Multiple Eccrine Hydrocystoma Masquerading as Papular Sarcoidosis in a Patient Suffering from Systemic Sarcoidosis

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Sir,

Hydrocystomas are rare, benign, cystic skin tumors arising from mature, deformed sweat units which are dilated by their own secretions.[1] Depending on the gland of origin, they can either be apocrine or eccrine hydrocystomas. Eccrine hydrocystoma can either be solitary or multiple. Most commonly they affect the face and neck regions of middle-aged female patients and are often multiple.[1] When on the face, multiple eccrine hydrocystomas can resemble a vast array of papulocystic lesions; papular sarcoidosis being one of them. Here, we present a case of multiple papular and cystic facial lesions in a middle-aged male patient, who is also suffering from sarcoidosis. The papular lesions were being treated in vain as sarcoidosis, because of this association; until histopathological examination (HPE) clinched the diagnosis of multiple eccrine hydrocystoma.

We present this case for the rarity of the association between sarcoidosis and multiple eccrine hydrocystoma, and also to highlight the various differentials to be considered when such a clinical picture is obtained. The importance of histopathology as a confirmatory tool cannot be over emphasized.

A 32-year-old man suffering from occasional breathlessness was referred to us for the evaluation of persistent, treatment resistant papular, and cystic lesions on his face, mainly below the eyes, which were present for the past 2 years. On further enquiry, the patient reported exacerbation of these lesions on exposure to heat each summer followed by their flattening each winter. The lesions were painless with occasionally itching. The patient was a known case of sarcoidosis with pulmonary involvement for the last 5 years, for which he was being treated by a pulmonologist with systemic steroids, hydroxychloroquine, and methotrexate. Family history was noncontributory. The presence of systemic sarcoidosis had led to the misdiagnosis of the facial lesions as papular sarcoidosis, for which he was being treated with topical corticosteroids. The persistence of the lesions despite treatment landed the patient at our outpatient department. General examination was normal except for the presence of pallor. Dermatological examination revealed multiple nontender, tense, smooth, skin colored papular and cystic lesions, which roughly measured about 0.5–1 cm in diameter. These lesions were mainly distributed on the upper part of malar areas, below the eyes; with some papules also over the eyelids [Figures 1 and 2]. Biochemical investigations were normal except for the presence of anemia (Hb 8.5 mg/dl), and a high level of serum angiotensin converting enzyme inhibitor (>95 units/dl). Chest X-ray (CXR) showed parenchymal and perihilar opacification, consistent with the diagnosis of pulmonary sarcoidosis. One of the lesions underwent biopsy and HPE revealed a cystic cavity in the dermis, lined by two layers of cuboidal epithelial cells; the overlying epidermis being atrophic [Figures 3 and 4]. The absence of decapitation secretion clinched the diagnosis as eccrine hydrocystoma. Although the condition is seasonal, showing marked improvement during the winter months, we have recommended topical application of 1% atropine cream twice daily for symptomatic improvement.

Eccrine hydrocystomas are benign cutaneous cystic tumors which arise from matured, deformed eccrine sweat units due to blockage of their ducts with their own secretions.[1] Nowadays, eccrine hydrocystomas are believed to represent dilated intradermal sweat ducts, rather than true neoplasms.[2] These tumors can either present as a solitary lesion “Smith and Chernosky” type, which is more common; or as multiple papules and cysts “Robinson” type of hydrocystoma.[3] Eccrine hydrocystomas usually occur in the middle age, from the 4th decade to the 8th decade; however, it has been rarely reported in the younger age group also.[4,5] Solitary eccrine hydrocystomas occur equally in males and females, while multiple eccrine hydrocystomas have a female preponderance.[3] In our case, a middle-aged male patient presented with multiple eccrine hydrocystoma.
Correspondences

as seen in our case also. However, several uncommon locations have been reported, namely, eyelid,[5] tarsal plate,[5] upper lip,[6] external ear canal,[7,8] and the pericoccygeal region.[9]

Clinically, multiple eccrine hydrocystomas usually present as dome-shaped, papulocystic lesions, often skin colored to bluish in color, ranging from about 0.5–2 cm in size; as in our case; however, a large pendunculated eccrine hydrocystoma has also been reported.[10]

The most common clinical differentials of multiple eccrine hydrocystoma are apocrine hydrocystoma, sebaceous and epidermal inclusion cysts, syringomas, milia, papular sarcoidosis, and rarely pigmented cystic variety of basal cell carcinoma. Apart from the typical history of seasonal variation, typical HPE is needed to confirm the diagnosis of multiple eccrine hydrocystoma. The closest histological differential diagnosis is apocrine hydrocystoma, which has been ruled out due to the absence of decapitation secretion. Our patient was also mistakenly treated as papular sarcoidosis, due to their close resemblance and presence of associated systemic sarcoidosis, until histopathology confirmed the correct diagnosis.

Medical therapy forms the backbone of treatment of multiple hydrocystoma, a plethora of options having been tried with varying rates of success, namely, topical scopolamine, topical atropine, and botulinum toxin Type A.[11] Apart from these measures, 585-nm pulsed dye laser and electrodessication have shown some promise.[3]

However, the avoidance of hot and humid conditions is of foremost importance to achieve symptomatic relief. We have prescribed 1% atropine ointment for our patient.

This case has been reported here, to highlight the rare association of multiple eccrine hydrocystoma with systemic sarcoidosis; to the best of our knowledge, there is only a single such report in the literature.[3] This association also led to the faulty management of the facial papular lesions as papular sarcoidosis, till the correct diagnosis was reached at by virtue of typical clinicopathological features. This is the first report of such an association and apparently coincidental.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.
Conflicts of interest

There are no conflicts of interest.

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