Photo Quiz

A Shiny Red Papule in an Older Person

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A collection of Photo Quizzes published in *AFP* is available at http://www.aafp.org/afp/photoquiz.



Figure 1.

A 66-year-old man presented with a solitary shiny red papule on his right lower leg (Figure 1) that had been present for two years. There was a slight increase in size, but it was otherwise asymptomatic. Dermoscopy was performed (Figure 2). A shave biopsy showed focal psoriasiform dermatitis.

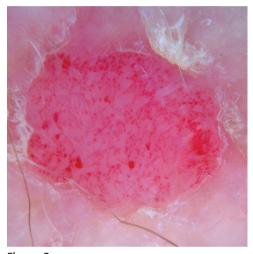


Figure 2.

Question

Based on the patient's history and physical examination findings, which one of the following is the most likely diagnosis?

- ☐ A. Amelanotic melanoma.
- ☐ B. Bowen disease.
- ☐ C. Clear cell acanthoma.
- ☐ D. Guttate psoriasis.
- ☐ E. Pyogenic granuloma.

See the following page for discussion.

Photo Quiz

Discussion

The correct answer is C: clear cell acanthoma. Clear cell acanthoma, also known as Degos acanthoma, is a benign epidermal tumor of unknown etiology. It typically presents as a solitary, pink to brown, glistening, round papule or plaque on the leg of an older person. Is is slow growing and usually smaller than 2 cm. The margin is sharply demarcated, often with a thin rim of scale. Dermoscopy shows a smooth and stippled surface with pinpoint vessels appearing as tiny red dots. A highly specific feature is the linear arrangement of these vessels with a "string of pearls" appearance.

On histology, clear cell acanthoma appears as psoriasiform epidermal hyperplasia, and a sharp demarcation from the adjacent normal epidermis. The glycogen content of the clear cells is highlighted with magenta on a periodic acid—Schiff stain, which is distinct from the surrounding normal epidermis that stains uniformly light blue.

Amelanotic melanoma is a malignant skin tumor that can present as a solitary featureless, pink papule or nodule, without the typical brown to black color of melanoma. Dermoscopic features include a blue-white veil (irregular area of confluent blue pig-

ment with a ground-glass haze), which is caused by hyperkeratinization; a scar-like or irregularly shaped depigmentation; blue-gray dots; irregular brown dots or globules; multiple shades of color; and prominent central vessels.⁷

Bowen disease, or squamous cell carcinoma in situ of the skin, commonly presents as an erythematous scaling patch or a slightly raised plaque on sun-exposed skin of an older person. It may develop de novo or within a preexisting actinic keratosis. Dermoscopy shows dotted or linearly coiled vessels arranged in clusters, possibly with a white halo around the vessels and surface scales. 5

Guttate psoriasis presents as multiple small, discrete, scaly papules and plaques on the trunk. It is common in children and may follow a severe upper respiratory tract infection.¹ Dermoscopy of the lesion may show homogeneous dotted vessels.⁸

Pyogenic granuloma is a rapidly growing, friable, vascular papule or polyp of the skin or mucosa most common in children and young adults. It may be associated with trauma or irritation.¹ On dermoscopy, red homogeneous areas are surrounded by a white collarette and intersected by white "rail lines."⁵

Summary Table		
Condition	Characteristics	Dermoscopic features
Amelanotic melanoma	A solitary pink, featureless papule or nodule, without the brown to black color of melanoma	Blue-white veil (irregular area of confluent blue pigment with a ground-glass haze), scar-like or irregularly shaped depigmentation, bluegray dots, irregular brown dots or globules, multiple shades of color, prominent central vessels
Bowen disease	Erythematous scaling patch or slightly raised plaque on sun-exposed skin of an older person	Dotted or linearly coiled vessels arranged in small clusters
Clear cell acanthoma	Solitary slow-growing, pink to brown, glistening, round papule or plaque on the leg of an older person; sharply demarcated margin, often with a thin rim of scale; less than 2 cm in size	Smooth and stippled surface with pinpoint vessels appearing as tiny red dots in the characteristic "string of pearls" arrangement
Guttate psoriasis	Multiple small, discrete, scaly papules and plaques on the trunk; common in children; may follow a severe upper respiratory tract infection	Homogeneous dotted vessels
Pyogenic granuloma	Rapidly growing, friable, vascular papule or polyp of skin or mucosa, common in children and young adults; may be associated with trauma or irritation	Red homogeneous areas surrounded by a white collarette and intersected by white "rail lines"

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REFERENCES

- 1. Bolognia J, Jorizzo JL, Rapini RP. *Dermatology*. 2nd ed. St. Louis, Mo.: Mosby/Elsevier; 2008.
- Ardigo M, Buffon RB, Scope A, et al. Comparing in vivo reflectance confocal microscopy, dermoscopy, and histology of clear-cell acanthoma. *Dermatol Surg.* 2009;35(6):952-959.
- 3. Scheinfeld N. A glistening brown nodule. Pigmented clear cell acanthoma. *Arch Dermatol.* 2007;143(2):255-260.
- Fine RM, Chernosky ME. Clinical recognition of clear-cell acanthoma (Degos'). Arch Dermatol. 1969;100(5):559-563.
- Zalaudek I, Kreusch J, Giacomel J, et al. How to diagnose nonpigmented skin tumors: a review of vascular structures seen with dermoscopy: part II. Nonmelanocytic skin tumors. J Am Acad Dermatol. 2010;63(3):377-386.
- DermNet NZ. Dermoscopy of other non-melanocytic lesions. http:// dermnetnz.org/doctors/dermoscopy-course/other-lesions.html. Accessed December 12, 2011.
- Menzies SW, Kreusch J, Byth K, et al. Dermoscopic evaluation of amelanotic and hypomelanotic melanoma. Arch Dermatol. 2008;144(9):1120-1127.
- 8. Blum A, Metzler G, Bauer J, Rassner G, Garbe C. The dermatoscopic pattern of clear-cell acanthoma resembles psoriasis vulgaris. *Dermatology*. 2001;203(1):50-52. ■