Conservative Management Of Congenital Dacrocystocele

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ABSTRACT

Congenital dacryocystoceles are variants of nasolacrimal duct obstruction. Even though they are considered to be a benign condition, intranasal extensions can bring about serious respiratory distress syndrome in neonates. Controversy still exists regarding conventional and invasive treatment options. There was total resolution with simple massaging of the cyst in this case.

**Key Messages:** Conservative treatment may lead to complete resolution in most of the cases

**Key words:** Dacrocystoceles, Crigler method.

Introduction

Congenital dacrocystoceles was first described by Raflo in 1982 as an obstruction of the nasolacrimal system and with an uncommon cause of respiratory dysfunction of the newborns, when expanded to the nasal cavity [1]. Congenital dacrocystoceles are uncommon variants of nasolacrimal duct obstruction (NLDO), accounting for only 0.1% of infants with congenital NLDO[2]. They usually present as cystic distensions of the nasolacrimal sac due to obstruction of the drainage system, both above and below the sac [3]. Neonates may present with variable manifestations. Mild forms may not be paid any attention at all and resolve spontaneously. Larger swellings may be seen as bluish cystic swellings below the medial canthal area [4].

Case Presentation

A newly born female child of a healthy mother, born full term, weighing 3.4 kg, presented with a bilateral, tense, bluish swelling which was located just below the medial canthal area of the eye, on both the sides. The eyes were filled with tears. The surrounding areas of the swelling were normal. There was no evidence of inflammation. The swelling measured about 7mmx7mm on the right side and 1mmx1mm on the left side [Table/Fig 1]. Systemic examination was normal. There was no respiratory distress. Ophthalmology and otolaryngology consultations confirmed the diagnosis. It was decided to give a trial of conservative treatment. The mother was asked to massage the swelling gently six times per day (Crigler method)[5]. Further stay in the hospital was uneventful and the mother and the infant were discharged on fifth day of confinement. The mother was contacted every week and called for review after four weeks. In the mean time, the mother continued to massage the lesion. On the seventh day, the swelling almost disappeared on the left side and regressed in size on the right side. The swelling on the right side almost completely disappeared on the tenth day. At four weeks, the
Discussion

Congenital dacrocystocele is usually a benign condition, but if it is bilateral with intranasal extension, it can cause respiratory distress. In newborns, it may be complicated by an intranasal cyst which may contribute to airway obstruction. The treatment of dacrocystocele is controversial. Bruce B Becker recommends the probing for all swellings which cannot be compressed, as early in life as possible, to reduce the incidence of infection.

Probing is usually done with a metal probe via the punctum and by passing it through the nasolacrimal sac across the obstruction. Marsupialization of the cyst may be required if there is an intranasal component. However, the resolution rate after a short course of topical antibiotics, warm compresses and massage has been reported to be 76% [10]. Roopa et al have recommended the early surgical intervention for all dacrocystoceles. As there was difference of opinion as to the preferred management options, we decided to undertake the conservative option because of the early presentation and the absence of any complicating features.

Conclusion

The conservative management was effective and there was complete resolution of the lesion without any complications.

References

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