Translucent Growth over Hairline

Quiz

A 63-year-old female presented with an asymptomatic pedunculated growth over the face since 1 year. There were no symptoms except occasional itching. She had received many forms of oral and topical treatments without improvement and had visited many physicians with the fear of malignancy before visiting our OPD. On examination, it revealed a translucent, pedunculated cystic lesion on the surface of the skin over the left temporal area of size $2.1 \text{ cm} \times 0.7 \text{ cm}$ [Figures 1 and 2]. The lesion was non-tender and the surface was smooth and shiny. Examination of other systems was unremarkable. The whole mass was excised and was sent for histopathological examination. Histology revealed multiloculated cysts in the dermis with lining of cyst wall having cuboidal cells [Figures 3 and 4]. No decapitation secretion was seen.

Question

What is the Diagnosis?
Table 1: The differences between eccrine and apocrine hidrocystoma are as follows

|                        | Eccrine hidrocystoma                                                                 | Apocrine hidrocystoma                                                                 |
|------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Number and anatomical location | Single/multiple or Periorbital or malar area                                           | Multiple                                                                            |
| Seasonal variation     | May grow in number and size in hot and humid weather                                  | No such change                                                                      |
| Association            | Goltz or ectodermal dysplasia                                                         | Goltz or ectodermal dysplasia                                                         |
| Histopathology         | Cuboidal cells with no decapitation secretion                                         | Decapitation secretion seen in the lining cells                                       |
| Special stain          | S100 positive                                                                        | S100 negative                                                                        |

**Answer**

Giant eccrine hidrocystoma.

**Discussion**

The adnexal structures of pilosebaceous units (the eccrine and apocrine glands) can develop a wide spectrum of benign and malignant tumors. Hidrocystomas are benign lesions, which can be of either eccrine or apocrine origin and are mostly found on the head, neck, and trunk regions and less commonly on the penis, axillae, and anal region.[1] Sometimes, the lesions can grow to a size greater than 1 cm, which are described as giant hidrocystomas.[2,3]

Clinically, eccrine hidrocystomas are small and tense thin-walled cysts, ranging from 1–6 mm in diameter and can occur as single or multiple lesions.[1] They occur predominantly in adult females and are located mostly on the periorbital and malar regions.

Eccrine hidrocystomas are classified into two major groups: (a) Smith type, which is solitary and most prevalent and (b) Robinson type, which presents with multiple lesions. The lesions typically are dome-shaped, have an amber, brown, or bluish tint, and range from 1–6 mm in diameter. In hot or humid weather, these lesions may grow in size and/or multiply in number.[4] Eccrine hidrocystomas usually do not involve the eyelid margin, but rather are distributed around the eyelid skin. On the other hand, apocrine hidrocystomas are often multiple and are occasionally associated with Goltz syndrome or ectodermal dysplasia.[1,4]

Eccrine hidrocystomas usually result from dilation of cystic excretory eccrine glands because of retention of sweat and dilation or blockage of the sweat duct. Microscopic examination shows unilocular cysts with one or two layers of cuboidal cells lining the wall. They are located within the mid-dermal to superficial layers of the skin, especially around the eyes. Unlike their apocrine counterpart, there are no secretory cells or decapitation secretion.[1] Histochmically, they stain positive for S100 protein (solitary type), whereas apocrine hidrocystomas do not. The differences between eccrine and apocrine hidrocystomas are described in Table 1. The cyst and epidermis do not communicate, and the periodic acid-Schiff (PAS)-positive granules are not observed.[1]

A large sized lesion in elderly can often raise the concern of malignancy or malignant transformation in the patient and family members. Clinically, eccrine hidrocystoma has to be differentiated from other cystic growths such as mucoid cyst and epidermal inclusion cyst. Because of the bluish tint of the lesion, it is sometimes confused with basal cell carcinoma or malignant melanoma. All these differentials can be excluded by the characteristic histological picture of eccrine hidrocystoma.

The treatment of hidrocystomas is needle puncturing. However, in the Robinson type and multiloculated lesions, a simple needle puncture may not produce a lasting improvement. Multiple lesions, distributed over a wide spread area, have been successfully treated with topical 1% atropine or scopolamine creams, but anticholinergic effects can cause discomfort and result in discontinuation of the treatment in patients.[3] Excision of hidrocystomas can give cure but can lead to recurrence within few weeks (6 weeks); however, this can be overcome by cauterezation and electrodeposition of the cyst wall.[1]

**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.

**References**

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