Case report

Sebaceous adenoma: clinics, dermatoscopy, and histopathology

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Conflicts of interest: None.

Introduction

Sebaceous adenomas are rare adnexal tumors with a wide spectrum of presentation, often difficult to diagnose because it is only based on clinical data. The sebaceous adenoma is a benign neoplasia, with sebaceous differentiation, which may occur isolated or as part of Muir–Torre syndrome.^{1,2}

Case report

A 79-year-old, African-American female patient presented an itchy lesion with progressive growth and eventual peripheral desquamation on the posterior trunk. Examination showed a red-yellowish tumor of about 1 cm, with multiple telangiectasias, irregular surface, erosion, and crust (Fig. 1). The examination with a polarized light dermatoscope and $10 \times$ magnification showed multiple pale yellow globules on an erythematous background, besides tortuous ramified vessels, more evident in the periphery and central crust, suggesting a pattern of sebaceous gland neoplasia (Fig. 2).

Irritated seborrheic keratosis and basal cell carcinoma were also assumed as pertinent differential diagnoses. The lesion was excised, and histopathologic examination demonstrated a circumscribed nodular lesion with mature sebaceous glands and basaloid cells (Fig. 3), confirming the diagnosis of sebaceous adenoma.

At the time of diagnosis, the patient did not present any indications of associated malignancy; however, longterm follow-up is fundamental.

Discussion

Sebaceous adenoma is a multilobular tumor with sebaceous differentiation, this being the terminology applied mainly to benign superficial sebaceous neoplasias, with prevalence of differentiation with mature sebocytes.^{1–3}

It can present as an isolated or multiple lesions, either dome-shaped, sessile, or pedunculated papule or nodule, rarely ulcerated, ranging between 0.5 and 10 cm in diameter, with yellowish color, located mainly on the face or scalp, but also on the neck, upper trunk, and legs. Despite usually being asymptomatic, it may present with pruritus and pain.^{1–3} It affects both sexes, with greater frequency in the elderly.² There are also reports of lesions in the oral mucosa.^{4,5}

When associated with visceral neoplasia, particularly of the gastrointestinal and genitourinary tracts, both the sebaceous adenoma as well as any other sebaceous neoplasia (e.g., sebaceous carcinoma, basal cell carcinoma with sebaceous differentiation) can be part of Muir–Torre



Figure 1 Erythematous, yellowish tumor of about 1 cm, with multiple telangiectasias, irregular surface, eroded area, and crust



Figure 2 Multiple pale yellow globules on erythematous background, beside tortuous ramified vessels, more evident in the periphery of the lesion and central crust, suggesting a pattern of neoplasia of the sebaceous gland (dermatoscopy with polarized light, $\times 10$)

syndrome.^{1-3,6} This is a hereditary disease of dominant autosomal transmission caused by mutations in the DNA MSH2 and MLH1 repair genes.² It is advised that these patients should submit to a more detailed investigation both at the time of the diagnosis and during periodic follow-up, including examinations with abdominal image, colonoscopy, transvaginal ultrasound, and urinalysis.¹⁻³

The differential diagnosis between sebaceous hyperplasia and other sebaceous neoplasia can be challenging, both clinically (dermatoscopy) and histopathologically.

In histopathology, it is a nodular, multilobular lesion, presenting basaloid (germinative) cells in the periphery of the lobes, which gradually move to the center, and the cells become increasingly larger, with abundant and clear



Figure 3 Mature sebaceous glands and basaloid cells confirming the diagnosis of sebaceous adenoma (hematoxylin and eosin $\times 5$)

cytoplasm, constituting the mature sebaceous cells (sebocytes). The main histopathologic differential diagnosis is with sebaceous hyperplasia, which presents a layer of germinative cells forming a rather thin periphery.

Despite the fact that dermatoscopic criteria for sebaceous hyperplasia have already been well documented, we only found two reports with a dermatoscopic description of sebaceous adenoma in the consulted literature. However, one of them is a series of 18 cases and suggests two dermatoscopy patterns for sebaceous adenoma. The first is similar to the present case, with a central crater associated with a structureless ovoid white–yellow center, radial telangiectasia, known as crown vessels and blood crusts. The other pattern has arborizing vessels and yellow comedo-like globules, without the central crater.⁷

Therefore, although dermatoscopic examination helps when a lesion of sebaceous origin is suspected, the study of more lesions can probably determine more specific standards for its diagnosis in the future, and histopathology still prevails presently as the gold standard for this purpose.⁸

The treatment of choice is surgical excision of the lesion, with possibility of recurrence; therefore, besides follow-up of the cutaneous lesion, patients with isolated sebaceous adenoma still without diagnosis of Muir–Torre syndrome must continue with regular medical check-ups and complementary examinations, to get an early detection of eventual associated neoplasias.^{1–3}

Conclusion

This rare benign neoplasia of the sebaceous glands has its final diagnosis proven by histopathologic examination, but the dermatoscopic criteria used for their identification can be of great value in clinical practice.

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