QUIZ SECTION

MJS PUBLISHING

A Solitary Pinkish Nodule on the Abdomen: A Quiz

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A 60-year-old Caucasian man presented with a solitary pinkish nodular asymptomatic lesion on his abdomen (**Fig. 1**). He reported that the lesion had developed during the previous month. He denied any personal or familiar history of skin cancer, and his medical history was unremarkable. He was not on immunosuppressive treatments.

Clinical examination revealed a solitary pinkish, firm, tender nodule, 0.5 cm in size, on his right abdomen. No openings were visible on the skin. Dermoscopy revealed pink and white areas with small linear vessels (**Fig. 2**). An excisional biopsy was performed.

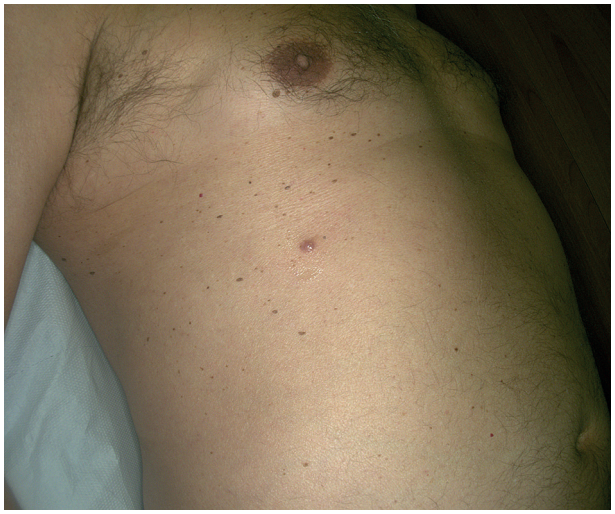

Fig. 1. Pinkish nodule on the abdomen.

What is your diagnosis?

Differential diagnosis 1: Apocrine cystadenoma

Differential diagnosis 2: Spitzoid melanoma

Differential diagnosis 3: Skin metastasis from internal malignancy

Differential diagnosis 4: Dermatofibrosarcoma protuberans

See next page for answer.

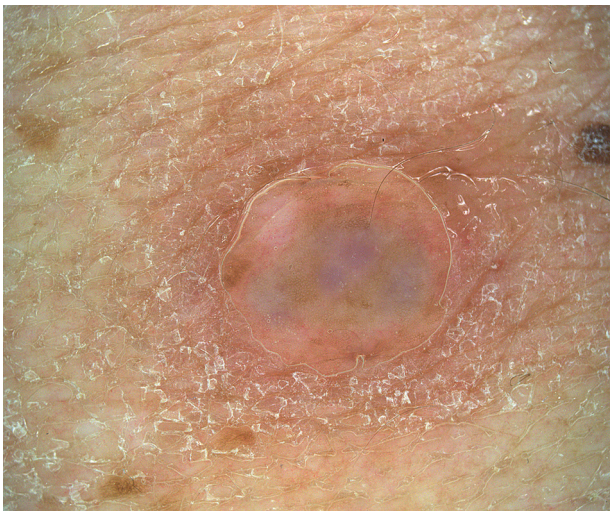

Fig. 2. Dermoscopic appearance of the lesion: 5 mm diameter nodule with pink and white areas, together with small linear vessels.

ANSWERS TO QUIZ

A Solitary Pinkish Nodule on the Abdomen: A Commentary

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Diagnosis: **Apocrine Cystadenoma**

Microscopic examination revealed a multiloculated intradermal cystic lesion lined with multiple layer of cuboidal epithelial cells without atypia, showing a characteristic apocrine-type secretion.

Apocrine cystadenoma (AC) is a relatively uncommon benign naevoid tumour of the skin, first described by Mehregan in 1964 (1). It represents an adenomatous cystic proliferation derived from apocrine glands and not a mere retention cyst. The tumour generally occurs as a well-defined, dome-shaped, translucent, asymptomatic and solitary papule or nodule. AC most commonly appears on the face, especially on the periorbital region and cheek, where apocrine glands occur with considerable regularity. The tumour usually ranges from 0.5 to 1 cm in size, although larger AC have been reported. AC may be skin-coloured, but also brown-greyish or dark bluish-black; thus it must be considered in the differential diagnosis of pigmented skin lesions (1–3). AC seems to be more common in female patients (4).

Dermoscopic examination reveals the presence of translucent to opaque skin-coloured lesion with pinkish-blue-grey central areas and linear-irregular vessels.

The presence of dark colour in AC seems to be due to a Tyndall effect or lipofuscin-rich fluid content of the cyst, considering the lack of melanocytes or melanophages within the stroma on histological examination (3).

Pink nodules are often a diagnostic challenge for dermatologists, since they may represent aggressive lesions, such as dermatofibrosarcoma protuberans or spitzoid melanoma. In addition, an internal malignancy might metastasize to the skin, appearing as a pink nodule. Dermoscopy is useful in differential diagnosis, but histological examination is warranted.

Histopathology shows the presence of a multiloculated intradermal cyst lined by 1 or more layer of cuboidal to columnar cells with eosinophilic cytoplasm, Periodic Acid Schiff-positive, diastase-resistant granules and basally located nuclei. The adluminal surface of the cells shows blebbing, which is indicative of decapitation secretion that is considered the hallmark of apocrine secretion. Fusiform myoepithelial Smooth Muscle Actin-positive cells are scattered peripherally beneath the secretory epithelium (1, 2, 4, 5) (Figs S1 and S2).

Although, in the past, AC and apocrine hidrocystoma (AH) have been used interchangeably to designate cystic lesions of apocrine glands, nowadays a histopathological distinction between "proliferative" AC and "non-proliferative" AH has been established (4).

This classification is based on the presence in AC of true papillary proliferative projections into the cystic cavity, which have a central fibrovascular core, a variable grade of cytological atypia, and increased Ki67 staining. These papillary projections are lacking in AH, which represent a simple retention cyst (4). Differential diagnosis of AC includes non-pigmented and pigmented lesions, such as sebaceous or epidermoid cyst, basal cell carcinoma, angiomas, melanocytic naevi, particularly blue naevi, or even malignant melanoma (2).

Usually, ACs are surgically excised. A wide, complete excision is particularly recommended for apocrine cystic lesion with florid papillary proliferation, especially when showing cytological evidence of atypia (4).

The current case was difficult to diagnose, as the occurrence of this lesion on the truncal region seems to be rare, since apocrine glands are normally found on the eyelids, axilla, groin and anogenital region. Also, its appearance was as a subcutaneous, firm, nodular lesion without specific features. The lesion was surgically excised with no recurrence.

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