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Letter to Editor

An infant with ankyloblepharon filiforme adnatum associated with a cleft lip and palate: A case report

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Dear Editor,

Ankyloblepharon filiform adnatum (AFA) is a rare but potentially ambylogenic congenital anomaly characterized by a partial or complete fusion of the eyelid margins.[1] Although AFA has been reported as an isolated finding, it also has been associated with several disorders or as a part of well-defined syndromes (e.g., Edwards, Hay–Wells, popliteal pterygium, and curly hair-ankyloblepharon-nail dysplasia syndromes).[2] Rosenman et al[3] classified AFA into four groups: The first group consists of isolated cases that occur sporadically with no associated defects and with no particular genetic pattern; the second group is associated with life-threatening cardiac and CNS defects; the third group that occurs with ectodermal syndromes and has an autosomal dominant pattern; and a fourth group associated with cleft lip and palate defects, which were recorded in the proband or the extended family. Bacal et al[4] further proposed the fifth group that includes AFA associated with chromosomal abnormalities. Williams et al[5] introduced the sixth group, covering the cases with a family history of AFA without systemic anomalies. Therefore, the discovery of AFA requires a thorough pediatric examination. An early diagnosis and management of AFA prevent a stimulus deprivation amblyopia, which can cause a devastating effect on the visual acuity of the neonate. Simple excision of the tissue band from the lid margins has been used to treat AFA.

We report a rare case of a full-term female infant born by vaginal delivery, referred to our institution to assess her bilateral eyelids at four days. The infant had uneventful antenatal, intranatal and postnatal periods. There was no family history of congenital anomalies, and her mother denied taking medication during pregnancy. Physical examination revealed the presence of a left-sided cleft lip and cleft palate (Fig. 1A). The rest of the systemic examination was within normal limits. Ocular examination showed bilateral partially fused eyelids by broad central bands of tissue arising from the grey lines (Fig. 1A), impairing full eye-opening. The posterior surfaces of the eyelids, ocular movement, anterior segment, and fundus examination appeared normal. The baby also had a left-sided lip and cleft palate (Fig. 1A). The diagnosis of AFA was made. The bands of tissue were dissected with a Swann Morton scalpel blade no. 15 under sterile conditions at the age of four days. There was no bleeding. No sedation or local anesthetic was required. At the end of the surgery, there was a complete resolution of AFA (Fig. 1B–C). Tobramycin ophthalmic ointment was prescribed twice daily for one week.

The postoperative course was uneventful, and the ophthalmic follow-up six and twelve months after surgery showed normal ocular findings. The lip and palate clefts were surgically corrected at the age of ten months.

In conclusion, timely diagnosis and treatment of AFA prevent a stimulus deprivation amblyopia that can cause a devastating effect on the visual acuity of the neonate. Although AFA is a relatively uncommon anomaly, physicians facing it should be aware of its possible link to other potentially serious congenital anomalies.

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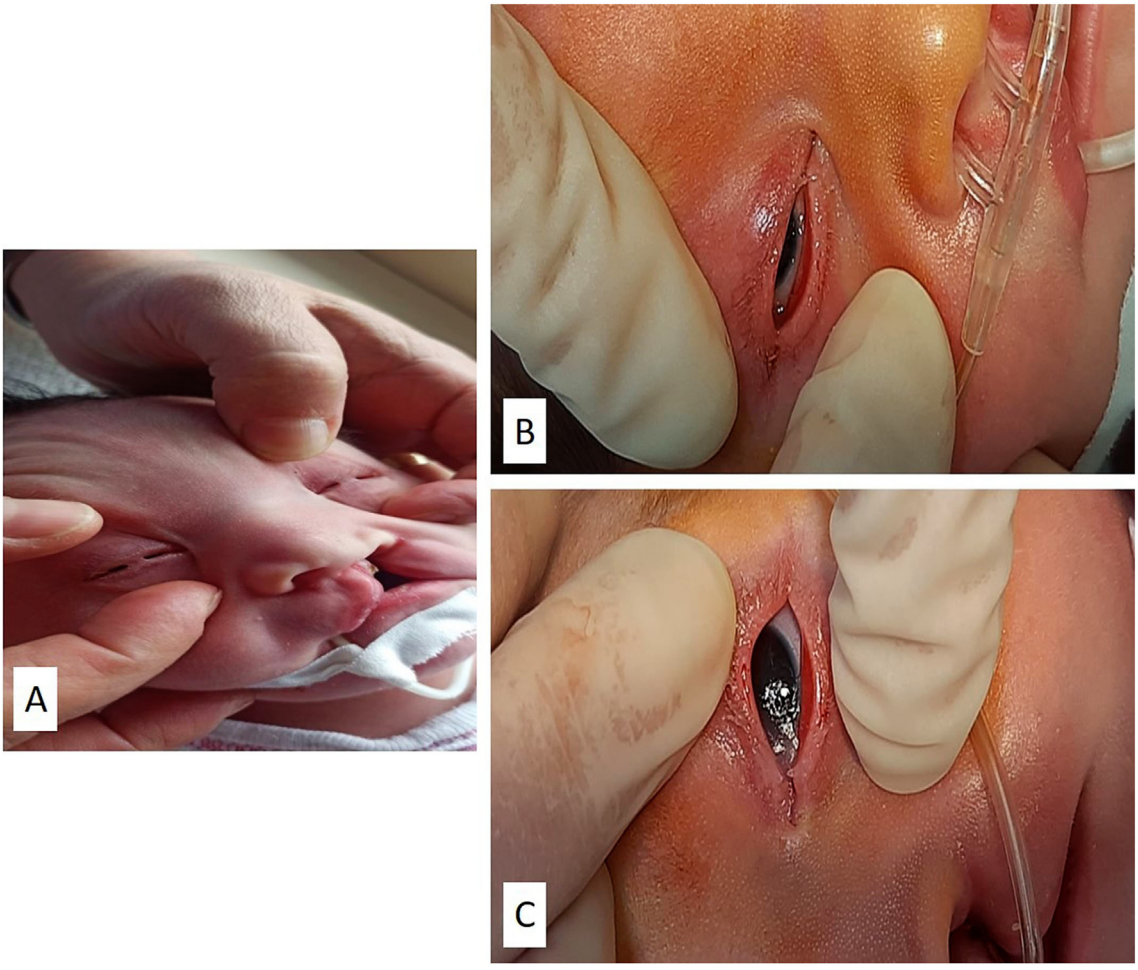

Fig. 1. A–C. Manual retraction of the eyelids shows ankyloblepharon filiforme vertically connecting both eyes and left-sided cleft lip and cleft palate (A); completely opened eyes after tissue bands excision (B and C).

Declaration of competing interest

The authors have no conflict of interest to declare.

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The authors acknowledge the patient's parents for permitting us to report this peculiar case.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.asjsur.2022.05.116.

References

1. Koubek M, Strakosova K, Timkovic J, et al. A rare form of ankyloblepharon filiforme adnatum associated with the Hay-Wells syndrome and a c.1709T>C mutation on the TP63 gene. *Ophthalmic Genet*. 2018;39:251–254.
2. Chakraborti C, Chaudhury KP, Das J, Biswas A. Ankyloblepharon filiforme adnatum: report of two cases. *Middle East Afr J Ophthalmol*. 2014;21:200–202.
3. Rosenman Y, Ronen S, Eidelman AI, Schimmel MS. Ankyloblepharon filiforme adnatum: congenital eyelid-band syndromes. *Am J Dis Child*. 1980;134:751–753.
4. Bacal DA, Nelson LB, Zackai EH, Lavrich JB, Kousseff BG, McDonald-McGinn D. Ankyloblepharon filiforme adnatum in trisomy 18. *J Pediatr Ophthalmol Strabismus*. 1993;30:337–339.
5. Williams MA, White ST, McGinnity G. Ankyloblepharon filiforme adnatum. *Arch Dis Child*. 2007;92:73–74.

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