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Epidermoid Cyst of the Anterior Fontanel a Case Proposition: Fousseyni Daou Hospital of Kayes

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Abstract **Case Report**

An epidermoid cyst is a benign tumor of embryonal origin. It is associated with abnormal localization of ectodermal tissue. The cystic wall is composed of a malpighian epithelium. Your localization at the level of the anterior fontanelle is rare. We report a case operated in our service in 2023. Our aim is to describe the clinical aspects; radiological services; therapeutic and evolutionary implications of this pathology.

Keywords: Epidermoid Cyst, Fontanelle, Rare.

INTRODUCTION

Congenital epidermoid cyst of the anterior fontanelle is a painless non pulsatile, poorly mobile fixed tumor. It can be observed at birth, covered with healthy hair skin, with a tendency to progressively increase in size. It is usually isolated without other clinical and radiological abnormalities. Psychomotor development is age-related normal. The somatic examination does not generally reveal any associated lesions. Multiple imaging modalities may compete in practice to the diagnostic approach. Ultrasound was our main imaging modality to establish the diagnosis.

OBSERVATION

There was a case of an 8-month-old girl who was referred to us for tumefaction of the fontanelle from birth and progressively increasing in volume.

The infant was born at term with no particularities. A clinical examination the tumor measured approximately 5 cm by 3 cm, slightly mobile and presented a very severe infection. We proceeded with a treatment of the infection with antiseptics and antibiotics. 2 weeks after resolution of infection. A transfontaneous ultrasound confirmed the diagnosis of an epidermoid cyst.

We planned to proceed with en bloc ablation of the cyst (see images). The biological balance was normal with a hemoglobin level of 14 g /dl. The diagnosis was confirmed to anapath. Postoperative follow-up was uneventful without recurrence after 6 months of retreatment.

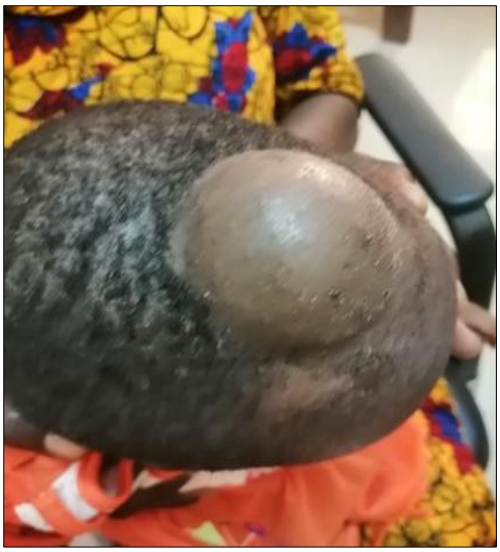

Fig. 1: frontal mass before surgery

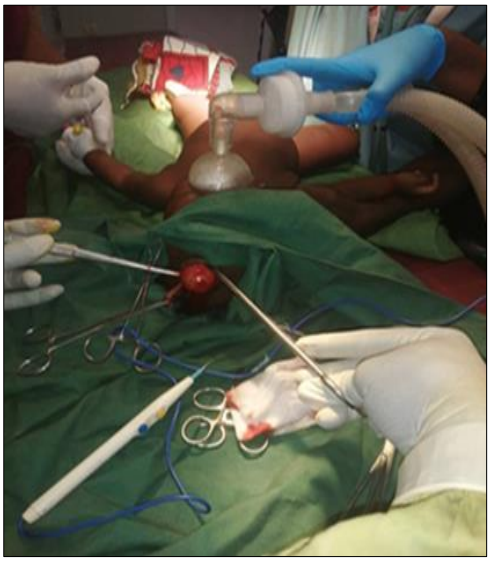

Fig. 2: incision and dissection of the cyst

Fig. 3: Cyst ablation

Fig. 3: Cyst ablation

DISCUSSION

During the entire year 2023 we had reviewed only one case out of 150 female sex hospitalized patients this is in agreement with the result of several authors including YAHIAOUI A.M and col. [4]. In the literature most cases are of discovery at the age of feeding as in our case at 8 months. The detection can be done prenatally but is difficult in our context due to the precarity of prenatal consultations. Carvahlot A. *et al*., [2], had specified that no predominance of one sex relative to the other was found in the literature. These –could be explained by an insufficient number of observed cases. On the embryological plane, epidermoid cysts of congenital origin result from the aberrant inclusion of an ectodermal element during the closure of the neural tube between the 3rd and 5th weeks of embryonic development. The anterior fontanelle is the privileged site for embryonic fusion which would explain this location [1]. In our case the cyst was sitting at the level of the anterior fontanelle from birth according to the history and has progressively enlarged in this confirming the literature. It is usually isolated without other clinical and radiographic abnormalities [5]. Which is corollary to our observation. In imaging the ultrasound was the main examination and diagnosis that targeted the cyst without communication with the brain. As per all authors [1-9], the treatment is surgical by en bloc ablation of the cyst as in our case. The sequels are generally favourable.

CONCLUSION

Epidermoid cyst of the fontanelle is extremely rare in our region where the treatment is en bloc ablation to prevent recurrence.

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