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Solitary Mastocytoma in Children: Case Report

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Report

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ABSTRACT

Solitary mastocytoma is the most common form of mastocytosis in children. The main symptom is pruritus. The treatment is symptomatic and it's based on Topical corticosteroids. The prognosis is good with possibility of spontaneous regression at adulthood. This case report is about a 7-month-old infant that presented with an erythromatous papular lesion on the left temple. The patient responded well to topical steroids and antihistamines.

Keywords: Mastocytoma; children; solitary; mastocytosis.

1. INTRODUCTION

Mastocytosis is an uncommon disease which is characterized by an abnormal accumulation of mast cells in one or more organs with the release of mast cell mediators. The skin is the most frequently affected organ [1,2]. Pediatric mastocytosis is frequently shown as isolated skin lesions unlike in adults. Solitary mastocytoma is the most common form in children [3].

2. CASE REPORT

This is a 7-month-old infant, with no pathological history, who got since birth an erythematous lesion in the left temple with episodes of lesional flares during which the lesion becomes itchy, popular and sometimes bullous. Dermatological examination showed a papular lesion surmounted by a bubble with a clear orange-yellow content, measuring 7 mm by 5 mm, located on the top left temple (Fig. 1 and 2).

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Darier's sign was positive. The remaining of physical examination was normal. These clinical features were consistent with a diagnosis of a solitary mastocytoma and a treatment based on a high-potency topical steroids and oral antihistamines was administered to the patient with a good outcome (Figs. 3 and 4).

3. DISCUSSION

Solitary mastocytoma is a form of papulonodular mastocytosis. It is the most common form of infantile cutaneous mastocytosis. It occurs in children under 2 years old, less frequently at birth and most often during the first 3 months. It usually appears as a unique plaque or nodule (hence the name solitary mastocytoma). The lesion is well limited, its diameter varies from 1 to 4 cm and its color is yellowish pink to brown. It can be located at any region of the body except the palms and soles.

Pruritus is the main symptom in children with mastocytosis and it can be either intermittent or continuous. Urticarial or vesiculo-bullous flares can occur spontaneously or after physical efforts, emotional stress, food or medication. Stroking of the lesion can also trigger these inflammatory flares, thus representing Darier's sign which is

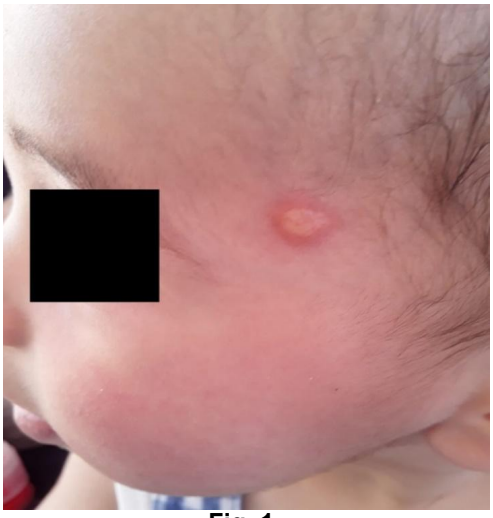

Fig. 1.

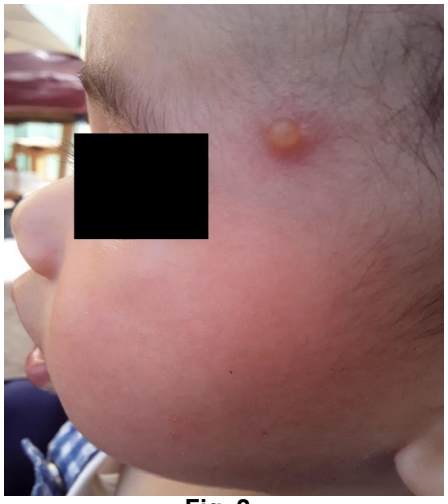

Fig. 2.

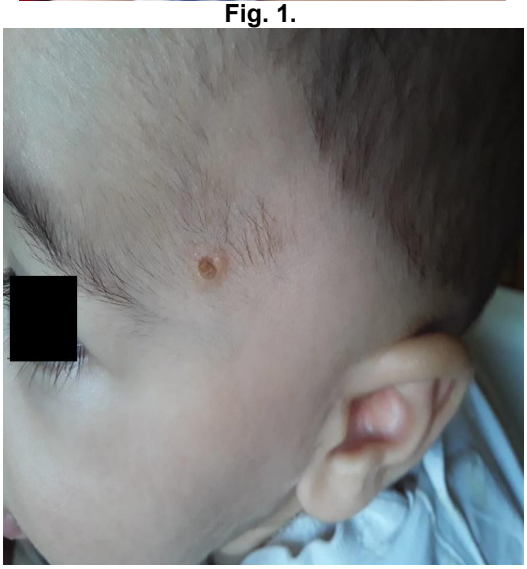

Fig. 3.

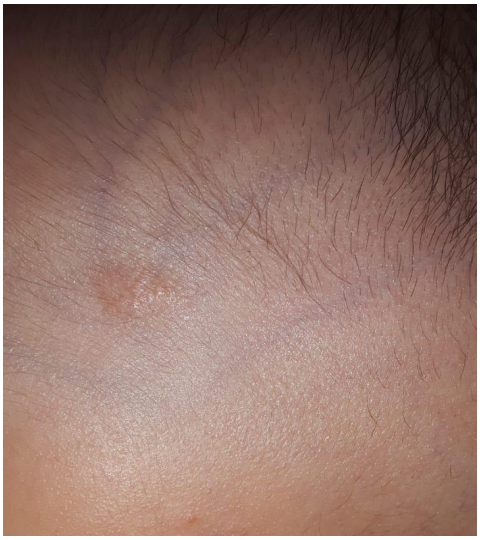

Fig. 4.

inconstant but pathognomonic for mastocytosis. Episodes of flushing, vomiting, colic and diarrhea can also be observed with the same factors triggering mast cell degranulation [4-8]. These symptoms are due to the local and systemic release of histamine and other mast cell mediators such as leukotrienes, prostaglandins and platelet activating factor. The diagnosis is based on the clinical appearance of the lesions and the presence of Darier's sign and absence of systemic involvement. Skin biopsy confirms the diagnosis by revealing a dense infiltrate of mast cells in the upper dermis [8-10]. Treatment is symptomatic and includes oral administration of antihistamines and topical steroids. The trigger factors should be avoided. Surgical excision can be used for patients with alarming lesions that do not respond to treatment [3,8-10].

4. CONCLUSION

Solitary mastocytoma is the most common form of cutaneous mastocytosis in children with a favorable prognosis and a possibility of spontaneous regression. Topical corticosteroids can accelerate this regression as it was the case for our patient.

CONSENT

As per international standard, parental written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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