Our Dermatology Online

Case Report

Palpebral sarcoid nodules

Rym Maamouri[1], Talel Badri[2], Yasmine Houman[1], Fatma Daouad[3], Monia Cheour[1]

[1]Department of Ophthalmology, Habib Thameur Hospital, Tunis, Tunisia, [2]Department of Dermatology, Habib Thameur Hospital, Tunis, Tunisia, [3]Department of Internal Medicine, Habib Thameur Hospital, Tunis, Tunisia

Corresponding author: Rym Maamouri,MD, E-mail: ryma.maamouri@fmt.utm.tn

ABSTRACT

Herein, we report a case of systemic sarcoidosis confirmed by a eyelid biopsy in a 47-year-old North African female with a past medical history of a bilateral granulomatous anterior and intermediate uveitis. She presented to the ophthalmological department for bilateral palpebral painful discomfort. An examination revealed the presence of bilateral, rounded, well-limited, subcutaneous, nodular lesions on the upper and inferior lid. A cutaneous biopsy confirmed the presence of a non-caseating granulomatous inflammation. The diagnosis of a definite ocular sarcoidosis was made and she was treated with local steroid ointment associated to hydroxychloroquine. A skin examination of the patient with granulomatous uveitis cannot be stressed enough. A biopsy allows us to make the diagnosis and to treat the patients appropriately.

Key words: Inflammation, Granulomatosis, Eye, Skin Biopsy

INTRODUCTION

Sarcoidosis has been defined as a chronic multi-systemic disease affecting patients in their third and fourth decades of life [1]. It is characterized by non-caseating granuloma formation with a predilection for pulmonary involvement [2]. Systemic locations of sarcoidosis are typically lungs and hilar lymph nodes. Therefore, any systemic organ may be affected, which may pose a great diagnostic challenge sometimes. Ocular disease is reported as present in 20% to 60% of patients with systemic sarcoidosis [3]. Eyelid involvement is highly rare, although it may have a great diagnostic value [4]. We, herein, describe a rare case of systemic sarcoidosis confirmed by a eyelid biopsy.

CASE REPORT

This observation is reported according the CARE guidelines [5].

A 47-year-old North African female had a medical history of bilateral granulomatous anterior and intermediate uveitis and no macular edema. Her visual acuity was 20/25 in both eyes. Biological blood data revealed a lymphopenia at 800 per µL (normal: 1500–4000/µL), Serum angiotensin-1 converting enzyme level was normal measured at 60 U/l (normal: 30–100 U/L), and a skin tuberculin test was anergic. Chest enhanced CT revealed mediastinal and hilar lymphadenopathy. The diagnosis of a presumed ocular sarcoidosis was made, and the patient was treated accordingly with oral corticosteroids (1 mg/kg/day), then with a progressive decrease and a marked improvement. After three years of follow-up, the patient complained of a palpebral painful discomfort. An examination showed the presence of bilateral, rounded, well-limited, subcutaneous, nodular lesions on the upper and the inferior lid (Figs. 1a and 1b: black arrows). Ophthalmic examination was completely unremarkable. A cutaneous biopsy revealed the presence of a non-caseating granulomatous inflammation. The diagnosis of a definite ocular sarcoidosis was reached, and the patient was treated with local steroid ointment associated with hydroxychloroquine.

DISCUSSION

Uveitis is the most common manifestation of ocular sarcoidosis. All anatomic class of uveitis may be seen in sarcoidosis including anterior, intermediate,

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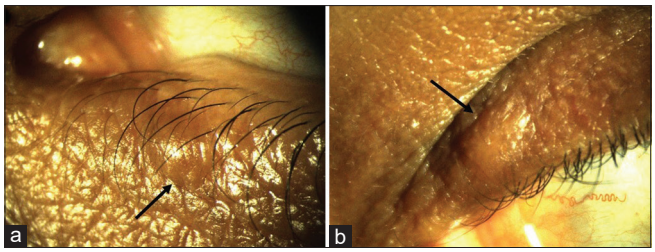

Figure 1: (a) The left inferior lid and (b) the upper lid showing the presence of rounded, well-delineated nodules (*black arrows*).

posterior, panuveitis, and sometimes mixed anterior and intermediate uveitis [6]. The rate of uveitis among ocular sarcoidosis is followed by dry and conjunctival nodules [7]. Eyelid involvement is not common. In all adnexal sarcoidosis, the incidence of eyelid involvement ranges from 11.5% to 17% [8]. Clinical manifestations include infiltrated skin, nodules, hard edema, symblepharon, entropions, irregular margins, and destructive lesions [4].

The diagnosis of sarcoidosis could be challenging in some cases due to the absence of pathognomonic clinical signs. The gold standard remains the specimen biopsy revealing the presence of non-caseating granulomas with or without epithelioid histiocytes and multinucleated giant cells. Nevertheless, biopsies of intraocular tissue are not routinely performed because of the rarity of orbitopalpebral accessible lesions and the invasiveness of intraocular biopsies [1]. Without anatomopathological diagnosis, the diagnosis of sarcoidosis may only be presumed. In fact, in regions where tuberculosis in not endemic, patients presenting uveitis associated with bilateral hilar adenopathy or asymptomatic bilateral hilar adenopathy have almost always sarcoidosis when a pulmonary biopsy is performed [9]. Therefore, because of clinical similarity on chest imaging and ocular presentation, in patients with more than six-month-long residence in tuberculosis endemic regions or where tuberculosis is endemic, tuberculosis must be excluded. If the patient has evidence of latent tuberculosis by having positive tuberculin skin test or positive interferon-Ɣ release assay, the only way to confirm the diagnosis is biopsy [10].

The strength of this case is that it highlights the importance of meticulous ophthalmic examination of ocular appendages in establishing and confirming the diagnosis of multi-system disorders. Therefore, because of its rarity, this case has the limitations of not being a current track in the diagnosis of sarcoidosis. Further prospective studies with multiple orbitopalpebral involvements should be performed to establish the clinical and prognostic patterns of those patients.

CONCLUSION

To conclude, a skin examination of the patient with granulomatous uveitis cannot be stressed enough. A biopsy allows us to make the diagnosis and to treat the patients appropriately. We obtained the patient's consent to publish this observation.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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