Case Report

Apocrine Hidrocystomas: An Unusual Case Presentation and Review of Literature

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Abstract

Apocrine hidrocystomas (AHs) are cystic benign lesions of the skin that originates from the apocrine sweat glands. It is usually solitary and occasionally multiple. Herein, we report an unusual case of multiple apocrine hidrocystomas. A 65-year-old Saudi male patient presented with asymptomatic recurrent skin lesions on his face for 2 years. The skin lesions appear during hot weather and regress in cooler temperatures. Skin examination revealed multiple skin-colored papules around both the eyes. Skin biopsy showed normal epidermis. The dermis showed cystic structure lined by columnar epithelium with decapitation secretion and some apical snouts. Based on the above clinicopathological findings, the diagnosis of AHs was made. The patient was reassured.

Keywords: Apocrine hidrocystomas, cystadenoma, sudoriferous cyst

Introduction

Hidrocystoma is a benign cystic lesion of the skin that originates from the sweat glands.[1] There are two types of hidrocystoma: eccrine and apocrine. The lesions that appear along the lower eyelid margin are called Moll's gland cysts.[2] The exact etiology is unknown. However, it is believed that eccrine hidrocystoma is due to the retention of eccrine secretions leading to cystic dilation of eccrine ducts, whereas apocrine hidrocystomas (AHs) are thought to be due to adenomas of the apocrine sweat gland [Table 1].[3-6]

AH is often observed on the head (around the eye, particularly lateral to the outer canthus), neck as well as trunk regions.[1,2] It is less frequently found on the penis, ears, scalp, chest, shoulders, feet, axillae, and anal region.[3,4] AH presents as asymptomatic skin-colored papules that are 3–15 mm in size. AH is usually solitary but occasionally multiple. It is most common in adults, aged between 30 and 70 years. It affects both genders equally.[1]

Case Report

A 65-year-old Saudi male patient previously healthy presented with an asymptotic recurrent skin lesion on his face for 2 years. The skin lesion was aggravated by heat exposure or in hot weather and regresses in cooler temperatures. There were no similar lesions in the family. Skin examination revealed multiple skin-colored deep-seated vesicular papules around both the eyes [Figure 1]. Skin biopsy showed normal epidermis; in the dermis, there was cystic structure lined by columnar epithelium with decapitation secretion and some apical snouts [Figure 2]. Based on the above-mentioned clinicopathological findings, the diagnosis of AHs was made. The patient was reassured.

Discussion

AHs are a benign cystic lesions of the skin that originates from the apocrine sweat glands.[1] The main differential diagnosis in our case includes senile comedones (Favre–Racouchot syndrome), vellus hair cysts, fibrofolliculoma, and syringomas. However, the histopathology was typical for apocrine hidrocystomas. Our patient showed unusual presentation of apocrine hidrocystomas, in term of multiple lesions and seasonal variation. Although the seasonal variations are a known feature of eccrine hidrocystomas, there was a single

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Access this article online

Quick Response Code:

Website: www.jddsjournal.org

DOI: 10.4103/jdds.jdds_55_18

How to cite this article: Al Hawsawi KA, Assaedi LM, Gefri A, Bukhari R. Apocrine hidrocystomas: An unusual case presentation and review of literature. J Dermatol Dermatol Surg 2019;23:52-4.

Table 1: Differentiations between eccrine and apocrine hidrocystomas

Characteristics	Eccrine	Apocrine
Location	Common in the periorbital area and malar regions[1-9] Rarely on chest, axilla, and neck[1-4]	Common in the periorbital area. Rarely on ears, head, chest, and shoulders[1-9]
Number of lesions	Single or multiple[1-9]	Commonly single Rarely multiple[1-9]
Size	1-6 mm[1-4]	3-15 mm[1-4]
Gender	Higher prevalence among females[1-4]	No gender preference[1-4]
Origin	Cystic dilation of eccrine ducts[6,7,9]	Adenomas of the apocrine sweat gland coils[6,7,9]
Histopathology	Unilocular dermal cyst of clear fluid, lined by double layers of cuboidal epithelial cells[3-9]	Unilocular to multilocular dermal cysts lined by double layers of columnar epithelial cells[3-9]
	No decapitation of cells nor secretory cells[1-3]	Decapitation of secretory cells, papillary projections[1-3]
	S100 is positive (solitary type) but negative in Robinson type PAS is negative[4-12]	S100 is negative, PAS is positive[10] Milk fat globulin 1 stain is positive[4-12]
Aggravating/alleviating factors	Appear during hot weather and regress in cooler temperatures[1-4]	No seasonal variations[1-4]
Associated syndrome	Schopf-Schulz-Passarge syndrome and Goltz-Gorlin syndrome in both eccrine and apocrine hydrocystomas.[10-12] Graves' disease[10-12]	
Treatment options	Simple needle puncture for both eccrine and apocrine hydrocystomas.[10-15]	
	Electrodessication successful in the treatment of small lesions <1 cm in diameter for both eccrine and apocrine hydrocystomas.[10-15]	
	Carbon dioxide laser for both eccrine and apocrine hydrocystomas	
	Pulseddye laser for both eccrine and apocrine hydrocystomas.[10-15]	
	Topical 1% atropine or scopolamine creams mainly for eccrine hydrocystomas and rarely for apocrine hydrocystomas.[10-15]	
	Botulinum toxin A injections for both eccrine and apocrine hydrocystomas.[10-15]	

PAS: Periodic acid-schiff

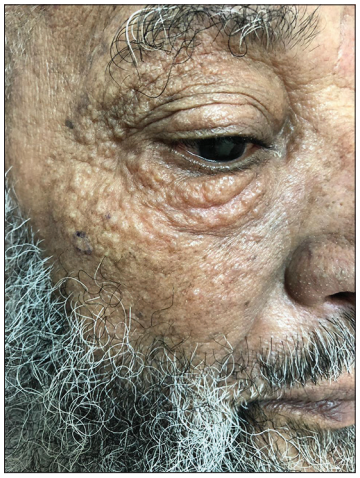

Figure 1: Multiple skin-colored tiny cystic papules around the eye

report of seasonal variations associated with multiple apocrine hidrocystomas.[7-9]

Both eccrine and AHs have been reported to be associated with Schopf–Schulz–Passarge syndrome and Goltz–Gorlin syndrome (focal dermal hypoplasia).[10,11] However, our patient has none of these. Goltz–Gorlin syndrome is usually seen in females and characterized by microcephaly, malformed ears, microphthalmia, papillomas of the lip, tongue, anus, and axilla, linear skin atrophy with telangiectasias, hypo- and hyperpigmented skin lesions that follow lines of Blaschko, and mental retardation.[11] Schopf–Schulz–Passarge syndrome is an autosomal recessive syndrome characterized by multiple AHs

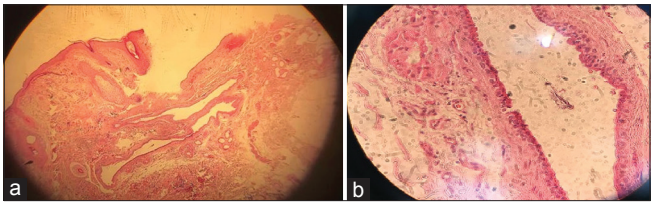

Figure 2: Histopathology of the skin lesions. The epidermis is normal. (a) The dermis shows cystic structure. (b) The cyst is lined by columnar epithelium with decapitation secretion and some apical snouts

of the eyelids, associated with palmoplantar hyperkeratosis.[10,11] About 1% atropine cream has been reported as a successful treatment of eccrine hidrocystomas.[10] Others have reported using electrosurgery and surgical excision as successful treatments of both eccrine and AHs.[12-15]

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.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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