

Melanoma of the Scalp: An Underdiagnosed Malignancy?

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We report a case of scalp melanoma that was found incidentally after the patient complained of pruritic lesions on his scalp. The melanoma was 13 mm in diameter and had a Breslow thickness of 0.25 mm. The incidence of melanoma has been on the rise, with a high incidence occurring in men on the head, neck, and trunk. This case stresses the need to thoroughly examine the entire scalp when performing total body screening examinations for skin cancer.

Melanoma of the scalp is a rare cutaneous malignancy known to be more aggressive than melanoma on other areas of the head and scalp. We describe a case of scalp melanoma found on a patient who presented for evaluation of a pruritic scalp. This incidental finding of a large scalp lesion in a patient with a full head of dark hair emphasizes the need to check the entire scalp when performing a skin cancer screening.

Case Report

A 65-year-old white man presented to our clinic for evaluation of several pruritic lesions on his crown that had persisted for several months. He had a medical history significant for asthma, hay fever, hypertension, and benign prostatic hypertrophy. He also had a significant history of skin cancer, including a 0.6-mm melanoma on his left dorsal wrist in 1990, and, subsequently, a squamous cell carcinoma on his left cheek and 4 basal cell carcinomas on his forehead, left ankle, left cheek, and mid chest. The patient had no family history of melanoma. After his scheduled skin cancer examination in late 1997, the patient failed to return for additional skin cancer screening.

Examination of the scalp revealed pruritic lesions consisting of 3 excoriated papules that had honey-colored crusts. They were located on the left frontal and parietal scalp. Further examination of the scalp revealed a 13-mm black, white, red, and brown macule with irregular borders on the patient's left occiput (Figures 1 and 2). Using epiluminescence microscopy, we discovered the lesion to be asymmetrical, with black dots, blue-gray areas, radial streaming, and an abrupt change of the pigment net at the periphery. The patient had no cervical, axillary, or inguinal adenopathy; hepatosplenomegaly was not detected. The remainder of the skin examination revealed multiple dark brown macules and papules diffusely scattered over the face, trunk, buttocks, and extremities, some with atypical features.

The patient was diagnosed with impetigo of the scalp and mupirocin ointment was prescribed. The lesion on the left occipital scalp was clinically consistent with melanoma. The following day, an excisional biopsy was performed with a 1-mm circumferential margin. Histopathology results revealed a Clark level 2 melanoma with a Breslow thickness of 0.25 mm; surgical margins of the specimen were free of tumor. Appropriate reexcision to obtain 1-cm margins was performed.

Comment

Since 1960, melanoma has increased 3% to 10% per year in most white populations.¹ The incidence of melanoma from 1973 to 1994 rose from 6.4 to 14.0 per 100,000 people, while the mortality rate rose from 1.8 to 2.5 per 100,000 people.² This rising occurrence of melanoma is speculated to be a result of increased exposure to UV radiation, as well as better public awareness and more frequent screening.² These latter 2 factors are thought to be the reasons why the increase in incidence has far surpassed the increase in mortality.³ In 1994, the greatest incidence in men was on the trunk (6.7 per 100,000) and head and neck (4.1 per 100,000). In women, the highest incidence was on the lower limbs (3.7 per 100,000) and the trunk

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Figure 1. Patient's scalp on presentation.

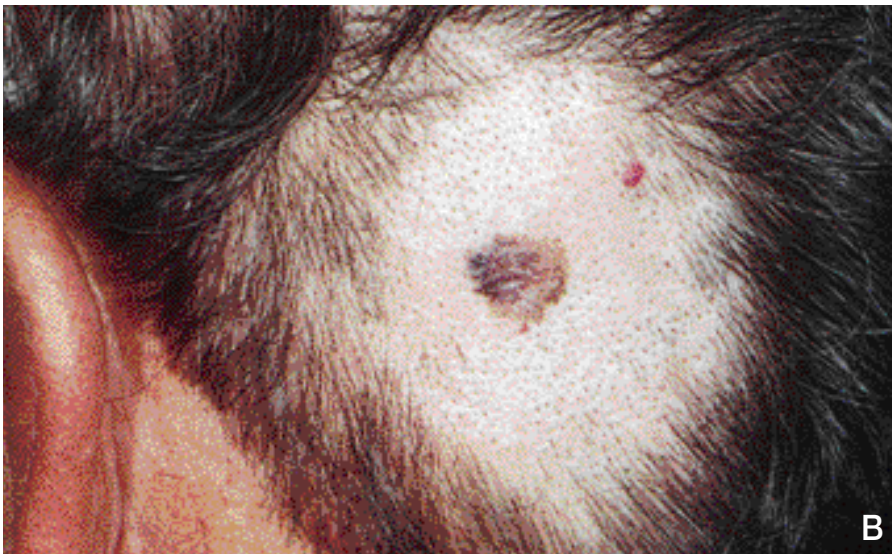
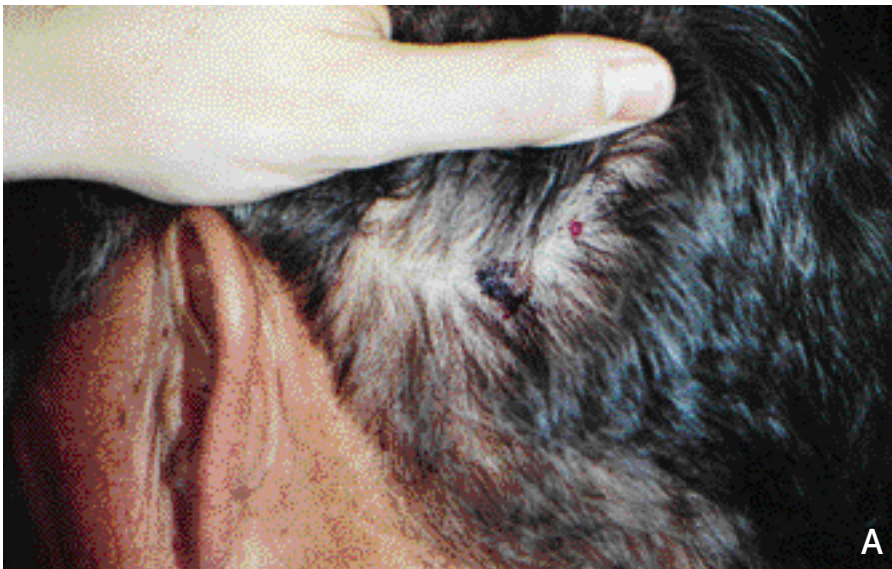


Figure 2. Scalp lesion clinically consistent with melanoma (A and B).

(3.0 per 100,000).² The lifetime risk of a person from the United States developing melanoma had reached 1 in 87 in 1996. By 2000, the estimated risk had increased to 1 in 75.⁴

The head and neck region harbors approximately 25% of all cases of primary malignant melanoma.⁵ Most epidemiologic studies include scalp lesions as part of the head and neck. Scalp melanoma is rare, accounting for 2% to 5% of all cutaneous melanomas.^{6,7} Scalp melanoma is primarily a disease of men, who account for 75% of these lesions.⁸

Melanoma of the scalp is a biologically aggressive disease with a worse prognosis and higher recurrence rate than melanomas found in other anatomic locations.⁹ The true anatomic scalp extends to the supraorbital ridge anteriorly, to the superior nuchal line posteriorly, and to the mastoid and zygoma laterally. Patients with melanomas on hair-bearing scalps have a worse 5-year survival rate than those with melanomas on non-hair-bearing scalps. The poor prognosis of melanoma of the scalp may be explained by its complex lymphatic drainage and rich vascular supply, which predisposes it to increased risk of dissemination.¹⁰

Due to the aggressiveness of scalp melanoma, the need for early diagnosis through screening is apparent. Controversy on the topic of melanoma screening exists: Who should be screened? Who should perform the screening? Should screening be performed at all?¹¹ The 1989 US Preventive Services Task Force recommended screening only for individuals at high risk (defined as people with a family history of melanoma, light skin, excessive sun exposure, higher than average numbers of nevi, and dysplastic nevi).^{9,11,12} However, in 1995, the American Academy of Dermatology, the American Cancer Society, and the National Institutes of Health Consensus Development Panel on Diagnosis and Treatment of Early Melanoma recommended screening of the general population at yearly intervals and self-screening by high-risk individuals at monthly intervals.^{9,11}

Melanoma of the scalp is a rare malignancy, and reported numbers indicate it is predominantly a disease of men. We question whether melanoma is as rare on the scalp as reported or whether it is underdiagnosed. Is it a disease of men because scalp melanomas are more easily found in men? Men tend to have shorter hair and may have hair loss or thinning that may facilitate identifying a melanoma on the scalp. Women tend to have longer hair and more elaborate hairstyles.

The consensus we formed through questioning colleagues is that not all dermatologists routinely make an effort to view the scalp during general skin screening examinations. We believe the best way to conduct a scalp examination is to ask patients to avoid using any hairstyling products on the day of the visit. We then use a blow dryer to elevate the hair, thereby enhancing visualization of the scalp. Because some patients object to having their hair blown around, we have found it helpful to show patients pictures such as those in this article. This helps to convince them that although they may have thick hair and their scalp may not be receiving much sun, a melanoma may develop on their scalp. We also suggest that patients have their hairdressers monitor their scalp and point out anything unusual. We offer these screening pearls as a way to enhance early diagnosis and treatment of an aggressive disease.

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