

Dermoscopy for the Diagnosis of Conjunctival Lesions

Elisa Cinotti, MD, PhD^{a,*}, Anna La Rocca, MD^a,
Bruno Labeille, MD^b, Damien Grivet, MD^{c,d},
Linda Tognetti, MD^a, Victor Lambert, MD^{c,d},
Mathilde Kaspi, MD^{c,d}, Niccolò Nami, MD^a,
Michele Fimiani, MD^a, Jean Luc Perrot, MD, PhD^b,
Pietro Rubegni, MD, PhD^a

KEYWORDS

- Dermoscopy • Eye • Conjunctiva • Lesion • Melanoma • Squamous cell carcinoma • Nevus • Tumor

KEY POINTS

- Dermoscopy is not only valuable for the skin but can also be used for the diagnosis of conjunctival lesions.
- The anatomy of the conjunctiva is different from the skin; therefore, dermoscopic features of conjunctival tumors are different from the respective tumors of the skin.
- Conjunctival melanoma is characterized by irregularly distributed dots and a higher prevalence of gray color compared with nevi.
- Squamous cell carcinoma of the conjunctiva is characterized by hairpin and glomerular vessels.

INTRODUCTION

Conjunctival lesions comprise a large and varied spectrum of conditions, including inflammatory lesions and benign and malignant epithelial, melanocytic, vascular, fibrous, and lymphoid tumors.^{1,2} Clinical observation often fails to make the diagnosis, and complete excisional biopsy is carried out in order to perform a histologic examination with possible functional and aesthetic consequences in this sensitive area.²

Noninvasive imaging techniques are extremely important for helping clinicians in the diagnosis

of conjunctival lesions. Ophthalmologists currently use the slit lamp for the observation of conjunctival lesions, a binocular microscope equipped with an optical system that only provides clinical images of the anterior segment of the eye at high magnifications. New noninvasive imaging techniques, such as reflectance confocal microscopy, optical coherence tomography, and high-frequency ultrasound biomicroscopy, are under development for the investigation of the conjunctiva; but they are expensive and are only available in highly specialized centers.³⁻⁸

Disclosures: None.

^a Department of Medical, Surgical and Neurological Science, Dermatology Section, University of Siena, S. Maria Alle Scotte Hospital, Viale Bracci 16, Siena 53100, Italy; ^b Department of Dermatology, University Hospital of Saint-Etienne, Saint-Etienne Cedex 2 42055, France; ^c Department of Ophthalmology, University Hospital of Saint-Etienne, Saint-Etienne Cedex 2 42055, France; ^d Laboratory Biology, Engineering, and Imaging of Corneal Graft, Jean Monnet University, EA2512, Saint-Etienne 42000, France

* Corresponding author.

E-mail address: elisacinotti@gmail.com

Dermatol Clin ■ (2018) ■-■

<https://doi.org/10.1016/j.det.2018.05.011>

0733-8635/18/© 2018 Elsevier Inc. All rights reserved.

In dermatology, the dermoscope is currently used to aid the clinical diagnosis of many skin diseases; it increases the diagnostic accuracy of skin tumors with respect to the simple naked eye.⁹ There are some studies of dermoscopy concerning the oral and genital mucosa,^{10–12} whereas the conjunctiva is rarely evaluated.^{8,13–16} The authors' study aims to evaluate the current literature about the use of dermoscopy for the conjunctiva and to analyze the dermoscopic features of a large series of conjunctival tumors.

METHODS

Patients and Setting

One hundred and twenty-seven consecutive patients (60 women, 67 men, mean age 47 years, standard deviation [SD] 22.1, range 7–94 years) presenting with 147 conjunctival lesions were recruited at the Dermatology Department of the University Hospital of Saint-Etienne, France, between September 1, 2013 and January 30, 2017 to exclude the presence of malignant tumors. Eyelid margin tumors were excluded. An institutional review board approval was obtained (institutional review board at the University Hospital of Saint-Etienne, France, number IORG0007394; study filed under reference number IRBN332014/CHUSTE). A patient-informed consent was always obtained orally during the first consultation and before the examination.

Examined Lesion Diagnosis

All lesions were evaluated by a team of 3 dermatologists and 3 ophthalmologists. A surgical excision and a histopathologic examination were performed in 38 cases suspicious for malignant tumors under clinical, slit lamp, dermoscopy, and/or in vivo reflectance confocal microscopy examination. Histopathology of the 38 excised lesions revealed 16 malignant tumors, including 8 squamous cell carcinomas (SCCs), 8 melanomas (3 local recurrences after surgery and 3 with an involvement of the eyelid) and 22 benign lesions (18 nevi and 4 primary acquired melanoses [PAMs]). In particular, nevi were all compound except for 2 that were limited to the stroma (dermal nevi).

The remaining 109 lesions were not excised because they were considered benign and did not show any changes following consecutive monitoring for at least 12 months. Their clinical diagnosis was of 51 nevi, 42 PAMs, 5 cases of pterygia, 5 cases of pinguecula, 3 cases of scleromalacia, 1 angioma, 1 dermoid cyst, and 1 lymphangiectasia. Scleromalacias were also included in the authors' study even if they were

not of the conjunctiva but of the underlying sclera because they are in the differential diagnosis with conjunctival lesions.

Clinical Data

The following data were collected for each lesion: demographic information of patients, anatomic site (bulbar, tarsal, limbal para-limbal and caruncle), presence of brown or blue pigmentation, shape (macule, papule, nodule and plaque), and larger diameter.

Dermoscopic Examination

Dermoscopy was performed with the PowerShot G7 camera (Canon, Melville, NY) combined with the FotoFinder Systems (FotoFinder Systems GmbH, Bad Birnbach, Germany) at $\times 20$ magnification. Before the examination, topical anesthesia was administered using oxybuprocaine hydrochloride (1.6 mg/0.4 mL) (oxybuprocaine Thea) and tetracaine hydrochloride 1% (tetracaine Thea) applied in the inferior conjunctival fornix of the eye, and a transparent ophthalmic gel of carbomer 974P (Gel larmes Thea) was applied to the ocular region to be examined. A disposable sterile transparent film (Visulin) was applied to the tip of the dermoscope for the first 50 patients. For the rest of the patients, the tip of the camera was disinfected by applying a layer of Tristel Duo foam and by using ethanol wipes (Cidalkan ethanol) before and after the application of the foam.

Analysis of Dermoscopic Images

Dermoscopic images were evaluated together by 3 experts in noninvasive skin imaging (P.R., E.C., and N.N.) blinded from the histologic diagnosis. Each lesion was scored using the dermoscopic patterns described by Blum and colleagues¹⁰ for genital and oral mucosal lesions: dots, globules or clods, circles, lines (parallel, reticular, or curved lines), structureless pigmentation, and number of patterns that was present within a single lesion. All these patterns were referred only to the distribution of the pigmentation.

In addition to these criteria, the authors also studied the vascular pattern: linear thin, linear thick, comma, arborizing, hairpin, and glomerular vessels. Vessels were calculated only when absent in the surrounding conjunctiva or when they exhibited a different pattern from vessels of the surrounding conjunctiva.

With regard to color, the authors scored the presence of brown, black, blue, gray, red (excluded red color of the vessels), white, yellow, and pink and the number of colors in a lesion. In

Download English Version:

<https://daneshyari.com/en/article/8963662>

Download Persian Version:

<https://daneshyari.com/article/8963662>

[Daneshyari.com](https://daneshyari.com)