A Rare Sighting: Xanthelasma in a 9-Year-Old Child

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Abstract

Xanthelasma palpebrarum, a very common type of xanthoma seen in adults, is an extremely rare sighting in children. To date, less than five cases of the same have been reported in the literature. The purpose of this study is to report and describe the clinical findings in a patient with juvenile xanthogranuloma. We present one such case of the rare xanthelasma in a 9-year-old child who reported to our outpatient department.

Keywords: Hyperlipidemia, xanthelasma, xanthelasma palpebrarum, xanthoma

Introduction

A xanthelasma is a type of xanthoma. Xanthelasma palpebrarum refers to a xanthoma that is found on the eyelids.[1] The term xanthelasma was coined by Erasmus Wilson and he applied it to any type of xanthoma. Xanthelasma is made up of two Greek words, “xanth-” which means yellow and “-elasma” which means plate. These lesions are due to lipid being deposited in the skin forming a yellow-colored papule appearance. We present a case of xanthelasma palpebrarum in a 9-year-old female child.

Case Report

We present a case of this rare sighting in an otherwise healthy 9-year-old girl who presented to our outpatient department for a regular eye check-up, with no complaints regarding the yellowish plaques around her eyelids, no history of any similar eruptions in the body, no history of any family hypercholesterolemia or hyperlipidemia, or any similar complaints or signs in siblings and/or blood relatives.

On examination, she was found to have visual acuity of 6/6 in both eyes with intraocular pressures of 12 mmHg in both eyes. Her anterior- and posterior-segment examination did not reveal any pathology or any abnormal finding.

On examination of eyelids and adnexa, three bilateral (one around the right eyelid and two around the left eyelids) pedunculated well-circumscribed nodular lesions were noticed [Figures 1 and 2a-b]. In addition, no other abnormalities, including skin eruptions or nodules, were detected anywhere.

Her laboratory investigations showed normal lipid profile and no other abnormality. She was suggested excision biopsy, i.e. histologically examination after excision of the nodule surgically, but her parents refused the same. However, the findings of further detailed ophthalmologic and systemic examinations and evaluations were unremarkable. Therefore, the clinical diagnosis was made of juvenile xanthogranuloma, solitary type, occurring on the eyelid.

Discussion

Xanthelasmas are more common in females, and their incidence tends to increase with age. The incidence among males ranged from 0.3% to 1.54% of the population. In contrast, the incidence among females ranged from 0.82% to 3.4%.[2] Xanthelasmas are associated with genetic conditions.

Familial dyslioproteinemia Type IIa is the most common underlying condition that predisposes to xanthelasmas, with

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familial dyslipoproteinemia Type IIb and III being associated with xanthelasmas as well.

Histologically, xanthelasmas are made up of foamy histiocytes and Touton giant cells. They are similar histologically to xanthomas. Xanthelasmas, contrastingly, have foam cells that sit more superficially and they have no fibrosis. The foam cells also typically rest near capillaries.[3] Ultrastructural features of xanthelasmas include cholesterol crystals, nonmembrane-bound lipid vacuoles, and lysosomes.[4]

These lesions are generally self-limiting and often do not require any treatment. Systemic examination is recommended, and laboratory investigations including blood workup to look for hyperlipidemia are often advised. When indicated, these lesions can be excised and tissue histologically examined.

**Conclusion**

Xanthelasma is a relatively common clinical sign of hyperlipidemia in an adult population, but uncommon in a child. The reader should be aware of the appearance of this clinical sign.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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**Conflicts of interest**

There are no conflicts of interest.

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