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CASE REPORT

Hidrocystoma on the auricular helix in a female patient: case report and literature review

Hidrocistoma na hélice auricular em paciente do sexo feminino: um relato de caso e revisão de literatura

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Abstract

Hidrocystoma is a benign tumor arising from the cystic proliferation of apocrine or eccrine sweat glands. It is often asymptomatic and most commonly found in the periorbital region, although it can develop wherever sweat ducts are abundant. We report the case of an 84-year-old woman who presented with a 1 cm normochromic nodule on the helix of her left ear, of 5 months' duration, showing intermittent size fluctuations and no associated symptoms. An excisional biopsy was performed, and hematoxylin-eosin staining revealed a unilocular cystic structure lined by a double-layered epithelium exhibiting cytoplasmic decapitation and intraluminal secretory material, confirming apocrine differentiation. The histological findings were consistent with an apocrine hidrocystoma in an auricular location – a presentation that is rare in the literature. The patient was counseled regarding the benign nature of the lesion and scheduled for clinical follow-up. This case highlights the importance of considering hidrocystoma in the differential diagnosis of translucent nodules occurring in extrapalpebral or facial regions.

***Keywords*:** Hidrocystoma. Auricular helix. Face.

Resumo

O hidrocistoma é um tumor benigno resultante da proliferação cística de glândulas sudoríparas apócrinas ou écrinas, frequentemente assintomático e mais comum na região palpebral, mas que pode ocorrer em qualquer área rica em ductos sudoríparos. Apresentamos um caso de uma mulher de 84 anos com nódulo normocrômico de 1 cm na hélice da orelha esquerda, de cinco meses de evolução com flutuações de tamanho e ausência de sintomas. Foi realizada biópsia excisional e análise histológica com colorações hematoxilina-eosina, evidenciando formação cística unilocular revestida por epitélio bicamadas com decapitação citoplasmática e material secretório, confirmando secreção apócrina. A morfologia histológica foi compatível com hidrocistoma apócrino em localização auricular, rara na literatura, e foi orientado acerca da benignidade da lesão e acompanhamento clínico. Este caso reforça a necessidade de incluir hidrocistoma no diagnóstico diferencial de nódulos translúcidos em regiões extrapalpebrais ou faciais.

***Palavras-chave*:** Hidrocistoma. Hélice auricular. Rosto.

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Introduction

Hidrocystoma is a benign sweat-gland adenoma resulting from the cystic proliferation of apocrine or eccrine secretory glands[1]. Typically, these cutaneous lesions present as translucent papules located preferentially in the facial region and, despite their cystic nature, are often clinically mistaken for solid masses such as basal cell carcinoma (BCC)[2]. Although rare and often asymptomatic, eccrine or apocrine hidrocystomas typically occur in the neck or eyelid regions[3,4].

Case report

An 84-year-old female patient was referred for dermatological evaluation of a lesion on her left ear of approximately 5-month duration. She reported intermittent spontaneous fluctuation in size without associated symptoms (Fig. 1).

On dermatological examination, a 1.0 cm normochromic, fluctuant nodule was observed on the helix of the left ear (Fig. 2).

The patient underwent an excisional biopsy of the lesion and was then referred for histopathological examination. Histological evaluation revealed a large unilocular cystic structure lined by a double layer of epithelial cells (Figs. 3 and 4).

The inner epithelial layer exhibited morphological features consistent with apocrine secretion, as demonstrated by the cytoplasmic decapitation of the epithelial cells. On additional sections, secretory material was observed within the cystic cavity, further corroborating the apocrine secretion pattern (Fig. 5).

These histological findings are consistent with hidrocystoma, a benign cystic lesion of sweat-gland origin. Based on this diagnosis, management consisted of counseling, the patient about the benign nature of the condition and opting for clinical follow-up.

Discussion

Hidrocystoma is a common cystic proliferation of sweat ducts that may exhibit either apocrine or eccrine differentiation. They are most frequently encountered in the eyelid skin but can occur at any anatomical site[5]. In general, they localize to the cephalic region, especially the face – forehead, malar areas, and eyelids (Moll's glands) – with the external canthus of the lower eyelid being the most common site[1]. In the case presented, the patient's lesion was in an unusual location, as few reports in the literature describe hidrocystomas on the auricular helix.

Clinically, hidrocystomas present as 1-5 mm papules with a translucent blue-gray color and, in some cases, may appear brown, mimicking a melanocytic neoplasm[5]. Despite their cystic origin, they are often clinically mistaken for solid masses, particularly BCC[2]. Histopathologically, hidrocystomas are characterized by a bilayer of cuboidal epithelial cells with small nuclei surrounding a dilated cystic space containing scant amorphous to pigmented cystic material[5]. These features were concordant with those observed in the present case, as both the macroscopic surgical description and the histopathological findings aligned with the definitions of hidrocystoma reported in the literature.

Its pathogenesis appears to result from obstruction of the sweat duct immediately above the glandular coil in the deep dermis, secondary to an inflammatory process or trauma[1]. Furthermore, the literature indicates that surgical excision is the treatment of choice for a solitary hidrocystoma.

Conclusion

The patient in this case report presents a rare presentation of apocrine hidrocystoma on the auricular helix of an 84-year-old woman. This case underscores that, although most hidrocystomas occur on the eyelids or face, any region rich in sweat ducts – such as the auricle – can give rise to these benign cystic tumors. Clinicians should include hidrocystoma in the differential diagnosis of normochromic nodules in extrapalpebral or facial sites.

Funding

None.

Conflicts of interest

None.

Ethical considerations

Protection of humans and animals. The authors declare that the procedures followed complied with Wthe ethical standards of the responsible human experimentation committee and adhered to the World Medical Association and the Declaration of Helsinki. The procedures were approved by the institutional Ethics Committee.

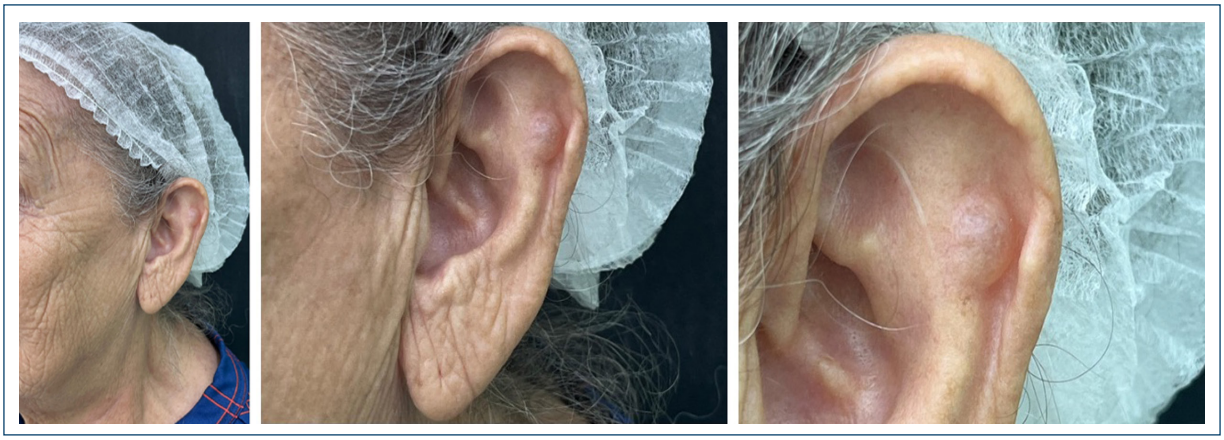

Figure 1. Clinical appearance of the lesion.

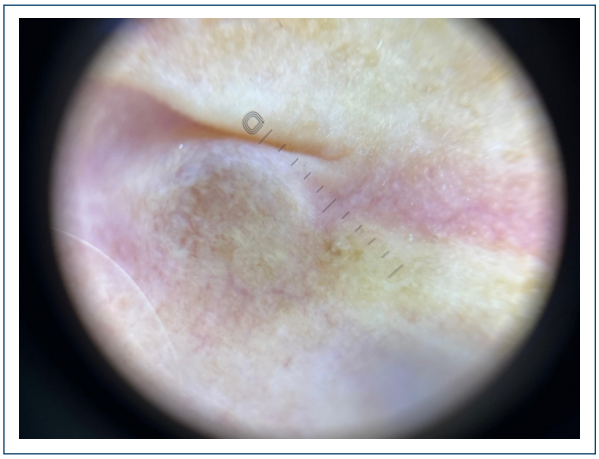

Figure 2. Dermatoscopy of the lesion on the helix of the left ear.

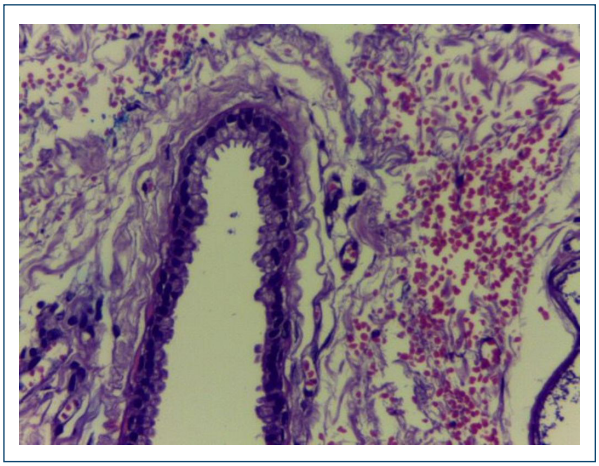

Figure 3. Large unilocular cystic structure lined by a double-layered epithelium (H&E: 100x).

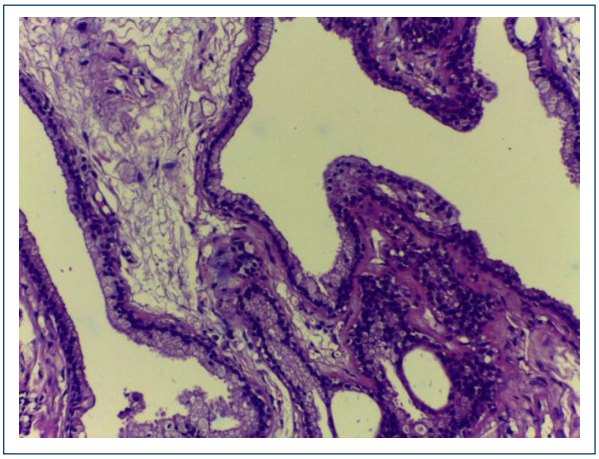

Figure 4. Large unilocular cystic structure lined by a double-layered epithelium (H&E: 100x).

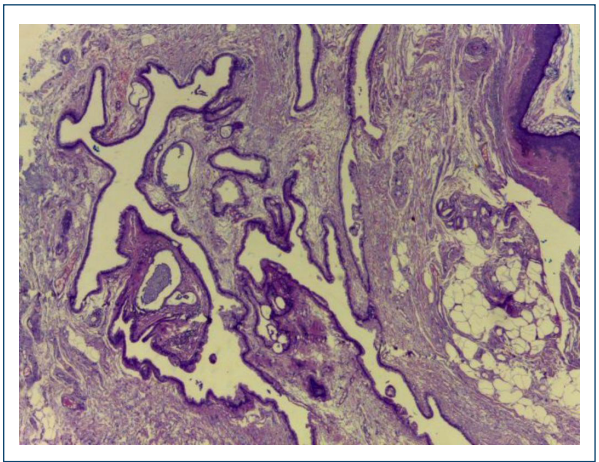

Figure 5. Lower-magnification view showing the cystic cavity and apocrine secretion (H&E: 4x).

Confidentiality, informed consent, and ethical approval. The authors have followed their institution's confidentiality protocols, obtained informed consent from patients, and received approval from the Ethics Committee. The SAGER guidelines were followed according to the nature of the study.

Declaration on the use of artificial intelligence. The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

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