Secondly, extranodal lymphoma (a variety particularly observed among immunocompromised individuals) has repeatedly been reported.[1] Thirdly, the recognized effects of asbestos on immune mechanisms[5] confers biological plausibility to the notion of a relationship between asbestos and lymphoma.

Conflict of interests

One of the authors (Claudio Bianchi) has provided scientific information in criminal or civil court cases related to asbestos diseases, serving as an expert for the court or for the plaintiff.

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Evolution, Diagnosis and Treatment of Elderly Subjects with Thoracic Sarcoidosis: Report of 6 Cases☆

Evolución, manejo diagnóstico y terapéutico en ancianos diagnosticados de sarcoidosis con afectación torácica: a propósito de 6 casos

To the Editor:

Sarcoidosis is a systemic granulomatous disease diagnosed mainly in patients younger than 40 years of age.[1]

We report 6 cases of thoracic sarcoidosis with onset at advanced age, and analyze how this disease differs in the elderly.

We reviewed 6 patients with sarcoidosis diagnosed after the age of 70 years. Presentation at the time of diagnosis was: erythema nodosum (1 patient), Sjögren's syndrome (1), respiratory symptoms (2) and asymptomatic finding (2). Radiological findings on chest computed tomography revealed sarcoidosis type I in 1 patient, sarcoidosis type II in 4 patients, and sarcoidosis type III in 1 patient. Three patients had atypical radiological findings in the chest computed tomography. All patients had elevated angiotensin-converting enzyme (ACE) levels. Bronchoscopy was performed in 4 patients, gallium scintigraphy in 4, and spirometry in 2. To rule out tuberculous infection, sputum culture was performed in 4 patients, all with negative results. Biopsy was performed in 5 patients in total: salivary gland biopsy in 1 patient (negative result), and lung in the others. Techniques used to obtain pulmonary parenchymal biopsies were transbronchial biopsy, cryobiopsy, open lung biopsy, and endobronchial ultrasound-guided bronchoscopy of mediastinal lymphadenopathies. Non-necrotizing granulomas were confirmed on pathology testing. As regards treatment, 4 patients required corticosteroids. Clinical progress was as follows: 3 patients remained stable, 2 improved and 1 worsened. During patient follow-up (ranging between 1.5 and 10 years), 2 patients died for reasons not attributable to sarcoidosis. None of the patients developed pulmonary fibrosis.

Sarcoidosis rarely occurs in elderly patients, and few references are available in the literature. After the age of 65 years, sarcoidosis can be considered elderly-onset.[2] Elderly subjects more frequently report general symptoms and it is unusual for disease to be identified by a chance finding in asymptomatic patients.[3,4]

The diagnostic tests for confirming suspected sarcoidosis and for ruling out infectious or malignant processes are manifold. The most typical radiological findings are lymphadenopathies and small pulmonary nodules distributed around the lymph nodes. Many atypical radiological forms have been described, some of which are more common in patients older than 50 years. ACE levels were elevated in some of our cases, but the utility of this marker in the elderly is questionable, since it can also be elevated in renal failure or diabetes.[3]

Table 1
Differences in Thoracic Sarcoidosis in Elderly Patients (≥65) Compared to Other Age Groups.

	Symptoms at Onset	Radiology	ACE	Bronchoscopy	Mantoux	Scintigraphy	Biopsy	Progress	Treatment
≥65	More frequent general symptoms. Rare asymptomatic forms	More frequent atypical adenopathy patterns on radiological tests	↑	No differences	False negatives in the elderly	No differences	Salivary glands Select technique in eldery, more fragile patients	No differences	More side effects requiring closer monitoring
<65	Skin, eyes, asymptomatic forms	Typical and atypical patterns	↑				Lung and lymph node biopsies		

ACE: angiotensin-converting enzyme, more often encountered in sarcoidosis in the elderly.

☆ Please cite this article as: Gómez Herrero H. Evolución, manejo diagnóstico y terapéutico en ancianos diagnosticados de sarcoidosis con afectación torácica: a propósito de 6 casos. Arch Bronconeumol. 2016;52:491–492.

No differences in bronchoalveolar lavage or gallium scintigraphy results have been described in elderly patients.

Granulomatous infections must be ruled out, particularly tuberculosis. Tuberculin testing can give false negatives in the elderly, so cultures for mycobacteria must be performed to rule out infection. Definitive diagnosis requires pathology confirmation and is determined by non-necrotizing epithelioid cell granulomas. The techniques employed will depend on the patient's situation, particularly in more fragile geriatrics. Salivary gland biopsy has been reported to have high diagnostic yield in the literature,[3] but in our series it was performed in only 1 patient, with a negative result.

Disease progress is varied and unpredictable. Up to 30% of cases can resolve spontaneously.[1] No difference have been described in the progress of elderly patients compared to other age groups.

There is controversy regarding when to start corticosteroid treatment.[5] According to some authors, treatment should be reserved for patients with significant clinical or functional compromise or with mild disease that does not remit spontaneously or progresses after 6–12 months. Closer monitoring is recommended in elderly patients, as side effects from steroid treatment are more common in this population.[2,4]

To conclude, sarcoidosis with thoracic manifestations is an entity which can occur in elderly patients and requires numerous diagnostic tests for confirmation. Some studies have described differences in sarcoidosis in elderly patients compared to other age groups. The interpretation of diagnostic tests may be more complex in these patients due to their high burden of concomitant diseases and the atypical presentation of the disease in this population.

Table 1 shows a summary of the different characteristics of sarcoidosis in the elderly patient.

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Human Herpes Virus 8 Unrelated Bilateral Primary Effusion Lymphoma in a Patient With Chronic Fluid Overload☆

Derrame linfomatoso primario bilateral, no asociado al herpesvirus humano 8, en un paciente con hipervolemia crónica

Dear Editor,

A 75-year-old white male with a history of coronary artery disease, paroxysmal atrial fibrillation and stable chronic heart failure, presented with progressive shortness of breath without orthopnoea or coughing, not responsive to increasing the dose of his diuretics. Chest X-ray and CT showed compression atelectasis of the left lung, caused by a moderate left-sided pleural effusion (140 000 RBCs; 1840 WBC [76% macrophages, 15% lymphocytes]; LDH 8488 IU/L; protein 40.4 g/L, glucose <20 mg/dl). No malignant cells were found in either sample; all cultures (including mycobacterial PCRs) were negative.

Blood analysis showed normal kidney function, elevated C-reactive protein (43.9 mg/L) and leucocytosis (7.53×10^9/L), no anaemia, mildly decreased serum albumin (26.9 g/L), and elevated lactate dehydrogenase (549 IU/L). Auto-immune screening showed a positive antinuclear antigen (1/320) with positive anti-mitochondrial antibody (M2-3E[BPO]). However, no auto-immune disorders could be identified. Hepatitis B and C serology was negative. Epstein–Barr virus (EBV) IgG was 404 U/ml. HIV serology was negative.

A smaller effusion at the right side was also present. No enlarged mediastinal or axillary lymph nodes were found. The pleural effusion quickly returned, necessitating a second needle aspiration. A pleuroscopy with pleural biopsies, followed by pleurodesis was performed. Over the next 2 months, the limited pleural effusion that had been present at the right side increased. Fluid analysis again showed exudate (636 RBCs; 401 WBCs; 53% macrophages, 24% lymphocytes; 13.5% abnormal lymphoid cells; LDH 2873 IU/L).

Flow cytometry followed by immunostaining showed a large monoclonal B-cell population with presence of CD20, CD30 (though weak), CD45, MUM1, and BCL-6 markers, and presence of immunoglobulin heavy chain rearrangement, suggestive of diffuse large B-cell lymphoma (DLBCL, Fig. 1). CD3, CD10, CD15, EBV, and HHV-8 immunostaining were negative. Diagnosis of an HHV-8-unrelated primary pleural diffuse large B-cell lymphoma was made. Retrospectively, we managed to identify this lymphoma in the samples of the left-side pleural effusion. Our patient refused treatment and was lost to follow-up soon after.

Primary effusion lymphoma (PEL), also called body-cavity-based-lymphoma (BCBL), is a rare type of B-cell non-Hodgkin's lymphoma confined to the body cavities, thus presenting as a pleural, pericardial or peritoneal (ascites) serous effusion. A detectable solid tumour mass is never present. It was first described by Nador in 1996.[1] According to the WHO classification of tumours of hematopoietic and lymphoid tissue, PEL is considered a variant of diffuse large B-cell lymphoma.[2]

Ichinohasama proposed a classification that divides primary effusion lymphoma into three subtypes[3]:

(1) *classic PEL*, related to human herpes virus 8-infection, usually in HIV-seropositive patients (but also in areas with high HHV-

☆ Please cite this article as: Raskin J, Slabbynck H, Beel K. Derrame linfomatoso primario bilateral, no asociado al herpesvirus humano 8, en un paciente con hipervolemia crónica. Arch Bronconeumol. 2016;52:492–493.