

Diffuse Hyperlymphocytosis cd8 Syndrome Initially Mistaken for Sarcoidosis

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Abstract

The syndrome of hyperlymphocytosis CD8 associated with HIV or "diffuse infiltrative lymphocytosis syndrome" (DILS) is a rarer pathology since the introduction of triple therapy. We report a new case of DILS taken initially for sarcoidosis. It was Miss A M 40 years old smoking weaned for 3 months; Followed in ophthalmology for panuvéite for 5 years under prednisone 1 mg / kg. This treatment was irregularly taken by the patient. At admission, she had a dry oculo-buccal syndrome, superficial polyadenopathy, sub-diaphragmatic superficial polyadenopathy, symmetrical bilateral parotidomalgia with pear-like appearance, asymmetrical bilateral crepitis in the pulmonary bases. Examination of the integuments found onyxia. The electrocardiogram was normal. Chest X-ray revealed an interstitial syndrome. Thoracic CT scan showed bilateral micronodular pulmonary images with lymph nodes in the upper non-compressive mediastinum and foci of lower lobar fibrosis. Bronchial biopsies showed non-specific inflammatory rearrangement. The alveolar broncho lavage found a lymphocytic alveolitis predominantly composed of CD8 T cells. The ophthalmological examination found sequelae lesions of panuvéite. Blood lymphocyte phenotyping found 161 CD4 / mm³ and 1855 CD8 / mm³ (CD4 / CD8 ratio = 0.086 [N> 0.68]). Investigations of a bacterial infection with benign or specific germs were negative. However, HIV1 serology was positive. The viral load was 110 copies / ml. The biopsy of a cervical adenopathy found a florid follicular lymphoid hyperplasia. The salivary gland biopsy showed lymphoplasmocytic infiltration of viral origin. A diagnosis of DILS was made and antiviral treatment was prescribed as well as corticosteroid therapy. CD8 hyperlymphocytosis decreased after 4 weeks of treatment. HIV-associated CD8 hyperlymphocytosis syndrome (DILS) is a rare entity, but should be systematically discussed in the presence of parotidomgalia and / or other organ damage associated with polyclonal CD8 lymphocytosis.

Keywords: CD8; DILS; Hyperlymphocytosis; Sarcoidosis.

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1. Introduction

The syndrome of hyperlymphocytosis CD8 associated with HIV or "diffuse infiltrative lymphocytosis syndrome" (DILS) is a rarer pathology since the introduction of triple therapy [1]. It is characterized by the presence of a polyclonal blood CDL hyperlymphocytosis associated with tissue lymphocytic infiltration occurring during HIV infection [2]. We report a new case of DILS taken initially for sarcoidosis.

2. Observation

It was Miss A M 40 years old smoking weaned for 3 months; Followed in ophthalmology for panuvéite for 5 years under prednisone 1 mg / kg. This treatment was irregularly taken by the patient. At admission, she had a dry oculo-buccal syndrome, superficial polyadenopathy, sub-diaphragmatic superficial polyadenopathy, symmetrical bilateral parotidomalgia (Figure1) with pear-like appearance, asymmetrical bilateral crepitis in the pulmonary bases. Examination of the integuments found onychia. There was no hepato-splenomegaly. The rest of the clinical examination was normal. Tuberculin intradermal reaction was negative. The hemogram showed 10 g / dl anemia of inflammatory type and lymphopenia. The electrocardiogram was normal. Chest X-ray revealed an interstitial syndrome. (Figure 2)

Thoracic CT scan showed bilateral micronodular pulmonary images with lymph nodes in the upper non-compressive mediastinum and foci of lower lobar fibrosis. (Figure 3 and 4). This description would be compatible with stage 4 sarcoidosis Bronchial biopsies showed non-specific inflammatory rearrangement. The alveolar broncho lavage found a lymphocytic alveolitis predominantly composed of CD8 T cells. The ophthalmological examination found sequelae lesions of panuvéite.

The dosage of the conversion enzyme was normal as well as serum calcium and calcium. Electrophoresis of plasma proteins showed polyclonal hypergammaglobulinemia 22 g / l. The search for antibodies (anti-SSA and SSB) was negative.

Blood lymphocyte phenotyping found 161 CD4 / mm³ and 1855 CD8 / mm³ (CD4 / CD8 ratio = 0.086 [N> 0.68]). Investigations of a bacterial infection with benign or specific germs were negative. However, HIV1 serology was positive. The viral load was 110 copies / ml.

The biopsy of a cervical adenopathy found a florid follicular lymphoid hyperplasia. The salivary gland biopsy showed lymphoplasmocytic infiltration of viral origin. A diagnosis of DILS was made and antiviral treatment was prescribed as well as corticosteroid therapy. CD8 hyperlymphocytosis decreased after 4 weeks of treatment.

3. Discussion

Diffuse HIV-related CD8 lymphocytic infiltration syndrome typically occurs in the first few years after infection and is characterized by the presence of persistent CD8 blood lymphocytosis with CD8 lymphocyte infiltration of one or more organs [1, 2]. Factors favoring this syndrome include: the black race, the presence of certain HLA antigens (HLA-DR5 or HLA A1 B8 DR3) and transmission by men who have sex with men.

Pulmonary (interstitial or nodular syndrome) and salivary disorders (parotitis with dry syndrome, infiltration of accessory salivary glands) are usually in the foreground, which can mimic sarcoidosis or sjögren syndrome [1, 3]

In our patient the table was initially very evocative of a sarcoidosis, but the normal dosage of the enzyme of conversion and calciuria; The absence of histological confirmation on biopsies and lymphocytic alveolitis predominantly of atypical CD8 in this diagnosis made it possible to exclude it.

The DILS is one of the differential or exclusionary diagnoses of the SSP, which differs in its more frequent occurrence in the male subject, the absence of SSA or SSB autoantibodies (although exceptional cases of DILS With anti-SSA have been reported) [4], a circulating rate of TCD8 + 1500 / mm³ lymphocytes with an infiltration by these lymphocytes of the viscera. The polymorphic visceral involvement frequently results in parotitis with dry syndrome, interstitial pneumonitis, hepatomegaly, splenomegaly, polyadenopathy and neuropathy [3,4].

This CD8 + hyperlymphocytosis is observed in our observation in the blood, LBA and BGSA which shows lymphoplasmocytic infiltration. On the latter point, lymphocytic phenotyping not performed in our patient due to technical problems could have shown a predominance of CD8 + T, whereas in SSP, lymphocytic sialadenitis is rather composed of predominant CD4 + T [5].

CD8 + hyperlymphocytosis would be an exacerbated host cytotoxic immune response (especially HLA DR5) to HIV-1 infection that occurs early in the natural history of HIV infection, Suggests the rate of CD4 + T of our patient. The progression was favorable under triple therapy. Although rare, the DILS should be included among the diagnostic assumptions of any presentation suggestive of sarcoidosis or Sjögren syndrome seronegative to autoimmunity markers.

4. Conclusion

HIV-associated CD8 hyperlymphocytosis syndrome (DILS) is a rare entity, but should be systematically discussed in the presence of parotidomgalia and / or other organ damage associated with polyclonal CD8 lymphocytosis.

References

- [1] Basu D, et al. Arthritis Rheum 2006; 55: 466-72.
- [2] Levay PF, et al. SA Fam Pract 2008; 50: 42-44.
- [3] Guillon JM, Fouret P, Mayaud C, et al. Extensive T8 positive lymphocytic visceral infiltration in a homosexual man. Am J Med 1987; 82: 665-761.
- [4] Hansen A, Feist E, Hiepe F, Burmester GR, Scholze J. Diffuse infiltrativelymphocytosis syndrome in a

patient with anti-52 kd Ro / SSA and human immunodeficiency virus type 1. *Arthritis Rheum* 1999; 42: 578-80.

- [5] Martel C, Jauberteau MO, Vidal E, Fauchais AL. Physiopathology of Primary Gougerot-Sjögren Syndrome. *Rev Med Internal* 2014, 35: 524-30.



Figure 1: parotidomegalia with pear-like appearance.

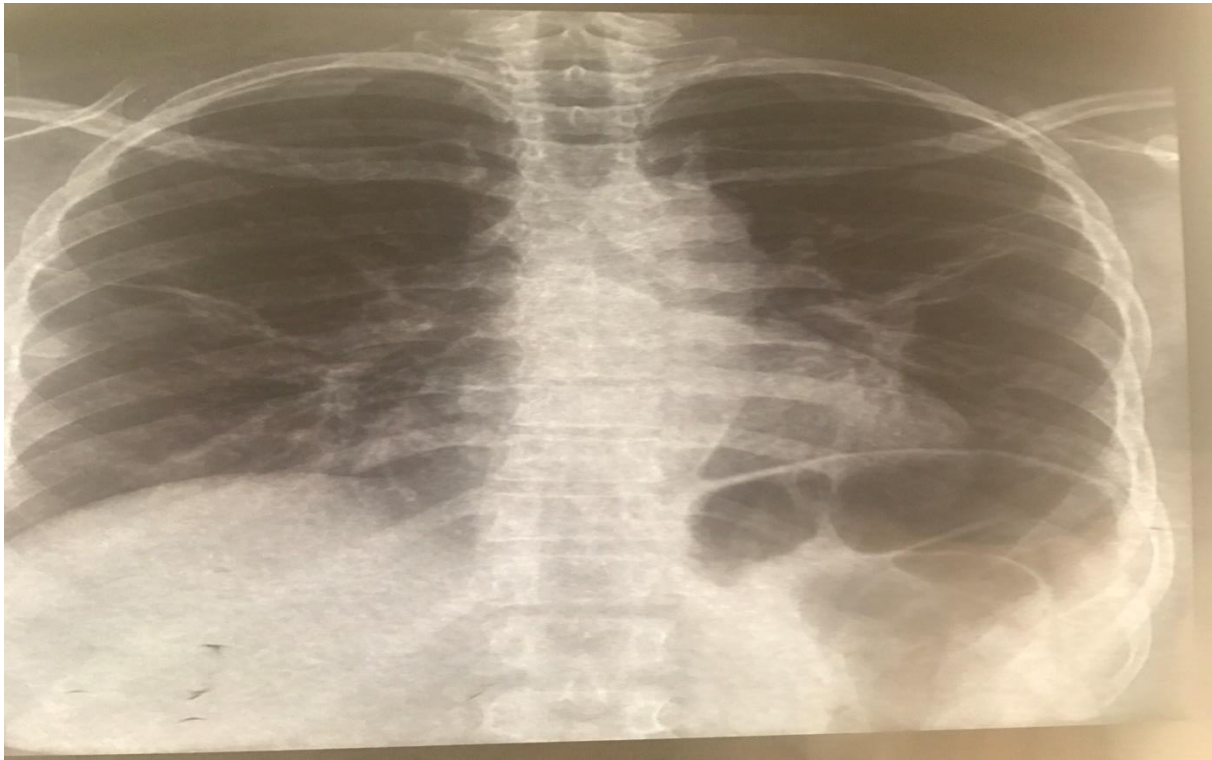


Figure 2: Asymmetric bilateral reticulo-nodular infiltrates taking the lower 2/3 of the pulmonary fields.

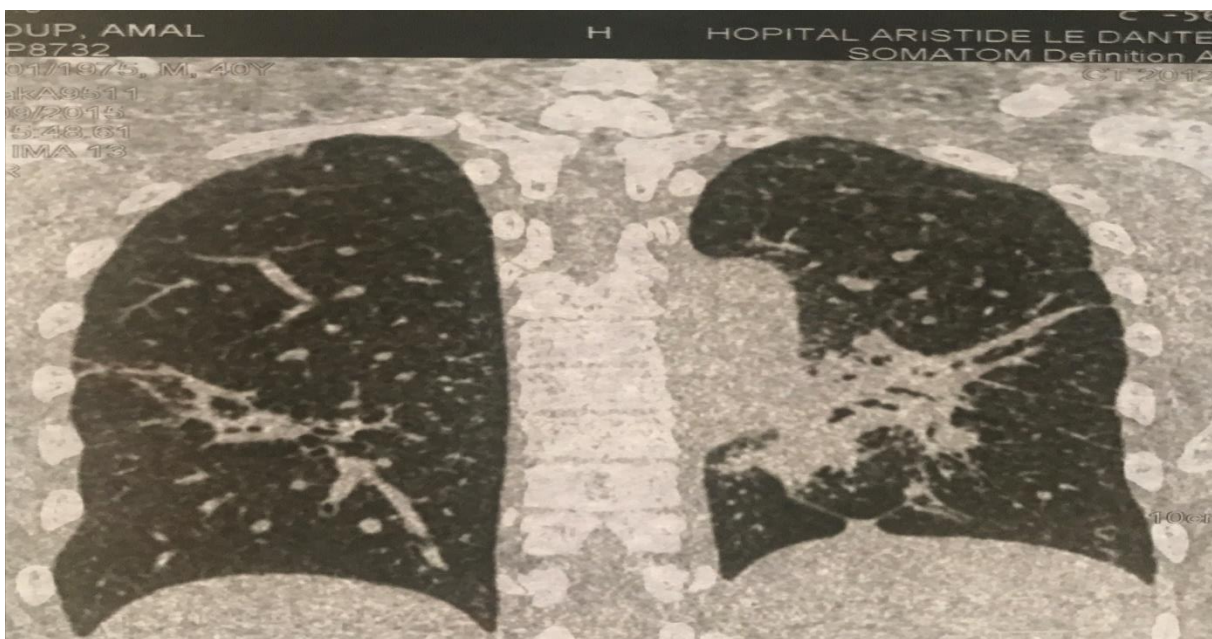


Figure 3: Presence of perilymphatic micronodules disseminated to the two pulmonary fields preferentially located along the fissures.

Bilateral peribronchoalveolar thickening and interlobular septa. Bilateral lower lobar fibrosis foci are the seat of architectural disorganization and bronchiectasis of traction. Presence of superior bilateral and mediastinal axillary adenopathies, non-compressive.

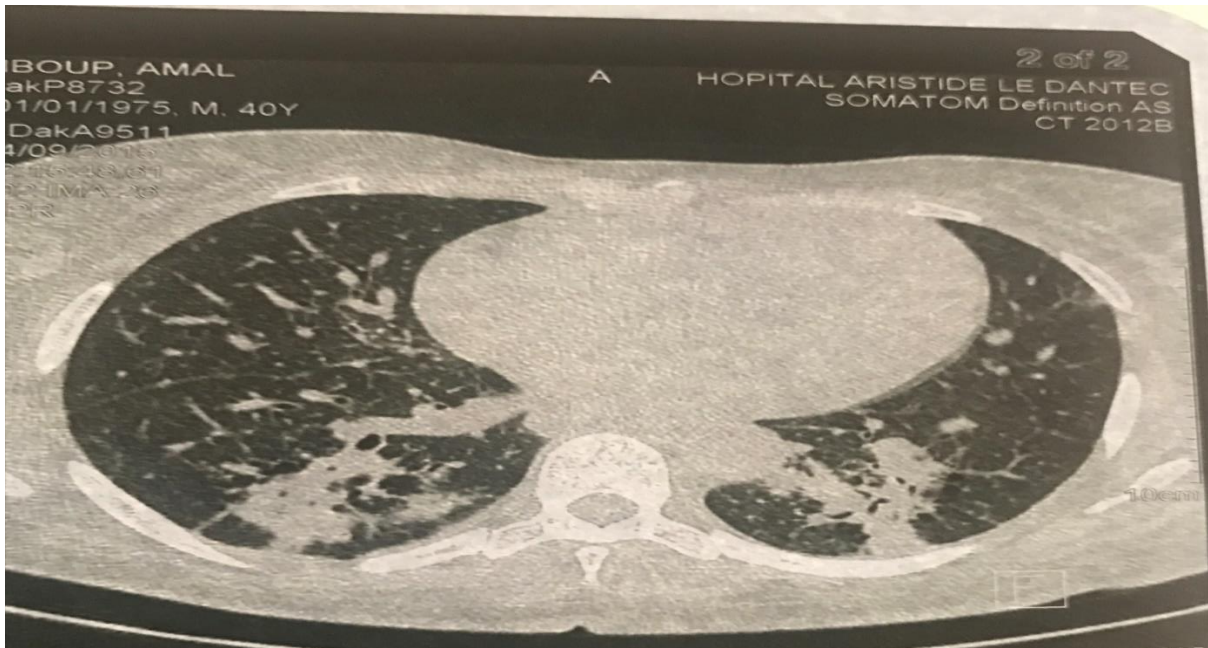


Figure 4: Presence of perilymphatic micronodules disseminated to the two pulmonary fields preferentially located along the fissures.

Bilateral peribronchoalveolar thickening and interlobular septa. Bilateral lower lobar fibrosis foci are the seat of architectural disorganization and bronchiectasis of traction. Presence of superior bilateral and mediastinal axillary adenopathies, non-compressive.