

Primary Palpebral Tuberculosis: A Case Report

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ABSTRACT

Tuberculosis is a frequent disease in Morocco, palpebral localization remains very rare, often poorly managed because of its polymorphism. We report the case of a 6-year-old patient, without any notable antecedents, who presented repeated chalazions. Following frequent recurrences, despite surgical management, the patient benefited from an exeresis biopsy which confirmed the tuberculosis infection. A general check-up was performed to look for secondary localizations of tuberculosis, specifically a pulmonary localization, which was negative. The patient presented a good response to antibacillary treatment. In the light of this clinical case, we recall the importance of an anatomopathological study, which must be systematic before any excision of tissue material in the treatment of a chalazion with atypical localization or notion of recurrence.

Keywords: Tuberculosis, chalazion, eyelid, primitive.

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I. INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by the bacillus *Mycobacterium tuberculosis* (MT). According to the most recent WHO estimations, the overall incidence of this disease remains high in Morocco. It typically involves the pulmonary system. Extra-pulmonary disorders account for 15% of tuberculosis cases. The cutaneous and conjunctival involvement remains very rare.

We report the case of a little girl with primary TB infection of the eyelid.

II. CASE REPORT

We report the case of a 6-year-old girl, without any particular pathological history, who consulted for a swelling of the left upper eyelid evolving for two months. The ophthalmological examination showed a corrected visual acuity at 10/10 in both eyes, an inflammatory, renitent and non-fistulized swelling of both upper eyelids (Fig. 1, 2). The anterior segment and the fundus examination did not show any abnormalities in either eye. The clinical picture appeared to be of an uncomplicated chalazion. General examination of the patient did not find any notable abnormalities. However, the parents reported a notion of chalazion recurrence at the same site despite surgical treatment and unquantified weight loss.

The patient underwent chalazion excision under general anesthesia. The anatomopathological study revealed a

tuberculoid granulomas composed of epithelioid cells and giant Langhans cells as well as a suppurative necrosis site next to the granulomas (Fig. 3).

A general check-up was carried out to look for secondary tuberculous involvement, particularly pulmonary, which was negative. The chest X-ray was normal and the intradermal tuberculin reaction was negative.

In the light of this isolated and primitive affection of the eyelid and after advice of the infectious diseases physicians, an antibacillary treatment was started according to the protocol of an extra-pulmonary tuberculosis localization. The patient received antibacillary treatment in two phases: the intensive phase (rifampicin, isoniazid, pyrazinamide and ethambutol for 2 months) and the maintenance phase (rifampicin and isoniazid for 4 months).

The patient progressed well under antibacillary treatment, with no recurrence and regained appetite and weight. No side effects occurred during the medical treatment.



Fig. 1. Inflammatory infiltrations of both upper eyelids.



Fig. 2. Eversion of the upper eyelid: renitent yellowish and rounded tumor.

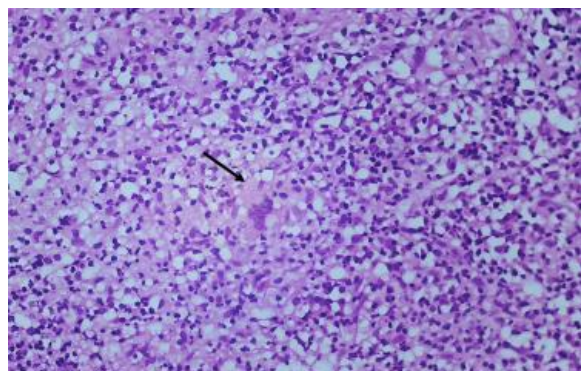


Fig. 3. Hematein eosin x 100: Tuberculoid granulomas containing epithelioids. cells and giant Langhans cells (black arrow).

III. DISCUSSION

Tuberculosis is an acute or chronic condition caused by *Mycobacterium tuberculosis*. (MT). In endemic countries, as in Morocco, tuberculosis should be considered in the presence of any recurrent chronic disease associated with even minimal changes in general condition. The MT can reach all ocular structures, without pathognomonic presentation [1].

Primary palpebral involvement is a rare entity. Contamination can occur through the bloodstream from an adjacent site or as a result of trauma by direct inoculation [3]. A notion of trauma that has gone unnoticed cannot be eliminated in our case. Palpebral tuberculosis may take the form of lupus vulgaris, cold abscess, or chalazion [2] as reported in our case.

This case reminds us and confirms the importance of systematic anatomopathological study during any excision of tissue material in the treatment of a chalazion with atypical localization or the notion of recurrence [4]. On the one hand to ensure that the right diagnosis is established, and on the other hand to avoid omitting infections such as tuberculosis that may have consequences on the patient's general condition. And more importantly, not to wrongly treat some types of tumors that may take on the appearance of a chalazion and to diagnose them earlier [5].

The treatment of ocular tuberculosis requires the same molecules used for the other forms of tuberculosis (Rifampicin, Ethambutol, Pyrazinamide and Isoniazide). The protocol used can vary between 6 and 18 months, with good therapeutic responses in sensitive forms [2]. However, it is important not to forget to carry out a regular follow-up in order to avoid or to early detect possible side effects of the

treatment, in particular Isoniazid and Ethambutol, on the optic nerve or retina.

The management of this primary palpebral tubercular disease requires a collaborative approach between different specialists, including infectious diseases and pneumology physicians, to ensure a global care of the patient.

IV. CONCLUSION

Primary palpebral tuberculosis is a rare under-diagnosed localization. The anatomopathological study must be systematic during any excision of tissue material in the treatment of a chalazion with an atypical appearance and chronic or recurrent evolution.

The authors confirm that this article content has no conflict of interest.

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