Ankyloblepharon Filiforme Adnatum in Premature Infants

Arjun Patel*, Buraine Bockman and Ellis Beesley
Pediatrics Clinic of Dr. Beesley, USA

Abstract

Ankyloblepharon Filiforme Adnatum (AFA) is a benign rare congenital disorder of the eyelid. It is characterized by single or multiple thin filamentous bands of tissue connecting the eyelid margins. AFA may occur in isolation, however, can be associated with additional anomalies related to chromosomal changes. In certain cases, the rate of regression of this band of tissue can occur in infants younger than six months. Our patient who was 20 weeks old was presented with a thin fibrous band of tissue that was present on the left eyelid. He was born 4 weeks premature.

Keywords: Isolated Ankyloblepharon filiforme adnatum; CNS; Infant

Introduction

Ankyloblepharon Filiforme Adnatum (AFA) is a benign rare congenital disorder of the eyelid [1]. It is characterized by single or multiple thin filamentous bands of tissue connecting the eyelid margins. AFA may occur in isolation, however, can be associated with additional anomalies. Rosenman et al. [2] categorized AFA into 4 types based on associated anomalies and genetic abnormalities that are present. Type I: Sporadic and isolated; Type II: Sporadic with CNS and/or cardiac anomalies; Type III: Autosomal dominant with ectodermal syndromes; Type IV: Autosomal dominant with cleft lip and/or palate and Clark et al. [3] and Balcal et al. [4] later proposed the fifth subgroup that is associated with trisomy 18. Williams et al. suggested the sixth group for an inherited autosomal dominant and isolated type. The treatment of AFA consists of resection of the fibrous strands. Some cases have been resolved spontaneously before the age of 4 months (Alba Martinez-Ortiz, MD).

Our patient presented at 20 weeks for a well child checkup in which a single thin fibrous band of tissue connected his left upper and lower eyelid. This fibrous band was visualized near the patient’s left lateral canthus. Patient appeared to be in no acute distress or discomfort and was able to open the left eye to greater than 90%. Patient is currently being seen by a pediatric ophthalmologist for ankyloblepharon filiforme adnatum. AFA in our patient appears to have no adverse impairment to proper development of her vision. Due to the small size and length of the thin fibrous band, the patient’s parents and medical team decided to see if the AFA would resolve on its own. The band of tissue did not spontaneously regress and has remained.

Case Presentation

Patient’s gestational age at birth was 35 weeks and 3 days, thus being 4 weeks premature. Birth weight was 5 pounds and 2 oz. Father’s age at the time of patient’s birth was 36 and the mother was 33. Patient’s mother had no vaccine use during pregnancy or any history of diabetes or other abnormal laboratory results. She does mention that she fell down while playing soccer on the beach and that her lower abdomen hit the sand, however she states that the impact was minimal. She reported vaginal bleeding that same night and was hospitalized and diagnosed with possible membrane rupture and partial previa. She was sent home after the bleeding subsided however one week later she reported heavier bleeding and a cesarean section was recommended and undergone at 35 weeks 3 days. Patient has caught up to all childhood milestones and his height and weight are trending upwards as well. There is no family history of AFA in either the mother or father.

Patient’s mother had a spontaneous vaginal delivery at 37 weeks to a Trisomy 13 child and passed away shortly after on day 4. Second pregnancy was a spontaneous vaginal delivery at 41 weeks and 3 days to a healthy boy in 2016 with no issues or complications. Father report that his aunt’s daughter has a heart defect which leads to cyanosis and had to be surgically corrected at 2 days old however is unsure of the official diagnosis. Pt received an echocardiogram however it was inconclusive and did not find any structural abnormalities.
There is now agreement between the patient’s parents and the ophthalmologist to have surgery to correct his ankyloblepharon filiforme adnatum. The patient’s condition has not resolved on its own and now surgery is recommended. Due to the patient’s age and the proximity of nearby organs, delicate care must be taken to minimize risks of damage. The decision to perform surgery was decided that it would be scheduled at Children’s Hospital of Los Angeles in the coming weeks.

References


