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A new papule and “age spots”

An 87-year-old woman came to the office for evaluation of a lesion above her lip (**FIGURE 1**) that had “been there a while” and had intermittently been bleeding and crusting for the last few months. On examination, there was a distinct, firm (but not hard) papule with some adjacent erythema. No distinct telangiectasias, ulceration, blood, or crusts were visible with handheld magnification or upon dermoscopy. (See “The digital camera: Another stethoscope for the skin,” page 282.)

An evaluation of the remainder of the woman’s face revealed 3 more lesions that the patient termed “age spots.” They had been present for quite some time, had not had any notable rapid change, and had not caused her (or a physician in the family) any concern. These “age spots” are depicted in **FIGURE 2A** (left temple), **FIGURE 2B** (forehead), and **FIGURE 2C** (left cheek). Digital photo-

graphs were taken through the dermatoscope of the temple, forehead, and cheek lesions (**FIGURES 3A, B, AND C**).

The 4 lesions are easily identified as worrisome, given that they were pigmented and asymmetric, with a variety of bizarre colors.

The lip. In particular, the lesion above the upper lip (**FIGURE 1**) clinically presented a wide range of possibilities, including basal cell carcinoma (BCC), milial cyst, nevus, trichoepithelioma, fibrous papule, or any of a variety of adnexal skin neoplasms. Knowing that the lesion was relatively new and had bled and crusted was sufficient to warrant biopsy.

The temple. Dermoscopically, the temple lesion (**FIGURE 3A**) had blue and brown ovoid structures (also called “blebs” or “blobs”), white areas within the lesion (whiter than normal surrounding skin), a high degree of asymmetry, and distinct telangiectatic vessels. The pink color on dermoscopy was also a cause for concern. The blue ovoid structures plus telangiectasias were highly suggestive of basal cell carcinoma.

The forehead. Dermoscopy of the forehead lesion (**FIGURE 3B**) showed leaf-like structures (12 o’clock) and maple-leaf structures (6 o’clock). These alone were highly suggestive of pigmented basal cell carcinoma—but in the absence of distinct telangiectasias, we decided to do a deep incisional biopsy rather than risk potentially “shaving a melanoma.” (If a melanoma is biopsied via a shave technique, the ability to histologically measure its thickness and to stage it according to

FAST TRACK

We did a deep incisional biopsy rather than risk “shaving a melanoma”

FIGURE 1

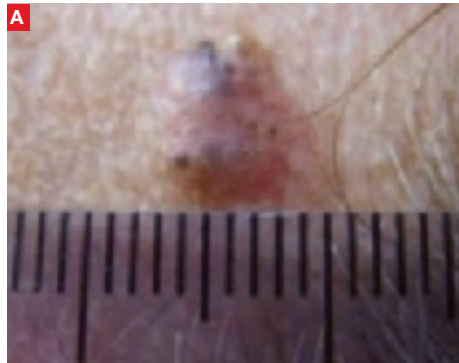
Lesion above lip



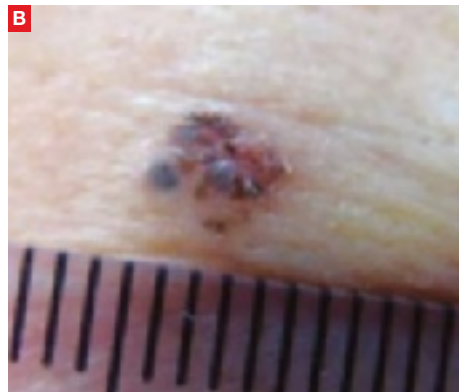
This lesion, which prompted the visit, had bled and crusted repeatedly in the past.

FIGURE 2

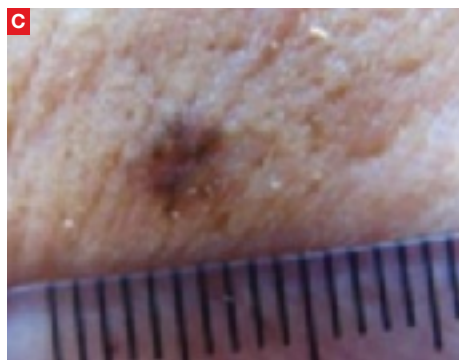
Digital photos



Temple: Asymptomatic papular “age spot” noted during examination of left temple near anterior to hairline.



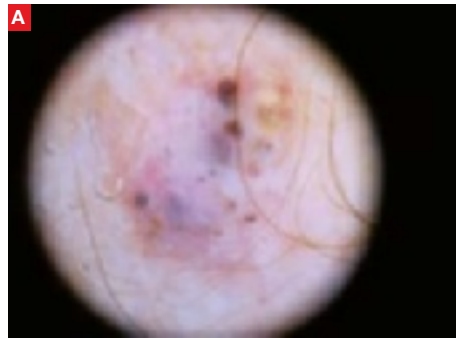
Forehead: Incidentally noted, asymptomatic, papular “age spot” on left forehead.



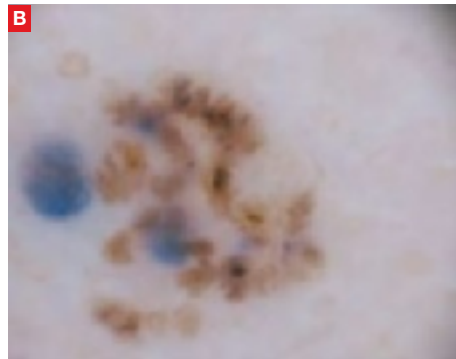
Cheek: Incidentally noted, asymptomatic predominantly macular “age spot” on right cheek.

FIGURE 3

Dermoscopy images



Temple: Note telangiectatic vessels, blue and brown ovoid structures, pink and white areas, and hair protruding from the lesion at about 6 and 8 o’clock.



Forehead: Note leaf-like structure at 12 o’clock and above the periphery of the lesion at 6 o’clock. Also note blue and brown ovoid structures of varying sizes.



Cheek: “Spoke-like” structure at 6 o’clock. Note the extensive variations in color and the asymmetry.

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The lesions were worrisome: they were pigmented and asymmetric with a variety of bizarre colors

Clark and Breslow staging is lost.)

The cheek. Dermoscopically, the lesion on the cheek (**FIGURE 3C**) also had no obvious telangiectasias but had a “spoke-wheel” structure (6 o’clock) highly suggestive of basal cell carcinoma.

All the lesions—except for the temple lesion, which was biopsied via a shave

technique—were biopsied via generous incisional ellipses.

■ **What is your diagnosis?**

■ **How would you treat?**

CONTINUED

I **Diagnosis:** **Basal cell carcinoma**

Histology confirmed that all 4 lesions were basal cell carcinomas, the most common type of skin malignancy. The temple lesion in **FIGURES 2A AND 3A** and the forehead lesion in **FIGURES 2B AND 3B** were histologically both pigmented nodular basal cell carcinomas, clinically characterized as pearly papules with pigment. **FIGURE 3A** also demonstrates telangiectasia.

Differential diagnosis: **Innocent papule or carcinoma?**

The lip lesion, the presenting “symptom,” did not have evident bleeding and crusting on visual or dermoscopic examination. In the absence of a complete history, it could have been “passed off” as an innocent papule, such as a molluscum (though not common in the elderly) or a milial or epidermoid cyst.

Remember that basal cell carcinoma can be subtle. These lesions were missed by a patient and her family—which included a physician within the household—and grew slowly enough that the patient felt they were simply “age spots.” We have seen basal cell carcinomas that patients have indicated have not changed in years—have not bled, ulcerated, or crusted, while symptomatic lesions have been the least impressive, clinically, at the time of the exam. Always maintain a high index of suspicion.

The clinical types of basal cell carcinoma and their dermoscopic findings are summarized in the **TABLE**.

Tips for making an accurate diagnosis

Basal cell carcinoma and melanoma can mimic other lesions, so keep these tips in mind:

- **The “company” a lesion keeps sometimes can help in diagnosis.** A patient may have a group of small “pearly papules,” only one of which may show the typical umbilication that allows a

confident diagnosis of molluscum contagiosum, for example. Here, 3 lesions had similar dermoscopic structures, only one of which exhibited telangiectasia. A fourth lesion lacked diagnostic characteristics. The best guess, based on the sum total appearance of all of these lesions, is that all are basal cell carcinomas because of the “company they are keeping”—but note that this is also potentially a trap: missing the single basal cell carcinoma lesion among a field of sebaceous hyperplasia, for instance.

- **Don’t focus exclusively on the symptomatic lesion.** Do a survey of the general region. For ultraviolet-associated lesions (including basal cell carcinoma), it’s preferable to perform, at minimum, a survey of “high-radiation” areas (face, exposed scalp, neck, ears, and dorsal hands and forearms) for other ultraviolet “damage” (eg, actinic keratoses).

- **Be meticulous when examining patients’ backs.** Patients may not spot lesions on their backs—especially if they are older and have poor vision.

- **Avoid thinking in terms of absolutes like “never” and “always.”** The clinical axiom that basal cell carcinomas “never” have hair growing from them is disproved by **FIGURE 3A**, which clinically, dermoscopically, and histologically is a basal cell carcinoma lesion. Some of the hair seen here is overlying, loose scalp hair “caught” in the dermoscopic field because of the location of this lesion on the temple adjacent to the hairline. But there are also very distinct hairs seen coming out from areas (at about 6 and 8 o’clock) that are clearly part of the lesion, especially on its periphery.

When in doubt, biopsy

When in doubt about which technique to perform, do an incisional biopsy—preferably excisional, but at least a good sampling of the most worrisome area(s).

Suspected basal cell carcinoma, when the examiner is confident the lesion is

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Some basal cell carcinomas never display typical ulceration, bleeding, and crusting

TABLE

Clinical types of basal cell carcinoma and dermoscopic findings

CLINICAL TYPE	DERMOSCOPIC FINDINGS	NOTES
<p>Nodular (including noduloulcerative and cystic)</p> <p>▼</p>  <p><i>“Wart” on a supraclavicular area—note pearly translucency of nodular basal cell carcinoma.</i></p>	<p>Arborizing (tree-like branching) telangiectasias ▼</p>  <p><i>Dermoscopy of lesion at left, clearly showing arborized telangiectatic vessels.</i></p>	<ul style="list-style-type: none"> • Most common type • Small lesions easily missed • Can be difficult to differentiate from irritated seborrheic keratosis, sebaceous hyperplasia, and numerous other papular lesions • If pigmented, look for findings of pigmented basal cell carcinoma
<p>Pigmented</p>	<ul style="list-style-type: none"> • Blue-gray ovoid structures (sometimes called “blebs” or “blobs”) (55/97*) • Arborizing telangiectasias (52/77*) • Multiple blue-gray globules (smaller than ovoid structures and larger than “dots”) (27/87*) • Leaf-like or maple leaf-like areas (17/100*) • Spoke-wheel structures (10/100*) 	<ul style="list-style-type: none"> • Contain melanin in all or part of lesion • Dermoscopy may identify highly suggestive features to aid diagnosis • May mimic melanoma
<p>Sclerosing, cicatricial, or morpheaform</p>	<p>Arborizing telangiectasias</p>	<ul style="list-style-type: none"> • May appear innocuous • Subclinical extension may be extensive; requires Mohs micrographic surgery or wide surgical excision
<p>Superficial</p>	<p>Arborizing telangiectasias</p>	<ul style="list-style-type: none"> • Least aggressive type • May resemble eczematoid diseases (eczema, psoriasis, extramammary Paget’s disease, Bowen’s disease)

***Sensitivity/specificity.** Sensitivity is the percentage of basal cell carcinomas that possess the feature. Specificity listed is the percentage of melanomas that lack the feature.¹ All discussion of dermoscopic diagnosis of basal cell carcinoma assumes absence of a melanocytic pigment network, the presence of which suggests a melanocytic lesion such as a nevus, lentigo, or melanoma.

Note: The primary use of dermoscopy is the evaluation of pigmented lesions. Thus, except to aid in visualization of telangiectasias and ulceration, there are no characteristic dermoscopic findings in other types of basal cell carcinoma. Telangiectasias may not be visualized if the dermatoscope is applied with sufficient pressure to blanch them. Basal cell carcinomas may exhibit no definite or suggestive findings by dermoscopy, as was the case with the lip papule on this patient.

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The axiom that basal cell carcinomas never have hair growing from them is disproved by this patient

The digital camera: Another “stethoscope for the skin”

While dermatoscopes are the true “skin stethoscopes,” most primary care physicians do not have them. Many, however, do have a digital camera. A digital camera with a macro-focus feature can be viewed as another stethoscope for the skin. Pictures allow great magnification on the computer screen, presenting color and detail that may be missed on routine clinical inspection. They allow an unhurried “self-second opinion”; you can evaluate lesions with no motion, breathing, or other distractions, following the office visit.

Digital images may also be important for:

- **the patient**, who may not be able to see the lesion, because it’s on his back, buttocks, or behind his ears. Consider, too, the older patient who may not be able to see the seborrhea in his eyebrow with his bifocals, but he can see it on the camera’s monitor.

- **the medical record** (printed or electronically stored).

- **the pathologist**—when forwarded with the pathology specimen. The images can be helpful in developing a clinical correlation to include in the pathology report.

- **the insurance carrier**, as indisputable documentation for the clinical rationale for biopsying 4 lesions on 1 visit in the event of a “Dear Bad Doctor” Medicare letter. In fact, if not for the indisputable photographic record, one author (GNF) would have been extremely hesitant to perform 4 biopsies on a Medicare patient in 1 session.

- **light and magnification** where the 2 may be in short supply, such as a poorly mobile patient in a hospital bed. A camera with flash, auto-focus, and macro mode may allow access to otherwise inaccessible lesions.

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One author would have been hesitant to perform 4 biopsies on a Medicare patient in 1 session

not a melanoma, can be further evaluated by superficial shave biopsy. Potential melanoma generally should not be evaluated by the shave technique.

Options for therapy

Therapy options for basal cell carcinoma vary based on location (high-risk vs low-risk locations), histologic type of basal cell carcinoma, patient preference, and local availability of therapy. The primary therapies for basal cell carcinoma are surgical excision (including Mohs surgery) and curettage, often combined with electrodesiccation. 5-fluorouracil (5-FU) should not be used because it can treat the surface tumor while deeper tumor proliferates.³ Imiquimod is not approved for facial lesions or nodular basal cell carcinomas. ■

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