidence of subclinical and undiagnosed neurosarcoidosis is estimated to be much higher[3,15,17-20]. Facial nerve (CN VII) palsy, often bilateral, is the most frequent manifestation, followed by the involvement of the ophthalmic nerve (CN II). Other cranial nerves are less frequently affected. If symptoms such as fever, üveitis, or facial paralysis are present, the condition is referred to as Heerfordt's syndrome. The diagnosis of sarcoidosis may also require a combination of clinical, and radiographic, histologic, or serological findings[21].

Individuals with sarcoidosis can exhibit clinical features similar to those of SS[4]. SS sometimes accompanies sarcoidosis, with involvement of many organs, including the heart, lungs, skin, joints, and central and peripheral nervous systems[22]. The coexistence of SS and sarcoidosis has been reported in only 1% of patients with SS[23]. Sarcoidosis is one of the exclusion entities for the diagnosis of SS; however, several clinical observations and literature evidence suggest a true coexistence of the two diseases[5-9].

Parotid gland enlargement in patients presenting with sicca symptoms might be more likely associated with sarcoidosis, especially in patients presenting with negative serologic profiles[24]. Clinically manifest parotid involvement occurs in 4 to 6% of sarcoidosis patients [25,26]. Labial salivary gland biopsy, normally used to confirm the diagnosis of SS, can also be used to demonstrate sarcoid granulomas[27]. Focal sialoadenitis is usually seen in both, but sarcoidosis is also characterized by non-caseating granulomas.

Distinguishing SS from sarcoidosis on clinical grounds solely could prove difficult. Autoantibodies can be useful; ANA are positive in 90% of patients with SS, rheumatoid factor in 60%, polyclonal hypergamma-globulinemia in 80%, and the presence of SSA and SSB antibodi-

es are considered highly specific for SS[8]. In general, severe pulmonary involvement is not considered typical of SS, whereas it is relatively common in sarcoidosis. Radiological pulmonary abnormalities are frequently seen in both SS and sarcoidosis, with similar frequencies. One notable exception is hilar adenopathy, which is rare in SS, but is seen in more than 90% of patients with sarcoidosis. three possible histological features may help distinguish SS from sarcoidosis. One is the presence of non-caseating granulomas, necessary for establishing the diagnosis of sarcoidosis. However, the specificity of this feature in distinguishing SS from sarcoidosis is unclear. There are several reports of patients with SS who had non-caseating granulomas on tissue biopsy and thus were considered to have coexisting sarcoidosis[28-37]. A second distinguishing feature is the presence of lymphocyte and plasma cell infiltration (but no granulomas) on biopsy of the minor salivary glands of the lip, which is considered a highly specific method of distinguishing between sarcoidosis and SS by some clinicians[38]. However, when sarcoidosis and SS coexist, both lymphocytic infiltration and non-caseating granulomas can be found. furthermore, there is at least one case of lymphomatoid granulomatosis associated with SS[39].

In this case SS diagnosis was based on histologic findings (lymphocytic infiltration) of parotid gland biopsy, high serum anti-SSA, anti-SSB levels and Schirmer test (1 mm/5 minute). Diagnosis of sarcoidosis was based on granulomatous inflammation detected in bronchial biopsy and elevated serum ACE level of 54 U/L. Also diagnosis of neurosarcoidosis was based on MRI findings (nodule in right lateral ventricle), granulomatous panüveitis, periphlebitis, papillitis and gallium 67 scintigraphy (panda and lambda signs in hiler and orbital area). In this case there was vocal cord involvement with sarcoidosis also.

The presence of non-caseating granulomas, necessary for establishing the diagnosis of sarcoidosis. In our case diagnosis of sarcoidosis was confirmed with granulomatous inflammation detected in bronchial biopsy.

The common histologic feature of SS is lymphocytic infiltration. However, when sarcoidosis and SS coexist, both lymphocytic infiltration and non-caseating granulomas can be found[9]. In our case parotis gland tissue biopsy revealing lymphocytic infiltrations and granulomatous inflammations suggest coexistence of SS and sarcoidosis.

She had loss of vision while under treatment with steroid, methotrexate, hydroxychloroquine sulfate. This symptom's control was achieved by increasing the doses of steroid and methotrexate drugs. This condition showed that in order to prevent severe complications, we should give agressive treatment to these patients

In conclusion, sarcoidosis is one of the exclusion entities for the diagnosis of SS; distinguishing SS from sarcoidosis on clinical grounds solely could prove difficult. Several clinical observations and literature evidence suggest a true coexistence of the two diseases. When sarcoidosis and SS coexist, both lymphocytic infiltration and non-caseating granulomas can be found as beeing in our case. Aggressive treatment of this condition is needed to prevent complications.

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