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## CASE REPORT

### Conservative Management Of Congenital Dacrocystocele

BAPPAL A\*, SUDHIR S\*\*, RATHNAKAR U P\*\*\*, UDUPA A L\*\*\*\*, PRAKASH S\*\*\*\*\*

#### 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:** Dacrocystocele, Crigler method.

\*(DNB), Department of ophthalmology,\*\* (MD), Department of pediatrics,Yenepoya Medical College, Mangalore,\*\*\* (MD), Kasturba Medical College, Mangalore, Department of pharmacology,\*\*\*\*(PhD), Department of Pharmacology, FMS, UWI, Cave Hill Campus, Barbados,\*\*\*\*\* (MD), Department of pharmacology, Kasturba Medical College, Mangalore  
**Corresponding Author:**

Dr. U.P. Rathnakar, MD, Manipal University, Kasturba Medical College, Mangalore, Department of pharmacology. L.H.H.Road, Karnataka, 575001. Phone: +919448983292, E-Mail: ratnakar.uncle@gmail.com

#### Introduction

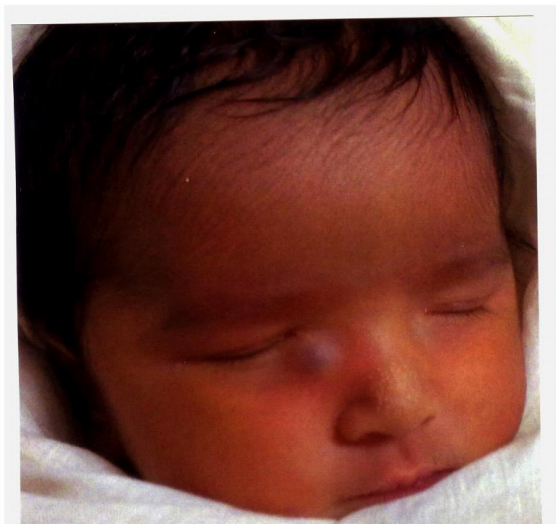
Congenital dacrocystocele was first described by Raflo in 1982 as an obstruction of the nasolacrimal system and with an uncommon cause of respiratory dysfunction of the newborns, when expanded to the nasal cavity [1]. Congenital dacryocystoceles are uncommon variants of nasolacrimal duct obstruction (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

swellings had entirely disappeared on both the sides and epiphora was not present.



(Table/Fig 1) Congenital bilateral dacryocystocele

### Discussion

Congenital dacryocystocele is usually a benign condition, but if it is bilateral with intra nasal extension, it can cause respiratory distress[6]. In new borns, it may be complicated by an intranasal cyst which may contribute to airway obstruction. The treatment of dacryocystocele is controversial [7]. 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 [8].

Probing is usually done with a metal probe via the punctum and by passing it through the nasolacrimal sac across the obstruction [1]. Marsupialization of the cyst may be required if there is an intranasal component [9]. However, the resolution rate after a short course of topical antibiotics, warm compresses and massage has been reported to be 76% [10]. Roopa [2] et al have recommended the early surgical intervention for all dacryocystoceles. 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

- [1] Calcaterra VE, Annino DJ, Carter BL, Woog JJ. Congenital nasolacrimal duct cysts with nasal obstruction. *Otolaryngology Head and Neck Surgery*. 1995; 113(4):481-4.
- [2] Rupa Krishnamurthy Wong, MD, Deborah K. VanderVeen. Presentation and Management of Congenital dacryocystocele. *Pediatrics*. 2008 November; Volume 122, Number 5, 1108-12
- [3] Mansour AM, Cheng KP, Mumma JV, et al. Congenital dacryocystocele: a collaborative review. *Ophthalmology*. 1991; 98:1744-51
- [4] Waldo Sepulveda, Adriana B, Wojakowski, Diego Elias, Lucas Otaño, MD and Jorge Gutierrez, MD, Congenital Dacryocystocele, Prenatal 2- and 3-Dimensional Sonographic finding. *J Ultrasound Med*. 24:225-30,
- [5] Castelo Branco Neto E, Castelo Branco B, Cardoso CC, Carvalho RG, Mota E, Castelo Branco A. Management of congenital nasolacrimal duct obstruction. *Arq Bras Oftalmol*. 2009 Jan-Feb;72(1):75-8
- [6] Teymoortash A, Hesse L, Werner JA, Lippert BM. Bilateral congenital dacryocystocele as a cause of respiratory distress in a newborn. *Rhinology*, 2004; 42:41-44.
- [7] Junji Narioka, MD, Yuichi Ohashi. Dacryocystography with nasolacrimal probing under fluoroscopic guidance for treatment of congenital dacryocystocele. *Journal of AAPOS (Journal of American association of paediatric ophthalmology and strabismus)*. 2008 Jun, 12(3): 299-301 .
- [8] Bruce B. Becker. The Treatment of Congenital Dacryocystocele. *American Journal of ophthalmology*. Volume 142, 2006 Nov; Issue 5:83538.
- [9] Weinstein GS, Biglan AW, Patterson JH. Congenital lacrimal sac mucoceles. *Am J Ophthalmol*. 1982;94(1):106-10
- [10] Schnall BM, Christian CJ. Conservative treatment of congenital dacryocystocele. *J Pediatr Ophthalmol Strabismus*. 1996; 33(5): 219-22.

