

Dermoscopy rainbow pattern as a diagnostic clue for early angiosarcoma

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Angiosarcomas of the scalp are aggressive invasive tumors that, more often than not, mimic benign painless skin lesions. We here report a case of angiosarcoma that was timely diagnosed and treated thanks to the dermoscopic rainbow pattern.

Keywords: angiosarcoma, tumor, dermoscopy

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INTRODUCCION

Cutaneous angiosarcoma (CAS) is a rare malignancy of vascular origin that usually occurs on the scalp or face of elderly males¹. Patients develop a lesion that resembles a “spreading bruise”, varying from blue to red in color¹. The initially harmless clinical symptoms usually conceal the aggressive course of such tumors¹. We report a case of CAS that was diagnosed and treated in time thanks to the presence of the dermoscopic rainbow pattern (DRP).

CASE PRESENTATION

A 78-year-old man with an asymptomatic, slow-growing lesion on his scalp was the case of the present study. He had reported the appearance of

the lesion 5 years prior to the research. The lesion had enlarged more rapidly over the last year. The clinical examination revealed a well-defined border violet tumor (15mm diameter), nonulcerated and compressible to palpation, showing a mild scaling in the periphery (Figure 1). Dermoscopic examination revealed a cluster of violet areas and areas with a combination of colors within the visible light spectrum (rainbow pattern). Further observed was a scaly surface in the peripheral area (Figure 2). Histopathologic study of the lesion showed a low-grade epithelioid CAS (Figure 3). A complete excision of the lesion was performed through Mohs surgery. Patient follow-up was conducted by clinical examination every three months, and an annual chest and abdominal computed tomography scan. The patient was asymptomatic five years following the diagnosis.



Figure 1. Tumor on the scalp. Well-defined violet lesion, nonulcerated, with mild scaling in the periphery.



Figure 2. Dermoscopic image, obtained using a polarized light dermoscope, showing a cluster of violet and rainbow pattern areas.

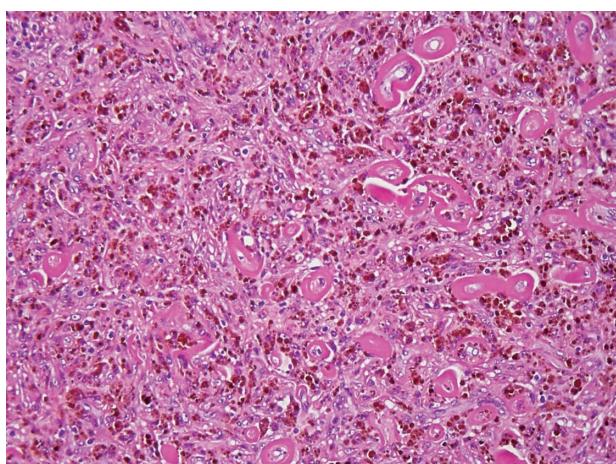


Figure 3. Vasiformative areas consist of ramifying channels lined by atypical endothelial cells forming intraluminal buds and papillations (H&E $\times 50$).

DISCUSSION

Angiosarcomas of the scalp are aggressive invasive tumors that often mimic benign painless skin lesions as hematomas or “simple” hemangiomas. The underestimated aggressive course of such tumors usually means that they are not infrequently diagnosed too late, with inadequate treatment in the initial presentation. Several studies have reported 5-year survival rates of 10% to 20%¹.

Dermoscopic rainbow pattern has been described mainly in Kaposi Sarcoma, and it seems to be caused by the optical phenomenon known as diffraction^{2,3}. Close and small vessels mimic a diffraction device, causing white light to split into different wavelengths (thus producing a ‘rainbow effect’). Other lesions with important angiogenetic activities can further show DRP. They have been reported in scars, atypical fibroxanthoma, angiokeratoma and basal cell carcinoma, but have not been previously described in CAS⁴⁻¹¹.

We propose that DRP, as an adjunct to clinical examination, possibly enhances accuracy in the early diagnosis of CAS.

Conflict of Interest: None declared.

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