Isolated Ankyloblepharon Filiforme Adnatum in a Nigerian Neonate

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Introduction: Ankyloblepharon filiforme adnatum (AFA) is a rare congenital malformation affecting the eyelids. It consists of a single or multiple bands of tissues joining the upper and lower lids either unilaterally or bilaterally.[1] This is different from simple ankyloblepharon where the lid margins are fused directly[2]

AFA is amblyogenic and when associated with other congenital abnormalities it may account for high mortality and morbidity.[3] We report a case of a newborn with isolated AFA treated on the twentieth day of life.

Case Report: This is a case report of a 20 days old male neonate, product of term gestation in a non-consanguineous marriage. Pregnancy and delivery were uneventful. He presented with inability to open both eyes since birth and noted to have partially fused lids with bands of tissue arising from the grey line attached to both the upper and lower lids (Figure 1).

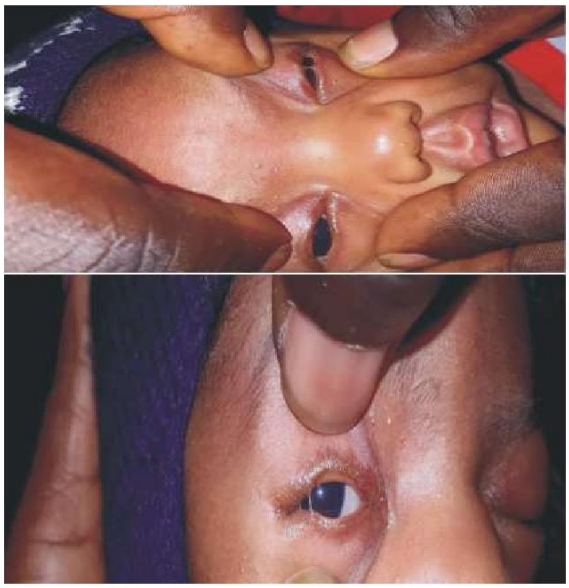

Figure 1: Bilateral ankyloblepharon filiforme adnatum

The adhesions were divided with the use of Vannas scissors and McPherson's forceps, cutting along the lid margin on the upper lid and lower lid. There was minimal bleeding and no sedation or local anesthesia was required.

At follow up visit, no abnormality was noted and both eyelids were opening normally (Figure 2).

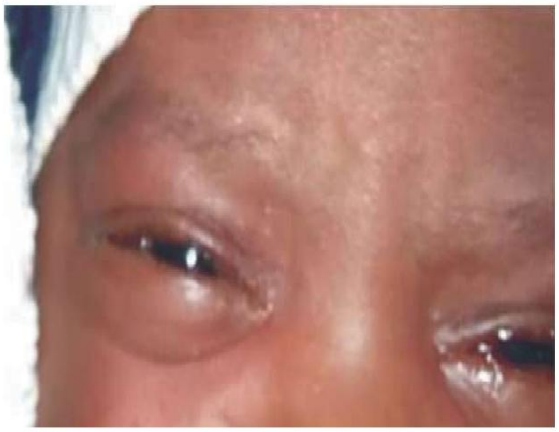

Figure 2: Eyelids after excision of the bands

Pediatrician's review found no other congenital abnormality hence diagnosis of an isolated AFA was made.

Discussion: Ankyloblepharon filiforme adnatum (AFA) is a rare but potentially amblyogenic congenital abnormality of the eyelids, it can be isolated as in our patient or associated with other congenital anomalies. Treatment is by simply excising the bands without sedation or anesthesia.[4] The band is composed of a central vascular connective tissue with muscle fibers and sub-epithelial glands found on histology.[5] The pathogenesis involves a temporary arrest of the growth of epithelium or more probably, an abnormally rapid proliferation of mesoderm allowing union of the lids.[5] Ophthalmic associations include iridogoniodysgenesis and juvenile glaucoma.[1,6]

Our patient had an isolated AFA, however he will be followed up to monitor the intraocular pressures in case he develops infantile or juvenile glaucoma.

Conclusion: Ankyloblepharon filiforme adnatum (AFA) is a rare congenital condition which can be easily missed at birth. Early diagnosis and treatment is necessary to avoid amblyopia and because AFA can be a pointer to other multisystemic disease.

References

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