Sessile Pink Plaque on the Lower Back

A 47-year-old man presented with an asymptomatic, 2.5 × 1.5-cm, sessile pink plaque with a coalescing papular texture on the lower back of 30 years’ duration. The patient reported that 2 papillated papules with peripheral rims of dark crust had developed in the center of the lesion over the past 6 months. His personal and family histories were unremarkable.

What’s the diagnosis?

a. cutaneous follicular tumor
b. eccrine poroma
c. epidermal nevus
d. sebaceous nevus
e. squamous cell carcinoma

Robyn Marszalek, MD; Phyu P. Aung, MD, PhD; Deon Wolpowitz, MD, PhD; Amy Yuntzu-Yen Chen, MD

Dr. Marszalek is from Harvard Vanguard Medical Associates, Boston, Massachusetts. Dr. Aung is from the Departments of Pathology and Dermatology, University of Texas MD Anderson Cancer Center, Houston. Dr. Wolpowitz is from Boston Medical Center. Dr. Chen is from the Department of Dermatology, University of Connecticut School of Medicine, Canton. The authors report no conflict of interest.
Correspondence: Amy Yuntzu-Yen Chen, MD, 117 Albany Turnpike, Canton, CT 06019 (ayyen@alum.mit.edu).
A shave biopsy of the lesion was performed for definitive diagnosis and demonstrated a well-circumscribed tumor with cords and broad columns composed of uniform basaloid cells extending into the dermis and in areas connecting to the overlying epidermis (Figure). There also were small ducts and cysts admixed in the tumor columns that were embedded in a tumor stroma rich in blood vessels. A diagnosis of eccrine poroma was made based on these characteristic histologic features.

First described by Pinkus et al in 1956, eccrine poroma is a benign neoplasm of cells from the intraepidermal ductal portion of the eccrine sweat gland. Eccrine poroma (along with hidroacanthoma simplex, dermal duct tumor, and poroid hidradenoma) is one of the poroid neoplasms, which account for approximately 10% of all primary sweat gland tumors. Eccrine poroma usually is seen in patients over 40 years of age without any predilection for race or sex.

Characteristically, eccrine poromas clinically manifest as solitary, firm, sharply demarcated papules or nodules that may be sessile or pedunculated and rarely exceed 2 cm in diameter. This entity classically presents on acral, non–hair-bearing areas (eg, palms and soles). Eccrine poromas have a wide range of clinical appearances that can lead to broad differential diagnoses and have been described as flesh-colored, pink to red, purple, and pigmented papules or nodules depending on features such as blood vessel proliferation and pigment deposition.

Eccrine poromas also have been reported on hair-bearing areas of the body, including the head, neck, chest, hip, and pubic area, despite the paucity of eccrine glands in these areas on the body. These findings suggest that these neoplasms may not be purely eccrine in origin. The wide range of clinical presentations of eccrine poromas has prompted investigation into further classification and delineation of this neoplasm. The occurrence of eccrine poromas on areas of the skin known to have few eccrine glands suggests that eccrine poromas may not be purely comprised of eccrine ducts and instead may be of apocrine origin. Histologic features of eccrine poromas that suggest apocrine origin include sebaceous and follicular differentiation (eg, folliculocentric distribution), the association with the follicular infundibulum, and the presence of follicular germ cells. Thus, apocrine gland involvement in eccrine poromas may account for their appearance in anatomic areas that do not have high concentrations of eccrine glands, such as the trunk and pubic area.

Based on these findings, eccrine poromas may therefore be of eccrine and/or apocrine origin; however, the nomenclature of this neoplasm remains confusing and possibly misleading, as the term eccrine poroma continues to be accepted even in instances in which the differentiation appears to be largely apocrine. The terms poroma and eccrine poroma often are used interchangeably, which contributes to the
confusion by failing to acknowledge the possibility of apocrine influence and possibly causing the clinician to exclude eccrine poromas from the differential diagnosis in areas that do not have high concentrations of eccrine glands.

Because of their high degree of clinical variability, characteristic acral location, and misleading nomenclature, eccrine poromas often are mistakenly confused with a long list of other cutaneous neoplasms, including hemangiomas, pyogenic granulomas, melanocytic nevi, warts, cysts, and other adnexal neoplasms. In our case, the lesion was abnormally large and was clinically concerning for an unusual sebaceous nevus. Its location on the lower back is not commonly noted and should remind the clinician of the possibility of apocrine differentiation. Clinicians should be aware of the wide phenotypic diversity of eccrine poromas, and therefore they should consider this diagnosis in their differential diagnosis for solitary papules or nodules occurring in any anatomic area.

REFERENCES