

# Orange palpebral spots: a rare entity of unknown clinical significance

**Keywords:** eyelid, discoloration, palpebral spots

Dear Editors,

Orange palpebral spots (OPS) is a rarely described entity of unknown etiology first reported in 2008 by Assouly et al.<sup>1</sup> OPS most commonly presents on females as flat, nonpalpable lesions on the superior eyelids. The coloration of OPS tends to vary between yellow-orange and light orange. Due to this, it has been previously suggested that the nomenclature be expanded to “yellow-orange palpebral spots.”

Herein, we present the case of a 53-year-old woman with a 2-year history of asymptomatic, yellow-orange patches on the upper eyelids (Fig. 1). Medical history was unremarkable except for gastroesophageal reflux disease and depression treated with omeprazole and escitalopram, respectively. Our patient did not recall any triggers and denied the use of makeup, protective eye-wear (ie, goggles), or contact lens solution. Skin examination was remarkable for the presence of well-defined, yellow-to-orange patches on the medial upper eyelids. Lipid panel was within normal limits. No other testing was performed. Given the patient's clinical presentation, a diagnosis of OPS was favored.

The differential diagnosis of OPS includes xanthoma or xanthelasma. OPS, unlike xanthelasma or xanthoma, do not have an elevated appearance with coloration that varies between yellow-orange to light orange.<sup>1,2</sup> Skin biopsies of OPS have shown increased adipose tissue and pigment-laden macrophages in the superficial dermis without the characteristic lipid-laden macrophages of xanthelasma.<sup>1,2</sup> In our case, because a diagnosis of OPS was favored at the outset and because of the sensitive location of these lesions, a biopsy was not performed. While xanthelasma tends to correlate with hyperlipidemia, patients with OPS present with normal lipid levels and lipid screens are often unnecessary.<sup>1</sup> In our case, the patient's primary care physician had ordered a lipid panel as routine lab work. Evolution of these 2 distinct conditions has not found them to be interlinked as patients that have been followed for xanthelasma have never shown clinical features of OPS and vice versa.<sup>1</sup> The differential diagnoses of OPS also include use of fluorescein solutions in ophthalmology and necrobiotic xanthogranuloma. However, staining due to fluorescein solution typically affects the lower eyelids.<sup>1,3</sup> Necrobiotic xanthogranuloma involves the periorbital area in addition to the eyelids and is often seen in patients with monoclonal gammopathy and clinically present with red-to-brown, violaceous, or yellowish papules and nodules.<sup>1,3</sup>

The etiology of OPS remains to be fully elucidated. Assouly et al.<sup>1</sup> proposed a correlation between OPS and high levels of vitamin E, total carotenoids, or  $\beta$ -cryptoxanthin secondary to high citrus consumption.<sup>1,4</sup> Our patient maintained a low-citrus diet due to her history of gastroesophageal reflux disease indicating that exposure to high levels of the previously mentioned compounds was unlikely. Belliveau et al.<sup>2</sup> also described melanin incontinence in the histopathologic analysis of patients with OPS, suggesting that chronic eye rubbing or blinking leading to local trauma may be responsible; however, our patient denied this.<sup>4</sup> OPS have also been reported in patients taking a serotonin reuptake inhibitor; yet, the significance of this finding is unknown, and in our case, the patient was prescribed escitalopram approximately 1 year after the first appearance of these lesions.<sup>1</sup> No association with systemic illnesses, including malignancy, has been previously reported in the literature.<sup>2</sup> To the best of our knowledge, no treatments for OPS have been previously reported in the literature. In view of the benign clinical course of this entity and the fact that



**Fig. 1.** Yellow-to-orange patches on the medial upper eyelids of a 53-year-old woman.

## What is known about this subject in regard to women and their families?

- While the prevalence of orange palpebral spot is unknown, its presentation is more common among adult women.

## What is new from this article as messages for women and their families?

- Orange palpebral spot is a benign skin condition, that although not frequently described in the literature, should not be alarming to patients.
- Clinicians should consider avoiding unnecessary testing and/or skin biopsies to establish a diagnosis due to the benign nature of this condition and its lack of association with hyperlipidemia.

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the patient was not distressed by the findings, we opted to monitor clinically and provide patient reassurance.

OPS is a rare entity and thus far no distinct diagnostic criteria or standard treatment has been proposed. A thorough medical history including review of medications and dietary intake can be helpful in distinguishing OPS from other entities and potentially avoid any additional unnecessary testing.

The patient in this report provided informed consent.

### Conflicts of interest

None.

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### Study approval

The authors confirm that any aspect of the work covered in this manuscript that has involved human patients has been conducted with the ethical approval of all relevant bodies.

### Author contributions

ZCF: Conception and design. GMM: Data collection. Munayco Maldonado, ZCF: Data analysis and interpretation. GMM, ZCF: Overall responsibility.

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