



CASE REPORT

Multiple Eccrine Hidrocystomas of Scalp

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Abstract

Hidrocystomas are rare benign cystic tumours that arise from the sweat glands (eccrine or apocrine). Eccrine hidrocystomas predominantly occur on the face as asymptomatic, skin-colored lesions with a chronic course and seasonal variability. They are more prevalent in females between the age of 30-70 years. Although rare and asymptomatic, they can be cosmetically disfiguring. Diagnosis can be made by histopathological examination, which reveals a unilocular cyst, with cystic cavity lined by one or two layers of cuboidal cells. Treatment options include medical, surgical and laser therapy. Here, we report a rare presentation of multiple eccrine hidrocystomas over the scalp.

Keywords

Hidrocystoma, Eccrine Gland, Scalp

Introduction

Eccrine hidrocystomas (EHs) are rare, benign, thin-walled cysts varying in diameter from 1-6 mm.^[1] They were first described by Robinson in 1893, in women working in a hot and humid environment.^[2] They can occur as solitary or multiple lesions, predominantly involving the periorbital and malar regions of the face. Solitary lesions show no gender predilection, whereas multiple eccrine hidrocystomas are commonly seen in adult females.^[1] EH is due to malformation of the eccrine sweat ducts that causes either temporary or permanent retention of sweat and dilation of the ducts. These lesions are found to show exacerbation during hot or humid weather. Here we report, probably for the first time, a case of multiple eccrine hidrocystomas over the scalp, an unusual site of presentation.^[3]

Case report

A 60-year-old woman presented to our dermatology outpatient department with complaints of multiple asymptomatic skin-colored raised lesions over the scalp for the past 3 months. She gave history of recurrence and aggravation of lesions during summers over the past 30 years. There was no history of similar skin lesions anywhere else on the body. She is a known case of

hyperthyroidism on medication for the past 15 years. On examination, multiple well-defined, smooth surfaced, dome shaped, skin-colored papules and few cystic lesions varying between 3-6mm in diameter were noted over the scalp [Fig 1a, 1b]. Differential diagnoses of appendageal tumors, xanthoma, trichoepithelioma and histiocytosis were considered. Routine investigations including lipid profile and thyroid profile were done and were normal. Punch biopsy of a papule was taken from the most represented lesion, which revealed an irregularly dilated cyst, lined by double layered cuboidal epithelium in the superficial dermis and surrounding hair shafts. No cellular atypia was noted. There was no evidence of decapitation secretion, thus ruling out apocrine hidrocystoma [Fig 2a, 2b]. A final diagnosis of multiple eccrine hidrocystomas of the scalp was made. Owing to the presence of multiple lesions and their site, combination of medical (topical anticholinergics) and surgical (electrocautery) therapy was considered as treatment option. Patient was non-compliant and has lost follow-up.

Discussion

Eccrine hidrocystomas are benign cysts of the eccrine

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Fig 1a, 1b: Shows multiple skin-colored papules and few cystic lesions on scalp.

duct commonly affecting the face.^[1-8] The exact etiopathogenesis is not known, but poral closure and adenomatous proliferation of excretory sweat duct are thought to be the causes of sweat retention and secondary dilatation of sweat duct.^[8] They are currently classified into two types according to the number of lesions, the 'Classic Robinson' type and 'Smith and Chernosky' type.^[3,4] The characteristic lesions seen in robinson type were multiple, small papules affecting the periorbital and malar areas and those in smith and chernosky were mostly solitary lesions, majority occurring in males. EH has been primarily described on the central face, but few cases involving the ear canal, lips, vulva, shoulder and chest have been reported.^[4] Only one case of solitary, giant eccrine hidrocystoma involving the scalp has been reported in literature so far, but, multiple EH on the scalp has not been reported.^[2]

EH may be associated with syndromes like Goltz-Gorlin Syndrome, Schopf-Schulz-Passarge syndrome, parkinson's disease, prolactinoma, conditions with hyperhidrosis like Graves' disease and idiopathic craniofacial hyperhidrosis.^[1] Electrocautery, puncture and drainage, surgical excision, microdermabrasion, carbon dioxide laser, pulsed dye laser, anticholinergic creams (topical atropine, scopolamine), botulinum toxin, 2.4% topical glycopyrronium tosylate have all been tried as treatment modalities for eccrine hidrocystoma with variable efficacies.^[6,7] Avoiding hot temperature and humid weather and regular treatment for thyroid disease and hyperhidrosis would help prevent disease onset as well as worsening of the lesions.

Conclusion

Although eccrine hidrocystomas are usually asymptomatic and have seasonal variations in most of the cases, they can be of cosmetic concern and may also lead to anxiety in the patients. This case is being reported due to the



Fig2a: H&E, x 4X magnification, showing irregularly dilated, unilocular cyst, surrounded by hair shafts in superficial dermis.

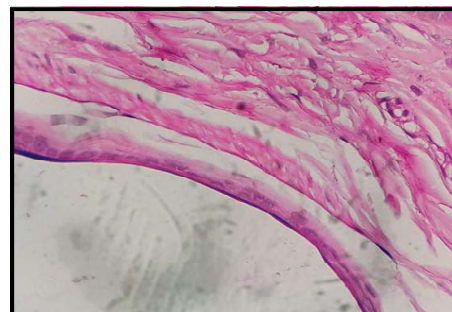


Fig 2b: H&E, x 40X magnification, showing cyst cavity lined by double layered cuboidal epithelium.

rare occurrence of multiple eccrine hidrocystomas over the scalp and the close resemblance to xanthomas posing a clinical diagnostic difficulty.

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