

Congenital Nasolacrimal Duct Obstruction at Prince Rashed Hospital, Irbid, Jordan

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Abstract

Objectives: To estimate the frequency of congenital nasolacrimal duct obstruction (CNLDO) and to assess the results of its management.

Material and Methods: A prospective study of 80 consecutive patients with congenital nasolacrimal duct obstruction, conducted from January 2005 to December 2005 at Prince Rashed Hospital. Only patients below the age of twelve months were included the study. Diagnosis was made by history of epiphora beginning early in life with obstruction clinically confirmed on examination. Antibiotic drops and massage of the lacrimal sac was advised. Probing was carried out for the non-resolving cases at the age of one year, and balloon dilatation for the failed case.

Results: A total of 80 patients with CNLDO were included in the study. Thirty six (45%) of these infants presented within the first two months of life. Out of these 80 patients 8 patients were lost to follow up. Out of remaining 72 patients, 66 (82.5%) of the patients resolved spontaneously with conservative treatment using topical antibiotics within one year. Only 6 (7.5%) of the patients required probing five patient 83.3% successful but one of them who failed referred for intubation and balloon dilatation at King Hussein Medical Center, Amman.

Conclusion: Spontaneous improvement of CNLDO is the natural course in most patients and probing for unresponsive cases is recommended at one year of age.

Keywords: Congenital, Nasolacrimal, Probing.

Introduction:

Emmetropia is the state in which parallel rays congenital nasolacrimal duct obstruction (CNLDO) is the most common abnormality of the lacrimal system in childhood. (1) The most common outcome is spontaneous resolution, but some children do require surgical treatment by probing. (2)

Probing of the NLD is a standard therapeutic procedure in the management of the CNLDO. Controversy, however, exists regarding the outcome of probing in children older than 1 year. (3)

The timing of probing for congenital nasolacrimal duct obstruction has been a matter of controversy in recent years.(4) which is advised up to the age of 5 years in Kashkouli et al.(5)

Because most nasolacrimal duct obstructions resolve during the first year of life, urgent treatment of a congenital obstruction is usually unnecessary. Conservative management includes warm compresses, massage of the lacrimal sac, and intermittent use of topical antibiotic ointment or drops. (6)

Repeated courses of topical and sometimes systemic antibiotics are widely used to treat

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the discharge associated with congenital lacrimal obstruction. (7)

Method

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Results:

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Table 1: Natural History of (CNLDO):

Variable	No.	%
Spontaneous resolution	66	82.5%
Probing	06	07.5%
Lost follow up	08	10%
Total	80	100%

Discussion:

Obstruction of the nasolacrimal drainage system is extremely common in pediatric age group, occurring in as many as 30% of new borns. (8)

Twenty per cent of infants develop the symptoms of congenital lacrimal obstruction during their first month of life (7) compared to 45% in our review.

Disorders of the lacrimal drainage system manifest as epiphora and recurrent infections with mucopurulent discharge. (9) Which was the presenting symptom in all the reviewed cases?

Traditional approach has been to combine massage of the nasolacrimal sac and duct with topical antibiotic. (8) As advised in our cases.

Spontaneous resolution is the commonest outcome, without treatment only 0.7% of infants will still be affected by their first birthday (7) which is higher in our cases.

Probing was done to six cases in our review which was successful in five of them 83.3% contrary to 79.59 in Maharashtra, India. (10) The remainder case was referred for balloon dilation which follows endonasal intubations that are effective procedures, and play an important role in the management of childhood epiphora. (11)

Balloon dilation under fluoroscopic control to be a safe and effective technique for the treatment of congenital lacrimal system obstruction as a primary procedure and as an alternative procedure after failure of probing

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