

RESIDENT ROUNDS: PART III

Plaque on Left Areola of an African-American Woman

Lindsey Goddard BBA,^a Todd Mollet MD,^b and Travis Blalock MD^b

^aUniversity of Oklahoma College of Medicine, Oklahoma City, OK

^bUniversity of Oklahoma Department of Dermatology, Oklahoma City, OK

ABSTRACT

Basal cell carcinoma (BCC) is the most common cutaneous malignancy, and usually presents on sun-exposed areas of the skin. Unsurprisingly, BCC appearing on the nipple-areola complex (NAC) is rare, and even more so in females and dark skin types. BCC of the NAC is more aggressive than other locations, thus diagnosis and treatment are imperative. We present a case of an African American female with a lichenified, scaly plaque on her left areola that was unresponsive to clobetasol. After biopsy, the lesion was identified as pigmented BCC of the NAC. The patient denied surgical treatment and was treated with topical 5-fluorouracil. The BCC initially resolved but recurred at 22 month follow-up. We plan to treat the recurrence with Mohs surgery.

CASE REPORT

A 66-year-old African-American female presented with a two centimeter lichenified, scaly, and excoriated plaque on the left areola (Figure 1). The asymptomatic plaque had been present for less than one year. Palpation revealed minimal substance without other associated physical findings. It failed to improve after two months of treatment with clobetasol 0.05% ointment. The patient reported a negative breast ultrasound and mammogram in the recent past. Biopsy revealed pigmented basal cell carcinoma of the superficial subtype with overlying epidermal excoriation (Figures 2-3).

Basal cell carcinoma (BCC) is the most common skin malignancy with numerous intrinsic and extrinsic factors that contribute to its pathophysiology.¹ A major etiologic factor in BCC is believed to be ultraviolet radiation, correlating with the fact that BCC frequently presents in sun-exposed areas such as the head and neck.²

We present a case of BCC associated with the nipple areola complex (NAC) in an African-American female. BCC of the NAC is rare, with 33 cases presented in the literature.³ Only 13 of these cases are in female patients, likely due to decreased truncal sun exposure in females.^{3,4} BCC of the NAC is even rarer in dark skin types. In published cases of BCC of the NAC in females, the demographics and photographs suggest Caucasian patients. However, some articles do not indicate demographic data for their patients. Thus, to our knowledge,

FIGURE 1. A scaly and excoriated plaque on the left areola.



this is the first case of BCC of the NAC reported specifically in an African-American female.

Our patient used 5-fluorouracil twice daily for six weeks after declining imiquimod or any surgical procedure. The BCC initially resolved clinically and was followed with regular skin exams.

FIGURE 2. Superficial, pigmented basaloid cells with peripheral palisading. H&E, original magnification x10.

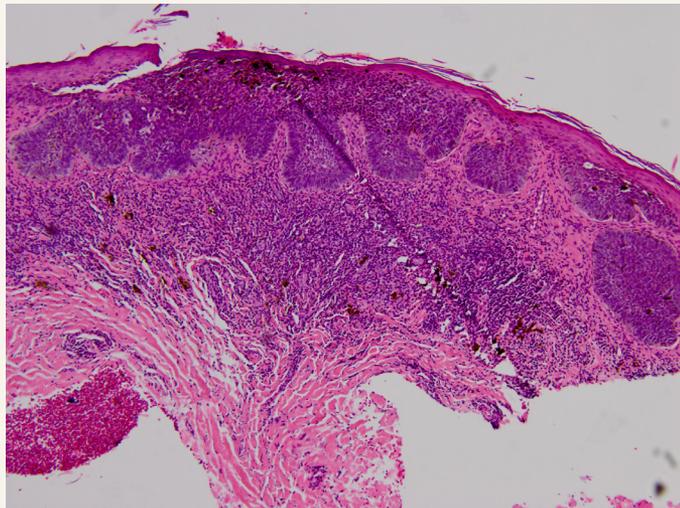
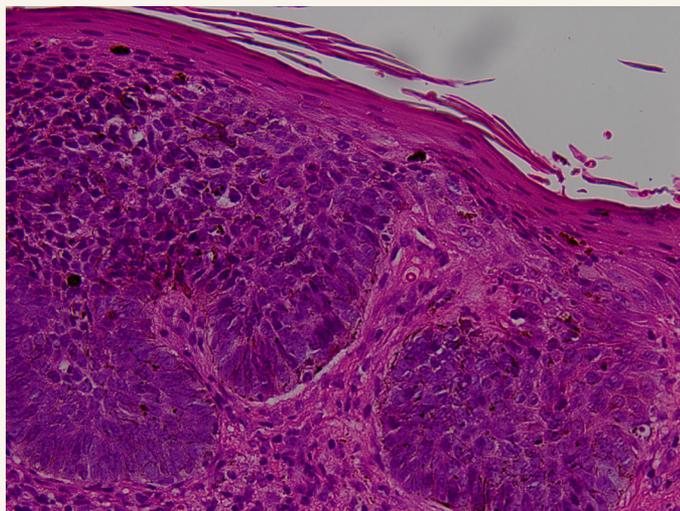


FIGURE 3. Superficial, pigmented basaloid cells with peripheral palisading and retraction artifact. H&E, original magnification x40.



At 22 month follow-up the BCC recurred clinically and histologically. We plan to treat the recurrence with Mohs surgery.

BCC of the NAC is considered an aggressive form of BCC.⁵ In comparison to the overall BCC metastatic rate of less than 0.55%, Ferguson et al. sites a 9.1% metastatic rate in BCC of the NAC.^{2,4} Although BCC of the NAC is rare, its incidence is increasing and the diagnosis harbors a greater risk for morbidity and mortality.⁵ Consequently, BCC should be included in the differential for an undiagnosed lesion on the NAC.

DISCLOSURES

The authors have not disclosed any relevant conflicts.

REFERENCES

1. Kwasniak LA, Garcia-Zuazaga J. Basal cell carcinoma: evidence-based medicine and review of treatment modalities. *Int J Dermatol.* 2011;50(6):645–658.

2. Wong CS, Strange RC, Lear JT. Basal cell carcinoma. *BMJ.* 2003;327:794–798.
3. Ferguson MS, Nouraei SA, Davies BJ, McLean NR. Basal cell carcinoma of the nipple-areola complex. *Dermatol Surg.* 2009;35:1771–1775.
4. Sinha A, Langtry JAA. Secondary intention healing following mohs micrographic surgery for basal cell carcinoma of the nipple and areola. *Acta Dermato-Venereologica.* 2011;91(1):78–79.
5. Oramin Y, Demirkesen C, Akkaya AD, Koyuncu E. Basal Cell Carcinoma of the Nipple: An Uncommon but Ever-Increasing Location. *Case Rep Dermatol Med.* 2011; 2011:3 pages. Article ID 818291.

AUTHOR CORRESPONDENCE

Lindsey Goddard BBA

E-mail:..... Lindsey-Goddard@ouhsc.edu