GIANT APOCRINE HIDROCYSTOMA OF THE ANAL REGION

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ABSTRACT

Apocrine hidrocystomas (HCs) are cystic lesions that arise from the apocrine secretory coil. Here we report a rare case of giant apocrine HC of the anal region, for which an excisional biopsy was performed. Histopathologically, the lesion was a unilocular cyst lined by bi-layered epithelium with inner columnar cell showing decapitation secretions. Based on histopathological findings, diagnosis of apocrine HCs was given. Here, we present it for its rarity.

Key words: Anal region, apocrine, hidrocystoma

INTRODUCTION

Hidrocystomas (HCs) are rare benign cystic tumor like lesions. They may present as solitary or multiple translucent nodules of cystic consistency and are known to occur in the penis, axillae, chest, shoulders, head and neck, feet and rarely in the anal region.[1-3]

Commonly it presents as a tumor of the skin and the color of tumor varies from skin and maybe pink, purple, brown or blue. It can also be called as giant HC if the diameter is more than 10 mm.[4] This case report deals with such a rare tumor presenting with a soft swelling in the anal region.

CASE REPORT

A 50-year-old male presented with a painless swelling in the perianal region. On examination, swelling was soft, movable present about 4 cm from the anal verge and a clinical diagnosis of lipoma was done. Systemic examination was normal. Routine blood and urine investigations were within the normal limits. Excision biopsy of the specimen was sent for histopathological examination.

Received specimen was partly skin covered measuring 3 cm × 4 cm. Cut section revealed a solitary cystic lesion ms 2 cm × 1 cm with clear fluid. Hematoxylin and eosin stained sections showed epidermis with a cyst in the mid-dermis [Figure 1a]. The cyst wall was lined by a cylindrical epithelium of the apocrine secretory type and below it was an outer layer of myoepithelial cells [Figure 1b]. The inner epithelium lining was composed of columnar cells with eosinophilic cytoplasm and basally located nuclei showing a decapitation secretion indicative of apocrine secretion. Based on these histological features, diagnosis of apocrine HC was done.

DISCUSSION

HCs are rare, benign adnexal cystic lesions. They are classified based on their presume histogenic differentiation and histological characteristics into two types – apocrine and eccrine HCs. Apocrine HCs are usually solitary and found mostly on the head and neck.[3]

Apocrine HC arises from the secretory coil of apocrine sweat glands. The exact stimulus has not been identified for development of an apocrine HC. Sweat duct blockage or occlusion leading to retention of sweat and dilated cystic structures could be one possible theory. Another theory could be the adenomatous cystic proliferation of the eccrine glands.[2,3]

Histological distinction between eccrine and apocrine HC is based on the presence of secretory cells showing decapitation secretion. The secretory

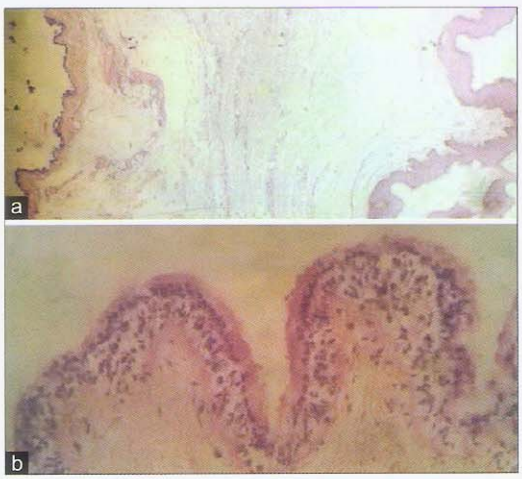

Figure 1: (a) Section shows epidermis with cyst in mid-dermis (H and E, ×4). (b) Section shows bilayered epithelium with inner cell layer showing decapitation secretions (H and E, ×40)

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cells contain periodic-acid-Schiff positive, diastase resistant granules and occasionally contain pigment granules, which can give brown color in the cystic fluid. Immunohistochemically, apocrine HC is positive for human milk fat globules, gross cystic disease fluid protein 15, cytokeratin 7 and alpha-smooth muscle actin. Eccrine HC is negative for all of them.[3,4]

Solitary lesions are usually apocrine HC. Eccrine HC can be multiple and could be an important marker of two rare inherited syndromes: Schopf-Schulz-Passarge syndrome and Goltz-Gorlin syndrome. Apocrine HCs, unlike eccrine HCs do not have any seasonal variation or become symptomatic in hot weather.[3,5,6]

Ultrasound, CT and MRI have also been used in the initial investigation before confirmation by histopathology and immunohistochemistry. Morphologically apocrine HC has a double lining of the epithelium with inner columnar or cuboidal with decapitation secretions and an outer side consisting of myoepithelial cells.[3,7]

Cysts are entirely benign and seldom recur after removal. Solitary lesions are usually treated by simple excision. Apocrine HCs can be incised and drained; however electrosurgical destruction of the cyst wall is recommended to avoid recurrence. Multiple apocrine HCs can be treated with carbon di-oxide laser vaporization.[4]

CONCLUSION

Apocrine HCs are rare and might resemble clinically other skin/soft tissue disorders. Other benign cystic lesions also need to be ruled out, before a histopathological diagnosis of HC is made.

REFERENCES

1. Ishida M, Iwai M, Kagotani A, Iwamoto N, Okabe H. Apocrine hidrocystoma with mucinous metaplasia. Int J Clin Exp Pathol 2014;7:2698-700.
2. Vani D, Dayananda TR, Shashidhar HB, Bharathi M, Kumar HR, Ravikumar V. Multiple apocrine hidrocystomas: A case report. J Clin Diagn Res 2013;7:171-2.
3. 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 Neck Pathol 2014;8:117-21.
4. Shishegar M, Ashraf MJ, Azarpira N. Apocrine hidrocystoma in external auditory canal. Iran Red Crescent Med J 2007;9:42-4.
5. Yaghoobi R, Saboktakin M, Feily A, Mehri M. Bilateral multiple apocrine hidrocystoma of the eyelids. Acta Dermatovenerol Alp Pannonica Adriat 2009;18:138-40.
6. Lee MJ, Yang HJ, Kim JH, Yim HW, Lim JM, Lee HK. Apocrine hidrocystoma of the cheek. Arch Plast Surg 2012;39:86-8.
7. Chin SC, Chen CY, Zimmerman RA. Pericoccygeal hidrocystoma. AJNR Am J Neuroradiol 1998;19:587-8.

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