

[ C A S E S E R I E S ]

# Three Cases of Scalp Melanomas Discovered by Hairdressers

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## ABSTRACT

Studies have demonstrated that patients are able to identify melanoma in many cases. A limitation to using self-examination as a means of melanoma detection is the fact that in certain areas of the body, such as the scalp, self-examination is difficult to adequately perform. This may be one of the reasons why scalp melanomas carry a worse prognosis than melanomas detected in other areas of the body. The authors present three cases of scalp melanomas that were detected by the patient's hairdressers and suggest that with minimal training, hairdressers could become a valuable resource in assisting dermatologists in the early diagnosis of scalp melanoma.

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Melanoma has high cure rates when diagnosed early, but poor survival when found at an advanced stage. Most melanomas are visible on the skin, which allows for self-detection. In fact, in one report based on a population-based survey, 53 percent of melanomas were detected by patients, 26 percent by physicians, 17 percent by family, and three percent by others.<sup>1</sup> Further, self-examination leads to decreased melanoma thickness in comparison to patients who do not perform self-examinations, with variable sensitivity data ranging from 25 to 93 percent, but high specificity of 83 to 97 percent.<sup>2</sup> Despite the benefits of self-examination in early melanoma detection, this is often very difficult on the scalp. Most patients visit a hairdresser more frequently than they see a dermatologist, so there may be a role for training hairdressers in melanoma detection as they are likely to see the entire scalp in the course of their work. The authors present three cases of scalp melanomas in which the patients presented to outpatient clinics at the University of Pittsburgh Department of Dermatology after their hairdressers initially detected the melanomas.<sup>1–4</sup>

## CASE 1

A 47-year-old woman with Fitzpatrick skin phototype I

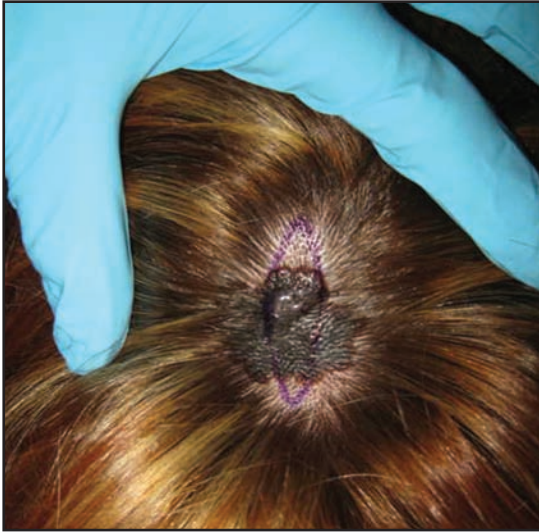
was advised of a scalp lesion by her hairdresser, which prompted dermatologic evaluation. She had been advised by her hairdresser multiple times to have this lesion evaluated; however, she delayed her visit for several months due to lack of health insurance. She was otherwise healthy with no prior personal or family history of skin cancer. On physical exam, a 3x3cm black plaque on her vertex scalp was noted and incisional biopsy was performed (Figure 1). Pathology demonstrated both superficial spreading and nevoid invasive melanoma, 4.58mm Breslow thickness, Clark's level V. The melanoma was excised with clear margins, and subsequent sentinel lymph node biopsy was negative, as was a combined positron emission tomography/computed tomography (PET/CT) scan. The patient was staged T4bN0M0 and received a year of interferon. Two years after initial presentation, she presented with widespread metastatic disease. She received a course of vemurafinib, but ultimately died of her disease.

## CASE 2

A 54-year-old man with Fitzpatrick skin phototype I presented for dermatologic evaluation after his hairdresser noted a lesion on his scalp. He was otherwise healthy with

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**Figure 1.** Clinical photograph of the patient in Case 1. The scalp photograph was taken immediately prior to biopsy of the dark brown nodule, which measured 3x3cm.



**Figure 2.** Clinical image of the patient in Case 3, showing a round 3cm nodule immediately prior to biopsy.

no personal or family history of skin cancer. On physical examination, a round, 2cm pigmented patch on his parietal scalp was noted. Biopsy demonstrated melanoma *in situ*. The melanoma was excised by Mohs micrographic surgery, and the patient currently has no evidence of recurrence.

### CASE 3

A 91-year-old woman with Fitzpatrick skin phototype I with a lesion on her scalp since childhood was informed by her hairdresser that the lesion had changed significantly since her previous appointment four months prior. She had a history of hypertension, transient ischemic attack, and osteoarthritis, but no personal or family history of skin cancer. On examination, a 3cm, round nodule with surrounding dark brown papules was detected (Figure 2). An excisional biopsy showed invasive melanoma, nodular type, 9mm Breslow depth, Clark's level V. Staging workup revealed extensive local disease, but no evidence of distant metastases. Due to her age and medical status, the patient refused additional treatment.

### DISCUSSION

Recommendations for skin cancer prevention and early detection include counseling on ultraviolet (UV) avoidance, encouraging self-examinations, and advising regular dermatological examinations. Given the questionable cost-effectiveness of regular dermatological visits for the general population,<sup>3</sup> efforts to improve utilization of resources should focus on improved counseling regarding self-examination and UV exposure. Performing a self-examination of the scalp can be difficult, and melanomas in this area can remain undetected by the patient. Unsurprisingly, scalp and neck melanomas present with more advanced disease with a worse prognosis

compared to facial melanomas.<sup>4,5</sup> In addition to counseling on self-examination, the authors now recommend that patients ask their hairdressers if there are any unusual scalp lesions. While the authors do not expect hairdressers to diagnose subtle malignancies, they likely have the ability to note lesions that warrant a dermatological evaluation, just as patients themselves are able to identify concerning lesions in many cases. Furthermore, training laypeople in detecting features of melanoma has been shown to be effective,<sup>6</sup> and interventions of this type could be targeted to hairdressers. In fact, studies have shown that roughly 50 percent of hairdressers are interested in learning more about skin cancer.<sup>7</sup> Importantly, increased comfort with providing health information is associated with increased frequency of hairdresser evaluation for skin lesions.<sup>7</sup> Therefore, training hairdressers to improve their recognition of skin cancers should also include instruction on how to relay this information to customers.

Recently, it has been demonstrated that showing photographs of pigmented lesions leads to better diagnostic accuracy in training programs for the public than teaching ABCDEs of melanoma (asymmetry, border irregularity, color, diameter, evolution).<sup>8</sup> The authors are hoping to develop a skin cancer recognition teaching program for individuals currently in school to become hairdressers. It will include a brief review of the ABCDEs followed by a presentation with images of benign and malignant lesions. Additional research will be needed to determine the cost-effectiveness of this approach, particularly whether the cost of training hairdressers and referrals for benign lesions is offset by earlier detection of malignant lesions.

Although the authors are not aware of any current or past lawsuits against hair care professionals for incorrectly stating a malignant lesion was normal, it is possible that

this will be a concern for some hairdressers. The authors will recommend in their training program that hairdressers advise clients to seek dermatological evaluation for concerning lesions, but not to give diagnoses or reassurances that lesions are normal. Hairdressers should emphasize that they want their client to be aware of a lesion that may be concerning and are not offering trained medical advice.

The ability of hairdressers to recognize concerning lesions has not been formally evaluated; however, this small case series demonstrates that hairdressers can play an important role in melanoma detection. By encouraging awareness in patients and hairdressers, earlier detection and improved outcomes for scalp melanomas may be achieved.

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