CASE REPORT

Congenital Inclusion Cyst Of The Subgaleal Space: A Case Report

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ABSTRACT

Background: *Subgaleal cysts are epidermal cysts located under the galea aponeurotica. They are rare lesions but are commoner among the children of African descent. To the authors knowledge, none has been described in Kano, Northwestern, Nigeria.*

Methods: *We present the management of a 6 month old Nigerian boy with scalp swelling.*

Result: *The scalp swelling was noticed soon after birth and was progressively increasing in size. There was no preceding fever or trauma to the scalp and no associated pain. At six months, the child could sit without support and had attained adequate neck control. Examination revealed a swelling over the anterior fontanelle, measuring 3x2cm. The swelling was hemispherical, firm, fluctuant, and non-tender. It was not pulsatile. Its size did not increase on crying. Diagnosis was confirmed by plain x-ray film and transfontanelle sonography. Total excision of the mass was carried out under general anesthesia and histology confirmed the diagnosis of epidermal inclusion cyst. The child was discharged home in good condition.*

Conclusion: *Awareness of this lesion will avoid misdiagnosis and inappropriate treatment.*

KEY WORDS: *Subgaleal cyst; Anterior fontanelle; Inclusion cyst.*

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INTRODUCTION

Subgaleal cysts are epidermal cysts located under the galea aponeurotica. They are rare lesions[1]. When found, they are located in the midline of the scalp anywhere from the nasion to the anion commonly in the subgaleal space over the anterior fontanelle[2].

The purpose of this write up is to highlight the clinical features and management of this rare benign lesion, which is surgically curable.

CASE REPORT

SA, a six-month-old male child was first seen in the Paediatric Out Patient Department of the Aminu Kano Teaching Hospital (AKTH). His mother complained of a scalp swelling that was noticed soon after birth and was progressively increasing in size. There was no preceding fever or trauma to the scalp and no associated pain. No attempt was made to incise the swelling. At six months, the child could sit without support and had attained adequate neck control.

Examination revealed an active, afebrile, well-nourished child weighing 8.6 kg with a 3x2cm swelling over lying the anterior fontanelle. The scalp swelling was hemispherical, firm, fluctuant, and non-tender. It was not pulsatile. Its size did not increase on crying (Fig. 1).

A plain radiograph of the skull revealed a soft tissue swelling over the anterior fontanelle with normal cranial vaults. Transfontanelle ultrasound revealed a cystic mass overlying the anterior fontanelle. There was no communication with the cranial cavity. The ventricles were not dilated. The cerebral and cerebellar hemispheres were within normal limit. No intracranial mass lesions were seen. Based on the clinical and radiological features, a diagnosis of subgaleal dermoid cyst was made. The lesion was excised under general anaesthesia and sent for histology. This revealed a fibrous cyst wall lined by keratinised squamous epithelium with several adnexial structures confirming the diagnosis of epidermal inclusion cyst.

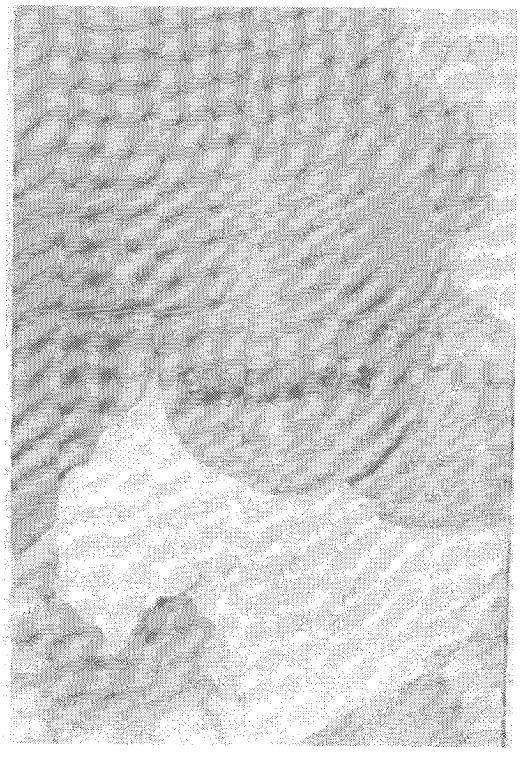

Fig. 1. Photograph of the Patient

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DISCUSSION

Subgaleal cysts are rare lesions but are commoner among the children of African descent[3]. They are either dermoid or epidermoid in nature, usually located in the midline of the scalp especially but not exclusively over the anterior fontanelle. There appears to be variable gender dominance in the cases described elsewhere[1-4]. The lesion is present at birth though hardly noticeable until few months later when it grows to prominence. It is oval or hemispherical in shape, with loose attachment to the overlying aponeurosis and underlying epicranium[5]. A subgaleal cyst is usually firm in consistency, fluctuant, and non-tender and easily transilluminates since it contains clear fluid. The lesion does not increase in size on crying or coughing since there is no intracranial extension. Usually, there is no motor or mental impairment. It increases in size as the child grows older and persists into adulthood. Several cases have been described in adults[6,7]. Though commonly benign, malignant transformation may occasionally occur if left untreated[8]. Few lesions can hardly be confused with this slow growing mass. But it may be mistaken for meningitis in early infancy. Its rarity among the Asians made some Japanese workers to consider diagnosis like sinus pericranii and pseudomeningocoele; these workers punctured the cyst but it recollected again within two weeks[9].

The diagnosis is confirmed by plain x-ray film and transfontanelle sonography. Plain films usually show a soft tissue mass superficial to the anterior fontanelle with normal subcutaneous fat layer above it while sonography usually shows a well defined sonoluscent interior with a clear wall separating it from the superior sagittal sinus and other intracranial contents[10]. A misdiagnosis may lead to a dangerous puncture or incision that may be complicated by meningitis and its sequelae.

Treatment is achieved by total resection through a transverse scalp incision [5] as shown in this case. It is concluded that awareness of this lesion will avoid misdiagnoses and inappropriate treatment.

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