

CASE REPORT

Apocrine hidrocystoma of the earlobe: First report at this unusual location

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ABSTRACT

Apocrine hidrocystoma is a rare, benign, solitary cystic tumor of the apocrine sweat glands. The commonest site is around the eye, and it may also occur on the shoulder, chest, axilla, fingers, umbilicus, foreskin, penile shaft, and vulva. Few cases have been mentioned on the ear, but none on the ear lobe. Herein, we present a rare case of apocrine hidrocystoma of the ear lobe.

Keywords: Apocrine, Ear lobe, Hidrocystoma, Sweat glands

INTRODUCTION

Apocrine hidrocystomas (also known as cystadenoma, a Moll's gland cyst and a sudoriferous cyst) are apocrine adenomas of the sweat glands. They are usually solitary, 1-8 mm in diameter smooth, cystic, translucent-skin colored, shiny brown or bluish papules or nodules.^{1, 2, 3} They most commonly occur on the head and neck, more specifically the eyelid margin. Apocrine hidrocystoma has also been reported in other sites, including the shoulder, chest, axilla, fingers, umbilicus, foreskin, penile shaft, and vulva. Few cases were mentioned on the ear but none on the earlobe.⁴

Herein, we present a rare case of apocrine hidrocystoma of the earlobe.

CASE SYNOPSIS

A 65-year-old male, known to have dyslipidemia,

benign prostatic hyperplasia, hypertension with a history of stroke 10 years back, presented to the clinic with a two years' history of asymptomatic left earlobe lesion. Which was increasing in size ever since. He reports clear fluid leakage from the lesion. There were no other sites involved, previous episodes, aggravating or relieving factors, and no personal or family history of skin or soft tissue malignancies.

Upon physical examination, a translucent- skin colored, non-tender, firm cystic cone shaped nodule located over the left earlobe measuring 7 mm in diameter. (Fig. 1-2) The patient underwent a consented excisional biopsy of the under local anesthesia.

Differential diagnosis of solitary apocrine hidrocystoma include eccrine hidrocystoma, epidermoid cysts, hordeolum and chalazion, cystic basal cell epithelioma, and melanoma.

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Fig. 1 Anterior view of the lesion.



Fig. 2 Postero-lateral view of the lesion.

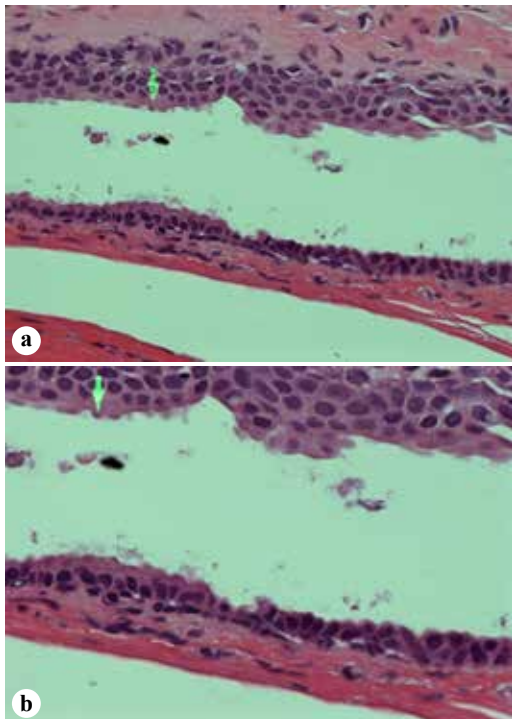


Fig. 3 (a-b) Histopathologic examination revealed apocrine hidrocystoma lined with both cuboidal and columnar apocrine cell showing apical snouts (arrowhead) and focal multilayer.

CASE DISCUSSION

Hidrocystomas are adenomas of the sweat glands, the apocrine and eccrine. They are rare, benign skin adnexal cystic tumors that arise from sweat ducts. They present as asymptomatic, translucent- light bluish cysts containing a watery fluid on the head and neck, specifically in the periocular region, although they can appear on other sites.^{1, 2, 5}

Apocrine hidrocystomas are slowly growing benign cystic lesions that most commonly present on the head and neck as a solitary, asymptomatic, papule or nodule.⁶ Clinically, apocrine hidrocystomas usually present as solitary lesions (Smith type) with a diameter of up to 15 mm as compared with their eccrine counterparts.^{1, 2} Rarely it can appear as multiple lesions (Robinson type) and be a marker of inherited syndromes such as Goltz-Gorlin syndrome or Schopf-Schulz-Pasarge syndrome.^{7, 8} This patient did not have any features suggestive of either disorder. The most frequent locations of apocrine hidrocystomas are the face (61.1%), scalp (12.6%), trunk (13.7%), and extremities (12.0%). They typically occur in patients over 60 years of age, rarely occurs during childhood or adolescence. It's equally noticed in both sexes with no ethnic predominance or geographic region predilection.⁶

The etiology behind the development of apocrine hidrocystoma is unknown. However, they are thought to be due to retention of the sweat as a result of the sweat duct apparatus blockage and a dilated cystic structure, which is considered to be a credible cause.⁴

Histopathologically, apocrine hidrocystomas have a double lining of epithelium with decapitation secretion and an outer layer consisting of myoepithelial cells.⁸

The solitary apocrine hidrocystoma, which represents the majority of cases, are often treated by a simple excision, like in our case, and it is not necessary except for cosmetic or diagnostic purposes. While multiple lesions are treated with a variety of techniques such as CO² laser ablation. Up to our knowledge, this is the first case report of an apocrine hidrocystoma on the earlobe.

REFERENCE

1. Viragh PAD, Szeimies RM, Eckert F. Apocrine cystadenoma, apocrine hidrocystoma, and eccrine hidrocystoma: three distinct tumors defined by expression of keratins and human milk fat globulin 1. *Journal of Cutaneous Pathology*. 1997; 24(4):249-55.
2. Sugiyama A, Sugiura M, Piris A, et al. Apocrine cystadenoma and apocrine hidrocystoma: examination of 21 cases with emphasis on nomenclature according to proliferative features. *J Cutan Pathol* 2007; 34:912-17.
3. Magdaleno-Tapia J., Valenzuela-Oñate, C., Martínez-Doménech, Á., García- Legaz-Martínez, M., Martínez-Aparicio, A., Alegre-de Miquel, V., & Pérez-Ferriols, A. (2019). Apocrine hidrocystoma on the nipple: the first report in this unusual location. *Dermatology Online Journal*, 25(10). Retrieved from <https://escholarship.org/uc/item/89n4f0sf>
4. Wissem H, Talel B. Apocrine Hidrocystoma [Internet]. StatPearls-NCBI. 2019 [cited 2020]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK448109/>
5. Matsuyama T, Yahagi E, Mabuchi T. Apocrine hidrocystoma on the genitalia of a 9-year-old girl. *Ped Dermatol*. 2018; 35(4).
6. Olmedo J. Apocrine Hidrocystoma [Internet]. Background, Pathophysiology, Epidemiology. 2019 [cited 2020May20]. Available from: <https://emedicine.medscape.com/article/1056133-overview>
7. D V. Multiple Apocrine Hidrocystomas: A Case Report. *Journal Of Clinical And Diagnostic Research*. 2013; <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576781/>
8. Kikuchi K, Fukunaga S, Inoue H, Miyazaki Y, Ide F, Kusama K. Apocrine Hidrocystoma of the Lower Lip: A Case Report and Literature Review. *Head and Neck Pathology*. 2013; 8(1):117-21.