

## PAEDIATRIC OPHTHAMOLOGY AND STRABISMUS

### A Case Series of Congenital Globe Abnormalities Seen at the University of Benin Teaching Hospital, Benin City, Nigeria

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**Introduction:** Congenital globe anomalies are structural defects of the eyeball that occur during intrauterine life and are present at birth. The cause may be unknown, from genetic or environmental factors. Mal-development of the eyes can range from complete absence, deformed to incompletely developed eyeballs.<sup>1,2</sup> The Paediatric Ophthalmology Unit of the University of Benin Teaching Hospital is a referral center for patients from within and outside Edo State. We present a series of seven cases of globe abnormalities at this facility seen in the last two years. Parents gave consent for photographs to be taken and the pictures were carefully cropped to conceal patients' identities in keeping with the declaration of Helsinki.

#### Case Presentation:

**Case 1:** Right microphthalmos, Left cystic eye  
EH is a female referred from Delta State at age 5 days with a history of inability to open the eyes at birth. Examination revealed a microphthalmic right eye (RE) and a cystic mass in the left socket with no eyeball visualized.

#### Case 2: Bilateral Anophthalmia

OE, a male, presented at age 2 months with a history of difficulty in opening the eyes since birth. On examination, there was bilateral anophthalmia.

#### Case 3: Left Congenital cystic eyeball

KA is a 16 day old male baby who presented with mass in the left eye since birth. The mass had remained the same in size and did not change with crying. On examination, there was a pedunculated cystic mass, measuring about 3cm by 4cm, which



**Figure 1:** Left congenital cystic eyeball

transilluminated brightly (Figure 1). The right eye was normal.

#### Case 4: Right microphthalmia and left incomplete cryptophthalmos

IE, a one week old female presented with inability to open the right eye and a swelling of the left eye from birth. Examination showed a microphthalmic RE and the left eye was completely covered with skin. Ultrasound scan of left orbit showed an amorphous echogenic structure without a well-defined globe.

#### Case 5: Left Cryptophthalmos

SL is a 15 day old baby who presented with inability to open the left eye. On examination, the right eye was normal. The left eye had absence of



**Figure 2:** Left cryptophthalmos

the lids with the skin continuous over the globe (Figure 2).

#### Cases 6 and 7: Mass right eye

OE and AS. These patients, both males presented at different times at age 3 weeks and 4 months with a mass in the right orbit and a normal looking left eye. The surface of the mass appeared

covered with keratinized conjunctiva. The patients were worked up for enucleation.

**Conclusion:** It is difficult to ascertain the causes of the congenital anomalies observed because many of the parents were unable to give a useful account of the incidents that occurred in early pregnancy. Exposure to irradiation may contribute. Facilities for genetic studies are not readily available to help determine the genetic make-up or chromosomal abnormality that may have contributed to the development of the abnormality.<sup>3</sup> In studies by Chuka-Okosa et al<sup>4</sup> and Onwasigwe<sup>5</sup>, the possible causes of these anomalies were also not ascertained. Three patients were referred from Delta State known for its environmental pollution which may be a pointer to a possible role. More studies will need to be done to clarify this role.

#### **References**

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