The best diagnosis is:

a. cutaneous adenoid cystic carcinoma  
b. metastatic adenocarcinoma  
c. sclerosing basal cell carcinoma  
d. syringoid eccrine carcinoma  
e. syringoma

H&E, original magnifications ×40 (left) and ×400 (right).

H&E, original magnifications ×100 (left) and ×100 (right).
Syringoid eccrine carcinoma is a rare malignant adnexal tumor with eccrine differentiation that histologically resembles a syringoma. Originally described as eccrine epithelioma by Freeman and Winklemann in 1969, syringoid eccrine carcinoma has been reported in the literature as eccrine carcinoma, eccrine syringomatous carcinoma, and sclerosing sweat duct carcinoma. Clinically, syringoid eccrine carcinoma most commonly presents as a tender plaque or nodule on the scalp, and histologic examination generally reveals a dermal-based lesion that rarely shows epidermal connection. It demonstrates syringomalike tadpole morphology (epithelial strands with lumen formation) composed of basoloid epithelium with uniform hyperchromatic nuclei (Figure 1). There usually is an infiltrative growth pattern to the subcutis (Figure 2 [left]) or skeletal muscle as well as remarkable perineural invasion (Figure 2 [right]). Mitotic activity is minimal to absent. The tumor cells of syringoid eccrine carcinoma typically show positive immunostaining for high- and low-molecular-weight cytokeratin, while the lumina are highlighted by epithelial membrane antigen and carcinoembryonic antigen. However, immunohistochemistry often is not contributory in diagnosing primary eccrine carcinomas.

The differential diagnosis of syringoid eccrine carcinoma includes cutaneous adenoid cystic carcinoma, metastatic adenocarcinoma, sclerosing basal cell carcinoma, and syringoma. Cutaneous adenoid cystic carcinoma is a rare, slow-growing, flesh-colored tumor that consists of lobules, islands, and cords of basoloid cells with prominent cystic cribriforming (Figure 3). The tumor cells typically are small, cuboidal, and monomorphic. Metastatic adenoid cystic carcinoma, such as from a primary tumor of the salivary glands or breasts, must be excluded before rendering a diagnosis of primary cutaneous disease.

Metastatic adenocarcinoma of the skin usually presents in patients with a clinical history of pre-existing disease. The breasts, colon, stomach, and ovaries are common origins of metastases. The histopathologic and immunohistochemical findings depend on the particular site of origin of the metastasis. Compared with primary eccrine carcinomas, metastatic adenocarcinomas of the skin generally are high-grade lesions with prominent atypia, mitosis, and necrosis (Figure 4).

Sclerosing basal cell carcinoma shows basoloid tumor cells with deep infiltration. Unlike syringoid eccrine carcinoma, basal cell carcinoma is an epidermal tumor that does not have true lumen formation. Furthermore, other variants of basal cell carcinoma, including nodular, micronodular, or superficial multicentric tumors, often coexist with the sclerosing variant in the same lesion and constitute a useful diagnostic clue (Figure 5). Staining for epithelial membrane

Figure 1. Dermal infiltrate with tadpole morphology (arrow) characteristic of syringoid eccrine carcinoma (left)(H&E, original magnification ×40). High-power view shows an epithelial infiltrate and tadpole morphology (arrow) (right)(H&E, original magnification ×400).

Figure 2. Syringoid eccrine carcinoma extending to the junction of the reticular dermis and subcutaneous fat (left) (H&E, original magnification ×100). Nerve with adjacent and invasive basoloid nests of syringoid carcinoma (right) (H&E, original magnification ×100). The tumor consists of monomorphic cells with oval hyperchromatic nuclei.

Figure 3. Striking cribriform architecture of cutaneous adenoid cystic carcinoma (H&E, original magnification ×40). The tumor is well circumscribed and consists of multiple cystic spaces lined by flattened to cuboidal basoloid epithelium.
antigen may be useful in identifying the absence of lumen formation, and Ber-EP4 highlights the epidermal origin of the lesion.\(^5\)

Syringomas most commonly present as multiple small flesh-colored papules on the eyelids. On histology, syringomas present as small superficial dermal lesions composed of small ducts that may form tadpole-like structures in a fibrotic stroma (Figure 6). The ducts are lined by benign cuboidal cells. In contrast to syringoid eccrine carcinomas, syringomas usually present as multiple lesions that are microscopically superficial without perineural involvement.

REFERENCES

Erratum

Due to a submission error, the article “Reduced Degree of Irritation During a Second Cycle of Ingenol Mebutate Gel 0.015% for the Treatment of Actinic Keratosis” (Cutis. 2015;95:47-51) contained the incorrect scale for local skin reactions (LSRs). The text in the Methods should have stated:

Using standardized photographic guides, 6 individual LSRs—erythema, flaking/scaling, crusting, swelling, vesiculation/pustulation, and erosion/ulceration—were assessed on a scale of 0 (none) to 4 (severe), with higher numbers indicating more severe reactions.

The staff of Cutis\(^\text{®}\) makes every possible effort to ensure accuracy in its articles and apologizes for the mistake.

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