

Dermscopy Relevance in Eyelid Lentigo Maligna Melanoma

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Introduction

Lentigo maligna melanoma (LMM) is one of the most frequent melanomas of the head and neck region, though it represents only about 4% to 15% of melanomas. Eyelid localization of LMM is extremely rare. We report three cases of eyelid LMM where dermscopy played a key role in both the diagnosis and determination of the appropriate therapeutic course, aiming to enhance early detection of this condition.

Case Presentation

The first two cases involve an 84-year-old man and an 88-year-old woman, who both reported a history of a progressively enlarging pigmented lesion of the lower eyelid of

the right and left eye respectively. The lesion affected more than two-thirds of the lower eyelid margin and displayed an uneven pigment distribution, which did not extend beyond the gray line (Figure 1A). The second case presented with a concomitant pigmented lesion of the left zygomatic bone area (Figure 1C). Dermscopy displayed structureless areas, asymmetric peripheral dots and globules, a mixed brown-gray pigmentation and, in the second case, linear vessels arranged perpendicularly to the eyelid margin (Figure 1, B and D). Madarosis was observed in both cases on the affected areas. An incisional biopsy was first performed, followed by a complete surgical excision. In the first case, a complete excision of the lesion with a limited margin of 0.5 cm was performed according to the patient consent, whereas in the second case, a complete surgical excision

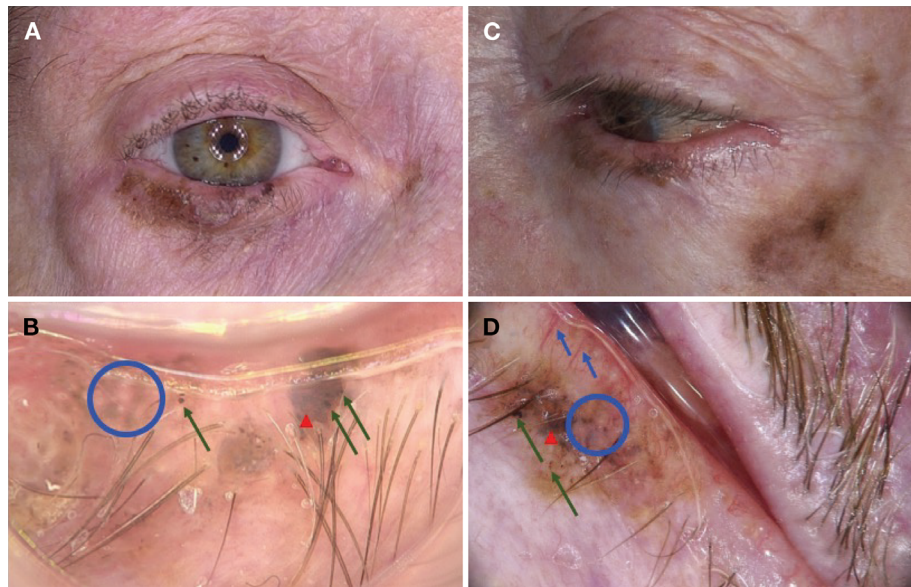


Figure 1. (A) Pigmented lesion affecting more than two-thirds of the lower eyelid margin of the right eye and displaying an uneven pigment distribution. Madarosis is associated. (B) Dermoscopic findings: structureless areas (red arrowheads), asymmetric peripheral dots and globules (green arrows), asymmetric perifollicular pigmentation (blue circle). (C) Pigmented lesion affecting more than two-thirds of the lower eyelid of the left eye associated to a second pigmented lesion on the left zygomatic bone area showing uneven pigment distribution. (D) Dermoscopic findings: structureless areas (red arrowheads), asymmetric peripheral dots and globules (green arrows), linear vessels arranged perpendicularly to the eyelid margin (blue arrows), asymmetric perifollicular pigmentation (blue circle).

with a narrow margin was performed first, followed by a wide local excision with a margin of 0.5 cm as a second step. Reconstruction was performed with a bilateral Tripier flap in the first case and a combination of a transposition flap and a dermo-epidermal graft in the second case. Histological examination confirmed LMM, measuring 1.8 mm thickness (pT2a) in the first case, and LM in the second case. Both patients have been followed for 10 months with no evidence of recurrence.

In the third case, an 84-year-old man presented with a recurrence of a melanoma on the upper rim of the eyelid, involving approximately half of it (Figure 2A). The lesion displayed two distinct areas, dermoscopically corresponding to an area with predominant brown-gray pigmentation and another one featuring white and red areas. Associated madarosis was also seen (Figure 2, B and C). Following an initial incisional biopsy, the excision of the lesion was performed with a limited margin of 0.5 cm and a conservative approach as per patient consent. Reconstruction was made with a dermo-epidermal graft. Histologic examination confirmed LMM with a thickness of 1.8 mm (pT2a). The patient did not develop recurrences during an 18 month follow-up. He died of a cardiovascular event.

Conclusions

Only a limited number of palpebral rim LM/LMM cases have been documented in the literature. The palpebral rim is a unique site, representing the boundary between mucosa and skin. During standard dermatological examinations, this region is frequently disregarded and radical surgery can be challenging to perform [1,2]. Consequently, the risk of recurrence as well as the potential for ocular involvement is considerable when melanoma affects this area. Characteristic dermoscopic features involve: asymmetric follicle hyperpigmentation, an annular-granular pattern consisting of blue-gray and brown dots and polygonal lines around and between adnexal openings leading to a gray pseudo-network. Brown-gray rhomboidal structures and homogeneous pigmented structures with obliteration of adnexal openings are characteristic of more advanced stages. Red rhomboidal structures and whitish and red areas may also be seen [3-5]. Linear vessels may be observed as a sign of malignancy, as in basal cell carcinoma of the eyelid [5]. Madarosis, reported in all our cases, is also a critical indicator of malignancy [5,6].

Palpebral rim melanoma is a rare entity, but clinical and dermoscopic examination of this peculiar region is

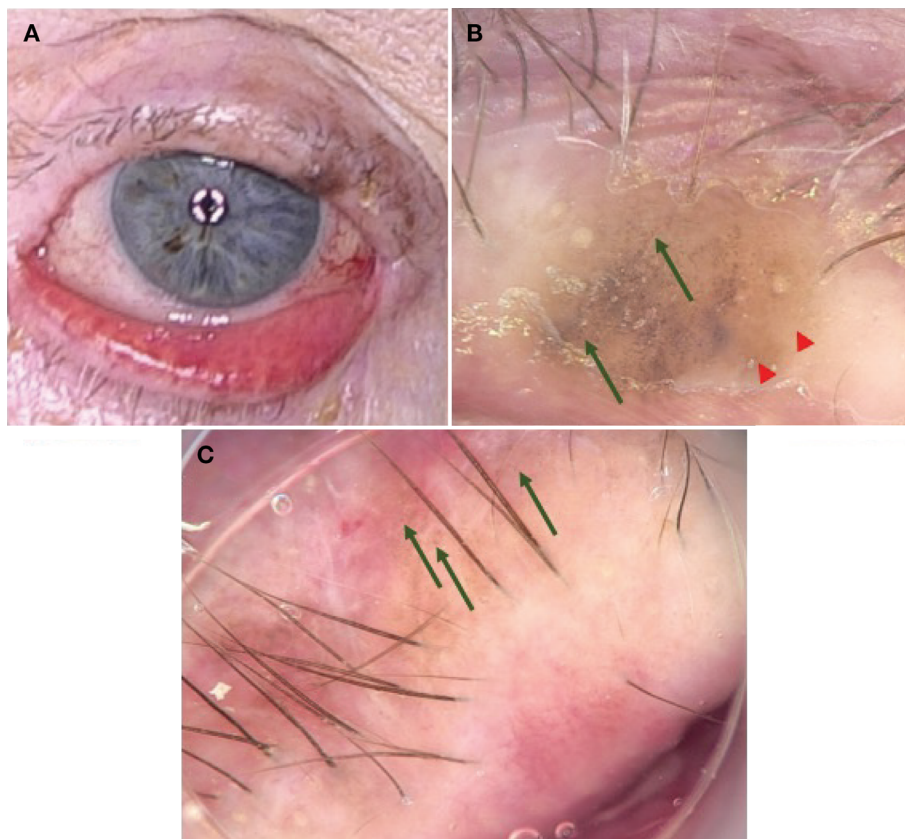


Figure 2. (A) Pigmented lesion affecting about fifty percent of the upper eyelid of the left eye showing a dense area and a gradually shaded one, with madarosis. (B) Dermoscopic findings. Brown-gray dots (green arrows) and homogenous areas (red arrowheads). (C) Dermoscopic findings. White and red areas and peripheral brown dots (green arrows).

extremely important in order to obtain an early diagnosis and to ensure radical surgery, limiting the risk of recurrence and involvement of noble structures, such as the eye bulb.

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