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A case of suboccipital lump with a rare and unexpected diagnosis of apocrine cystadenoma

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ABSTRACT

INTRODUCTION: Cystadenoma of apocrine origin is a tumour of the sweat gland that is benign in nature. Classification of this pathology is based upon histological characteristics plus histochemical analysis. Prevalence of cystadenoma has been suggested to be quite rare, in the region of 1 in 1000 of subcutaneous biopsies observed.

PRESENTATION OF CASE: We present a case of a 40 year old man referred by his GP with a suboccipital lump, present for some years. On examination the lump was approximately 4–5 cm in diameter and an unusual punctum was present. The patient proceeded to an excision of the lesion and the gross specimen showed characteristics of a multiloculated cyst, measuring some 5 cm × 3.5 cm. Histopathology of the tumour revealed an apocrine cystadenoma; there were no features suggestive of malignancy.

DISCUSSION: Previous classification of cystadenoma via histological and immunohistochemical method; has revealed only two distinct entities and the term hydrocystoma was often used in place of cystadenoma. More recent studies have suggested that a third type can be identified via immunohistochemical analysis. This third type; apocrine hydrocystoma, reveals that those previously defined as eccrine in origin may also be related to the apocrine ducts.

CONCLUSION: Apocrine cystadenoma remains a benign pathology and treatment should be focussed on excision, without need for further intervention. Apocrine cystadenoma remains a relatively rare pathology, though one which should not recur if adequate treatment is given.

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1. Introduction

Cystadenoma of apocrine origin is a tumour of the sweat gland that is benign in nature [1]. The lesions generally present as small cutaneous nodules, which are mainly solitary; occurring on the face, neck and trunk. Other regions have been described, as well as lesions from multiple sites, in the same patient. Such tumours are generally less than 1 cm in diameter, but in rarer cases larger cystadenoma's have been found. Classification of this pathology is based upon histological characteristics plus histochemical analysis [2]. Prevalence of cystadenoma has been suggested to be quite rare, in the region of 1 in 1000 of subcutaneous biopsies observed [3].

2. Presentation of case

We present a case of a 40 year old man referred by his GP with a suboccipital lump, present for some years. The patient had

requested removal of the lump, as it had become more noticeable, slowly growing in size over time. He denied any pain caused by the lump and there were no other associated symptoms. There was no prior medical history and he was otherwise fit and well, the patient did not report any significant family history.

On examination the lump was approximately 4–5 cm in diameter and an unusual punctum was present (see Fig. 1). It was adherent to the epidermis and was suspected to be cystic from its characteristics. Differential diagnoses were tending towards a sebaceous cyst rather than a lipoma, clinical suspicion of malignancy was low. No imaging was performed of the lesion prior to excision, and the procedure was to be done under a general anaesthetic, due to size of the lesion, location and patients overall good health.

The patient proceeded to an excision of the lesion and the gross specimen showed characteristics of a multiloculated cyst, measuring some 5 cm × 3.5 cm (see Fig. 2). An ellipse of skin was taken to allow adequate primary closure with minimal dead space (see Fig. 3). Histopathology of the tumour revealed an apocrine cystadenoma; there were no features suggestive of malignancy. Due to this no adjuvant therapy was required and primary resection

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Fig. 1. Suboccipital lump—pre-operative.



Fig. 2. Gross specimen excised—multiloculated cyst (apocrine cystadenoma).

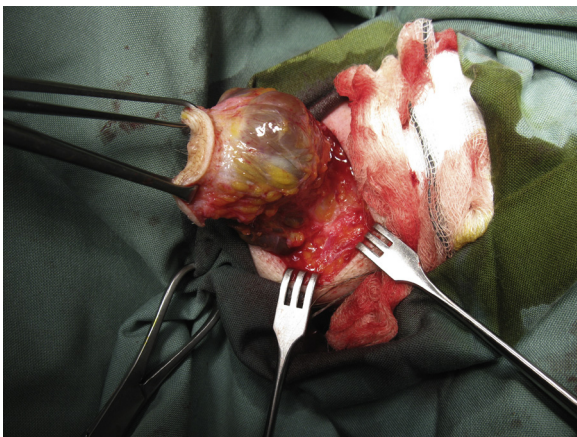


Fig. 3. Intra-operative photo of lesion being excised in a fashion to limit dead space.

was the only treatment. It was shown to be a cystic structure, with flattened epithelial cells in communication with structures in the subcutaneous tissue, which had an apocrine morphology. The post-operative period was without complication and there has been no recurrence at this stage.

3. Discussion

Previous classification of cystadenoma via histological and immunohistochemical method; has revealed only two distinct

entities and the term hydrocystoma was often used in place of cystadenoma. The two types of cystadenoma most commonly described are those of eccrine, or of apocrine cellular origin. While unique at the cellular level, the two types of cystadenoma are not able to be differentiated clinically [1]. More recent studies have suggested that a third type can be identified via immunohistochemical analysis. This third type; apocrine hydrocystoma, reveals that those previously defined as eccrine in origin may also be related to the apocrine ducts. de Viragh et al. showed that apocrine cystadenoma showed an affinity to secretory coils within the apocrine sweat gland. Furthermore they illustrated that cystic tumours may be related to the eccrine sweat duct or the apocrine sweat duct. In establishing this, a third way to classify such tumours has been suggested, which means that the terminology of hydrocystoma and cystadenoma should not be used interchangeably, as has been the case in the past [4].

4. Conclusion

Apocrine cystadenoma remains a benign pathology and treatment should be focussed on excision, without need for further intervention. Wide local excision with negative margins remains the main stay for treatment of a solitary tumour [2]. Adjuvant therapy is not required, if histological diagnosis can be made without question of malignancy. From the literature we can see that it is important to distinguish the true histological characteristics, to ensure a correct diagnosis is made. Care should be taken when describing such lesions, to ensure that the true nature of the tumour is identified. Apocrine cystadenoma remains a relatively rare pathology, though one which should not recur if adequate treatment is given.

Conflict of interest

None.

Funding

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Ethical approval

No ethics approval was required for this case report.

Consent

Consent from the patient has been obtained.

Author contributions

Richard Maguire: Primary author and constructor of most of the body of report etc.

Errol Maguire: Provided the case and pictures for the report. Also helped in the editing process for submission.

Guarantor

Dr Richard Maguire.

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