

Melanoma in a Psoriatic Plaque

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This is the first reported case of a melanoma in a psoriatic plaque. The clinical, dermoscopic, and histologic features of this case are detailed. A review of the risk of melanoma among patients treated with psoralen-ultraviolet A is presented.

This report details the case of a 45-year-old man diagnosed with melanoma within a psoriatic plaque. The patient had no history of psoralen-ultraviolet A (PUVA) treatment. This is the first such reported case.

Case Report

A 45-year-old man was referred for evaluation of his long history of psoriasis for which he had never sought treatment. He noted that the psoriasis had worsened over the past several months. He also reported having a “mole” on his left upper back since birth. Over the past 2 years, he noticed that the mole had slowly increased in size, and over the past few weeks, it had gradually darkened. The patient believed this was due to the fact that he had banged his shoulder and traumatized the lesion. He had no personal history of skin cancer. His father had a non-melanoma skin cancer, however, there was no family history of melanoma.

Physical examination revealed extensive psoriatic plaques on his chest, arms, and legs. On his left upper back, he had a psoriatic plaque, which measured approximately 4 cm in diameter. In the center of the plaque, there was a red, blue-black area with a fine superimposed scaling on the surface. The rest of the plaque was slightly raised, red, and scaly (Figure 1).

Skin surface microscopy showed a heterogeneous pattern. The area was highly asymmetric with sharp borders and contained the colors light brown, dark



FIGURE 1. A psoriatic plaque on the left, upper back. In the center, there was a fine scaling on the surface.

brown, black, red, white, and blue. Dots and globules were scattered haphazardly. In addition, tortuous blood vessels were present. A blue-white veil and areas of scar-like depigmentation were also noted (Figure 2).

A biopsy revealed a melanocytic neoplasm in both the epidermis and the dermis. The neoplasm was asymmetrical and poorly circumscribed. The epidermal component had a pagetoid pattern. The dermal component was comprised of sheets of atypical melanocytes. The diagnosis was malignant melanoma measuring 1.32 mm (Figure 3).

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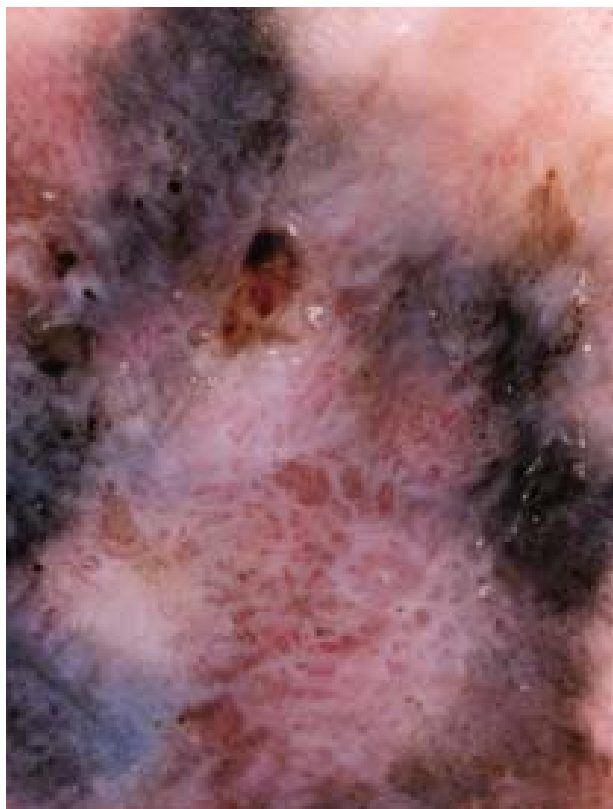


FIGURE 2. Skin surface microscopy demonstrated a heterogeneous pattern. There were sharp borders and many colors. Dots and globules were scattered haphazardly. A blue-white veil and areas of scar-like depigmentation were noted.

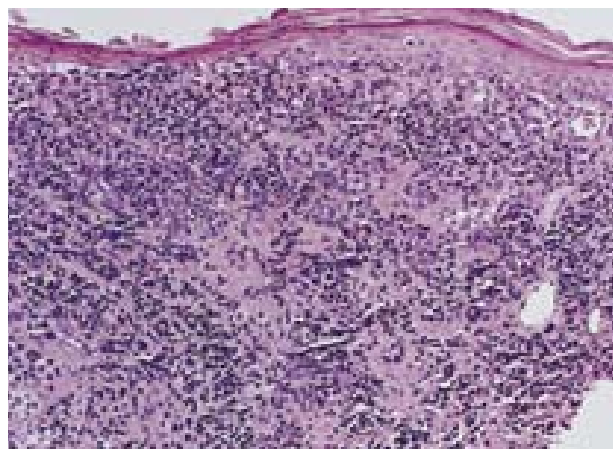


FIGURE 3. Histologically, the melanocytic neoplasm was asymmetrical and poorly circumscribed. The dermal component was comprised of sheets of atypical melanocytes. The epidermal component had a pagetoid pattern. The diagnosis was malignant melanoma.

Comments

It has been a concern that psoralen-UVA (PUVA), which is used to treat psoriasis, also increases the risk

of melanoma. A multi-center study in the United States found a rise in melanoma incidence among patients who had received the highest doses of PUVA phototherapy and had the longest follow-up.¹ Other studies, however, have not shown a correlation between melanoma and PUVA treatment, but the time of follow-up in these studies may have been too short.²⁻⁸ A 10-year study in Denmark of PUVA-treated patients revealed a significantly higher incidence of melanomas in women (7, compared to the expected 2.2), but the expected number in men (2). Although the relationship between PUVA treatments and melanoma is controversial, there does not seem to be an increased incidence of melanoma in psoriasis patients who do not have a history of excess exposure to the sun.⁹

In this case, the patient did not undergo PUVA treatment for his psoriasis. This seems to be the first report of melanoma arising within a psoriatic plaque. Although this finding may be incidental, other physicians may have observed similar occurrences without reporting them.

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