PROBING OUTCOMES FOR CONGENITAL NASOLACRIMAL DUCT OBSTRUCTION IN DUHOK CITY

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ABSTRACT

Background: Epiphora is generally a common disorder in children particularly in infants; congenital nasolacrimal duct obstruction (CNLDO) is one of the most frequent causes of epiphora of newborns which symptoms start immediately or within first 2-3 week after birth as tearing and/or discharge of one or both eyes.

Aim: To report the success rate of probing and irrigation for children with CNLDO of different ages.

Methods and Materials: This is retrospective observational comparative study, which was held in Duhok eye hospital, 241 eyes from 209 children from with age range from 6 months to 9 years age, diagnosed as CNLDO included , probing and irrigation done under general anesthesia, according to age, the children were arranged into 4 groups, group I from 6 – 9 months, group II from 9 – 12 months, group III from 1 – 3 years and finally group IV from 3 – 9 years, mean age was 1.8 years.

Results: From 209 children 109 were females and 100 were male. 177 children have unilateral CNLDO and 32 children were having bilaterally obstructed nasolacrimal passage. The success rate was as follows; group 1 (94.6%), group 2 (89.3%), group 3 (81.6%) and group 4 (72.9%). And was defined as a complete resolution tearing and discharge.

Conclusion: Probing is the first surgical intervention for CNLDO not resolving with conservative treatment, despite the decrease in the success rate with increasing age it worthwhile to be the first procedure attempted to open the obstructed duct before proceeding to a more invasive procedure.

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Keywords: *Congenital nasolacrimal duct obstruction; Lacrimal apparatus; Tears.*

Congenital nasolacrimal duct obstruction (CNLDO) is one of the most common lacrimal drainage system disorders; up to 20% of newborns may have a non-patent duct[1].

Only 5% of newborns become symptomatic, children in general and infants, in particular, require adequate attention and evaluation when presenting with watery eye, it should be differentiated from other serious causes of watery eye such as (infantile) congenital glaucoma which also presents with lacrimation together with photophobia and blepharospasm[2].

Premature neonates are more prone to have duct obstruction, there is no gender predilection and the infants with nasolacrimal duct obstruction may have a positive family history[3].

The obstruction of the nasolacrimal canal most of the time is due to incomplete canalization of the duct at the level of the valve of Hasner, this failure of canalization

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leads to tearing and discharge which may be continuous or intermittent[4].

There are various types of CNLD obstruction, but Kushner was first who divided CNLDO into simple and complex types, the decision is established during the probing procedure[5].

Overflow of the tears from the conjunctival sac is a feature of the watering eyes, which can be the result of one of the following conditions, either (epiphora) when the outflow of the tears is obstructed or (hyperlacrimation) as excessive tears production and secretion[6].

The epiphora can result from anatomical obstruction of the nasolacrimal pathway which is called anatomical epiphora due to congenital disorder as in CNLDO or acquired as due to inflammation or trauma to the lacrimal pathway, or it may result from the lacrimal pump failure which is called physiological epiphora[7].

Manifestations of the symptomatic CNLDO vary from mild intermittent tearing and/or discharge to severe continuous tearing and discharge, it may be unilateral or bilateral and most infants' symptoms are more prominent in the cold, wind or when the infant has upper respiratory tract disease. Unlike conjunctivitis, there will be no conjunctival redness in CNLDO.

Clinical features alone are fair enough for CNLDO to be diagnosed clinically, but caution must be taken to other sight-threatening causes of watery eyes, the most important one is (infantile) congenital glaucoma, the features that differentiate between both condition is that infants with infantile glaucoma will also have associated blepharospasm, photophobia and other important signs such as enlarged corneal diameter, optic disc cupping, axial elongation, and myopia. Other differential diagnoses are conjunctivitis, keratitis, foreign body or lacrimal punctal agenesis, amniotocele, dacryocystocele, epiblepharon, entropion, or ectropion[8].

MacEwen et al[9]. reported that CNLDO in 95% may resolve spontaneously by the age of one year.

The incidence of the CNLDO is higher in infants with certain syndromes and associated craniofacial anomalies such as Down syndrome, Crouzon syndrome, Treacher Collins syndrome and Klinefelter syndrome[5], cleft lip/palate, facial cleft, hypertelorism, bifid uvula, hemifacial microsomia, preauricular skin appendages, deformed external ears, and laryngeal stenosis[10].

METHODS AND MATERIALS

A historic retrospective cross-sectional study which was conducted in Duhok eye hospital between the periods of January 2017 to September 2018. 241 eyes of 209 children between the age of 6 months and 9 years were enrolled in this study.

Inclusion criteria :Any children above 6 months age, with confirmed diagnosis as CNLDO.

Exclusion criteria: Other causes of the watery eye, punctal agenesis, canalicular obstruction, and eyelid deformities.

Data collection :After the aim of this study was explained for the parents oral consent taken from each of them, all children who visited Duhok eye hospital with epiphora and/or mucopurulent discharge (Figure-1), they have been thoroughly examined for any syndroms or abnormalities, facial or eyelids anomalies, lacrimal puncta were assessed, cornea and conjunctiva examined to exclude other causes of watery eye such as congenital glaucoma (Figure-2).

Figure 1 Left nasolacrimal duct obstruction[11].

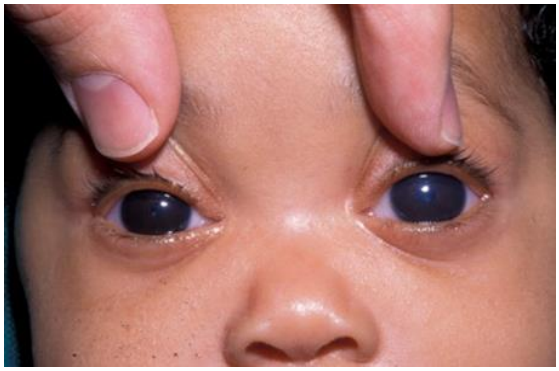

Figure 2 Primary congenital glaucoma[12].

The diagnosis of CNLDO was based upon the clinical history of watery eye and/or discharge, and the presence of epiphora with or without mucopurulent discharge, the patient prepared for probing and irrigation under general anesthesia. Informed consent was taken from the children's parents. Instruments were used for the procedure were punctum dilator, Bowman's probe size (0-000) (Figure-3) and 10 ml syringe with a blunt-tipped cannula. The procedure began with dilatation of upper and lower puncta with lacrimal dilator (Figure-4) then Bowman's probe was inserted vertically about 2 mm, while a traction is applied to lateral end of eyelid margin, the direction changed to horizontal through the canaliculus till reaching the lacrimal sac then the direction was changed to vertical and proceed downward slightly posteriorly and laterally through the nasolacrimal canal till inferior meatus at the nasal cavity (Figure-5), the probe then retrieved back and the opening of the duct was confirmed by injection of saline through the puncta (Figure-6) and aspiration of the saline from child's throat by sucker.

Finally, topical antibiotics instilled into the eye (drop and/or ointment) and covered temporarily with an eye pad and discharged after complete recovery from anesthesia. Follow up done after one month, three months and six months duration after probing, at each follow-up visit, parents were questioned about the symptoms and examined for the presence of epiphora. Complete resolution was defined as the complete absence of clinical signs and symptoms of CNLDO on examination and parental confirmation of the absence of residual symptoms of obstruction.

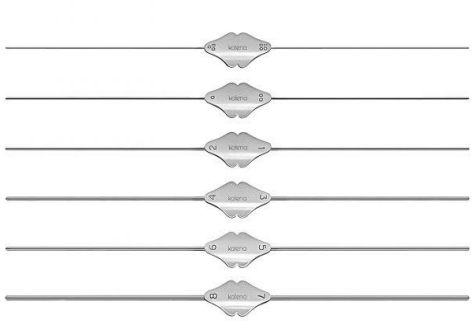

Figure 3 Probes with different sizes

Figure 4 Castroviejo double lacrimal dilator

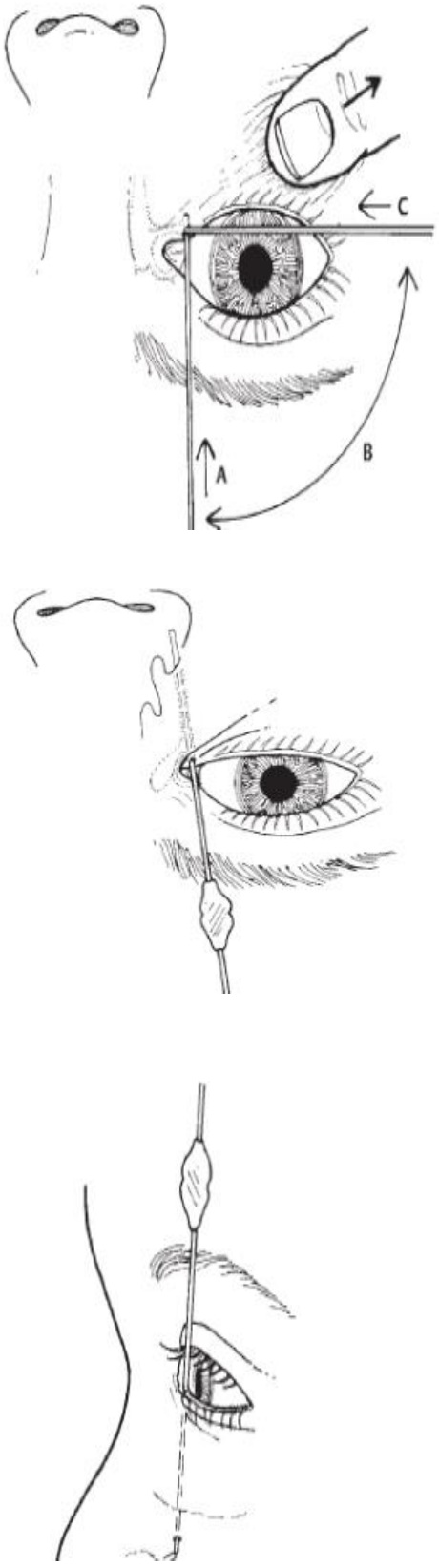

Figure 5 Drawings showing the steps of probing[13]

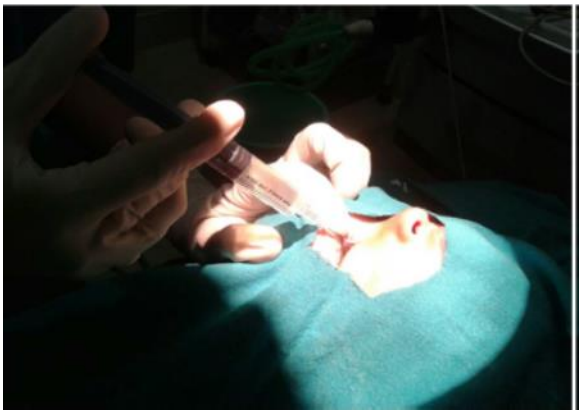

Figure 6 Irrigation at the completion of the procedure[14]

STATISTICAL ANALYSIS

Data were entered into Excel 2016 and then converted and analyzed using SPSS 24. Data were described using frequency and frequency percent tables for categorial data and mean and standard deviation for numerical data. Categorial data were analyzed by Chi-square or Fisher's exact tests, while numerical data were analyzed using the t-test and analysis of variance (ANOVA). P-value < 0.05 was considered statistically significant.

RESULTS

This study included 209 patients; the age range was 6 months to 9 years with mean age 1.8 years, most of the cases were unilateral, 111 (53.1%) patients with right CNLDO and 66 (31.6%) with the left, only 32 (15.3%) with bilateral duct obstruction. Out of 209 patients, 109 (52.2%) were females and 100 (47.2%) were males. From 209 patients four groups of patients were made according to the age, group I; 56 (26.8%) were aged between 6-9 months, GROUP II; 28 (13.4%) were aged older than 9 up to 12 months, GROUP III; 103 (49.3%) were aged from 13 months up to 3 years and finally group IV; were 22 (10.5%) patients from 3 years age up to 9 years. Majority of patients 45.9% developed signs and symptoms of CNLDO 1-2 months after birth.

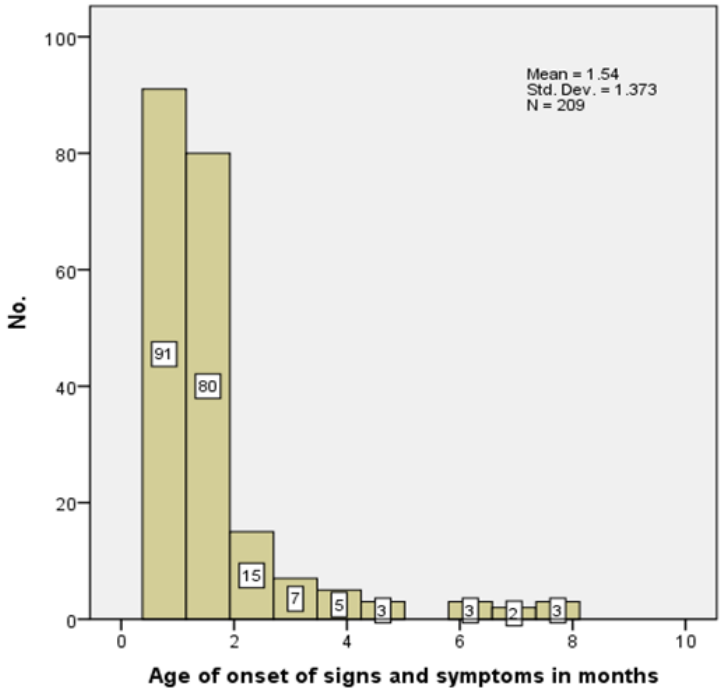

Figure 7: Distribution of age of onset of signs and symptoms in months.

The family history was positive for 2 patients out of 209 were having other siblings with CNLDO. In our study type of CNLDO determined as follows; 90.4% as a simple (membranous) type and only 9.6% were complex types.

Table 1: Distribution of the patients by age, sex and clinical characteristics

Characteristic		No.	%
Age	6 - 9 months	56	26.8
	> 9 – 12 months	28	13.4
	> 1 - 3 years	103	49.3
	> 3 - 9 years	22	10.5
Sex	Boy	100	47.8
	Girl	109	52.2
Affected eye	OD	111	53.1
	OS	66	31.6
	OU	32	15.3
Family history of CNLDO	Positive	2	1.0
	Negative	207	99.0
Age of onset of signs and symptoms in months	< 1 month	90	43.1
	1 - < 2 months	96	45.9
	2 - 8 months	23	11.0
Types of CNLDO	Simple	189	90.4
	Complex	20	9.6
Total		**209**	**100.0**

The overall success rate of probing was 84.5% (no. 178), and the failure rate was 15.4% (no. 31), the success rate for each age group was as follow; group I; 53 patients had complete resolution (94.6%), group II; 25 patients ended up with

completely symptoms free (89.3%), group III; 84 patients completely became free of symptoms (81.6%), lastly group IV; 16 patients had complete resolution (72.7%). While failure rate for each group was exactly opposite to the success rate and it was as follows; group I (5.4%), group II (10.7%), group III was (18.4%) and group IV failure rate of (27.3%) recorded. There was no significant difference between boys and girls in both success and failure rates. The difference between unilateral and bilateral success rate was significant.

Table 2: Relation between patients' characteristics and improvement (complete resolution)

		Improved		Did not improve		Total no.	P-value
		No.	%	No.	%		
Group I Group II Group III Group IV	6 - 9 months	53	94.6	3	5.4	56	0.034
	> 9 months - 1 year	25	89.3	3	10.7	28	
	> 1 - 3 years	84	81.6	19	18.4	103	
	> 3 - 9 years	16	72.7	6	27.3	22	
Sex	Boy	85	85.0	15	15.0	100	0.948
	Girl	93	85.3	16	14.7	109	
Affected eye	OD	100	90.1	11	9.9	111	0.034
	OS	55	83.3	11	16.7	66	
	OU	23	71.9	9	28.1	32	
Types of CNLDO	Simple	166	85.4	23	14.5	189	<0.001
	Complex	12	60.0	8	40.0	20	

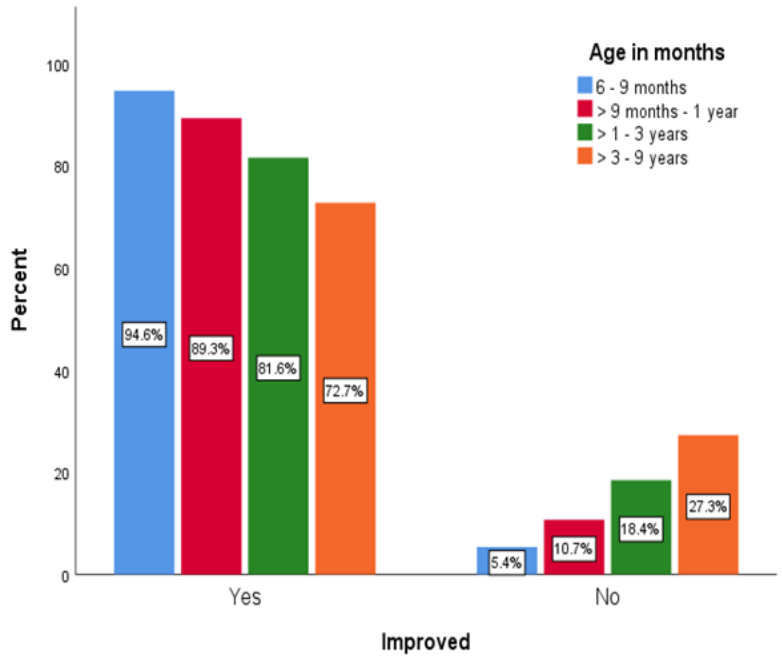

Figure 8: Improvement according to age

Improvement after probing was as follows; 91 (51.1%) patients became completely free from signs and symptoms within 1-2 weeks of probing and irrigation, 68 (38.2%) patients within 2-4 weeks and 19 (10.7%) within 4-24 weeks of probing and irrigation.

Table 3 Time needed for complete resolution of signs and symptoms after probing in weeks (n = 178)

	No.	%
1 - 2 weeks	91	51.1
> 2 - 4 weeks	68	38.2
> 4 - 24 weeks	19	10.7
Total	**178**	**100.0**

The relationship between patients' age and time needed for complete resolution of signs and symptoms was significant as for younger patients less time required while for older patients more time passed until the patient became free from all signs and symptoms.

Table 4: Relation between age and time needed for complete resolution

The time needed for complete resolution	Age in months			P-value
	No.	Mean*	SD	
1 - 2 weeks	91	17.5	1.37	
> 2 - 4 weeks	68	19.7	1.35	0.003
> 4 - 24 weeks	19	31.7	1.43	
Total	**178**	**19.8**	**1.41**	

* The first and the second categories are significantly different from the third category.

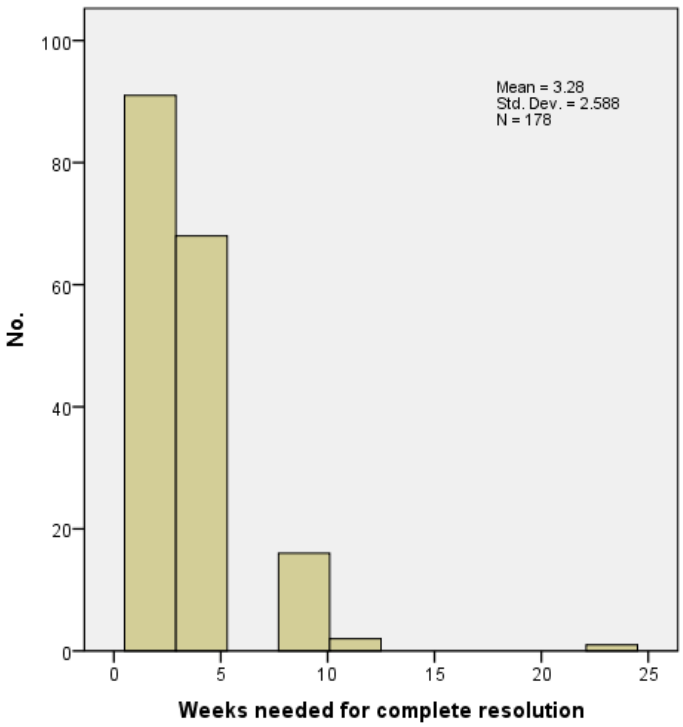

Figure 9: Weeks needed for complete resolution of signs and symptoms after probing

DISCUSSION

CNLDO is due to the failure of canalization of the duct at birth, which may cause the infant to have a watery eye at birth or within 1-2 weeks of birth or even later after months of birth. Initially after the diagnosis is confirmed and other causes of epiphora are excluded the management is conservative and observation, topical antibiotics are required when there associated discharge or conjunctivitis till the age of infant reach 6 months, some ophthalmologists prefer to wait till the of 12 months. By the time

spontaneous canalization failed then the probing and irrigation are considered the first surgical intervention for children showing no improvement with conservative treatment.

In our study, all children underwent probing under general anesthesia, which is preferred by all of the ophthalmologists in our hospital, because it provides better control during the procedure and it is painless.

Timing of probing is in a debate, many studies been done about this subject and different age classification had been dependent.

The age is considered a major factor in determining the outcome of probing and irrigation, younger the child particularly less than 12 months higher cure rate, in older children cure rate decreases, this fact has been reported in many studies.

The hypothesis for this discrepant is that; prolonged inflammation in the lacrimal drainage system may result in fibrosis that increases with age (15) .

Hung, et al.(16) reported the overall success rates of probing in the 6 variably aged groups were 90.2%, which was 90.3% for 6-12 month age group and dramatically reduces to 33.3% for those aged between 36-60 months.

Early probing has been advocated in a study of 33 infants aged 6-9 months with complete resolution of 30 (90.48%) patients with minimal operative time and no postoperative complications (17) .

A study by Perveen and associates(18) , which included 118 children aged between 4-48 months, revealed highest success rate 100% to those between 4-6 months, 94% for 7-12 months age and the success rate dramatically decline as the age was increased to reach 33.3% for those aged between 37-48 months.

Abrishami, et al.(19) , noted the decrease in probing success rate decreases with age in a study done for children older than 15 months.

The evaluation of results of probing and the effect of the child age on the success rate was not found to be significant between the ages of 6 – 36 months of age, where the success rate beyond this age was not valuable due to a low number of participants (20) .

Complete resolution of signs and symptoms has been recorded for children aged 6 months old, while decreased for children older than this age (21) .

The timing of probing is still not strictly determined, but the highest 93% success rate has been recorded for that age between 6-12 months, and the success rate gradually decreases as the child grew up (22) .

In spite of children's age increment but still probing remains the most valuable option with good success rate recorded to be 90% for child aging between 1-9 years old (23) .

Regardless of the lower success rate for children older than 2 years still probing as a less invasive procedure should be done before trying more invasive ones (14) .

Sharife, et al. (24) , report a 100% success rate for 97 children between 1-2 years, and 87% for 23 between 2-3 years.

In our study, overall success rate 84.5% were comparable to previous studies, with the highest cure being reported for infants between 6-9 months 94.6% this rate decreased to 72.7% for children aged between 3-9 years.

Other than the age factor, in our study, the type of obstruction and bilaterality has significantly affected the outcomes of

probing and irrigation, other studies consistent with these two factors.

In one of the studies in which CNLDO was membranous in 87.3% (103 eyes) and non-membranous in 12.7% (15 eyes); 92.2% (95 eyes) of eyes with membranous obstruction were successfully cured and 33.3% (5 eyes) of cases with firm obstruction had a successful outcome[18].

Although the number of complex type CNLDO in our study was limited only 20 cases cure rate was significantly was differ from membranous type, of complex type 12 cured while 8 did not cure.

In our study bilateral obstructed ducts that cure by probing and irrigation were significantly differ from unilateral cases 23 (71.9%) children cured with initial probing whereas 9 (28.1%) cases failed with initial probing (p-value = 0.034).

While Kashkouli et al[25]. reported that bilaterality had no significant impact on cure rate, Honavar et al. found that patients with bilateral CNLDO had increased rates of probe failure (p = 0.012). Other factors believed to play a role and define the success rate of probing and irrigation such as previously failed probing attempts, prior failed conservative treatments, and dilated nasolacrimal sacs.

Eshragi, et al.[26], also reported that bilaterlally obstructed nasolacrimal duct had a significant failure rate in comparison to unilaterally obstructed duct.

The age range in our study was wide and patient aged 9 years included to assess the results, this has been mention by Amir & Ullah[27], that probing considered as the first step of intervention in children up to the age of 9 years.

Maheshwari[28], also believes that 2 years and above were with high success to justify probing as a viable option in older children. Based on the above findings, simplicity, and safety of the late probing procedure should be considered as the initial procedure of choice in older children.

CONCLUSIONS

Probing and irrigation for CNLDO remain the first line of intervention after the conservative therapy is ineffective in the treatment of obstructed lacrimal pathway, although the effect of this procedure reduces with increased age of the children but, nevertheless it worthwhile to try probing and irrigation and not to be withheld before deciding more invasive procedures.

RECOMMENDATIONS

It is highly recommended that all the children with CNLDO, when admitted to our hospital for the purpose of probing, refraction to be done as the child already, will get general anesthesia, as some studies had reported relationship between CNLDO, anisometropia, and amblyopia. This subject deserves attention and to be studied in the future.

Educating parents about the nature of probing and irrigation as it is a non-invasive and safe procedure, and when their children with CNLDO need this procedure better not neglected to avoid more aggressive procedure in the future.

REFERENCES

1. Ugurbas S. Otolaryngological findings in congenital nasolacrimal duct obstruction and implications for prognosis. British Journal of Ophthalmology. 2000;84(8):917-918.
2. Fundamentals and Principles of Ophthalmology, BCSC:2014-2015. [San Francisco]: American Academy of Ophthalmology; 2014:28-29
3. Mukherjee P. Pediatric ophthalmology. New Delhi: New Age

International (P) Ltd., Publishers; 2005.
4. Honavar S, Prakash V, Rao G. Outcome of probing for congenital nasolacrimal duct obstruction in older children. American Journal of Ophthalmology. 2000;130(1):42-48.
5. François J, Bacskulin J. External Congenital Fistulae of the Lacrimal Sac. Ophthalmologica. 1969;159(4-6):249-261.
6. Khurana A. Comprehensive ophthalmology. 4th ed. New Delhi: New Age International (P) Ltd., Publishers; 2007:236.
7. Weber R, Della Rocca R, Keerl R, Schaefer S. Atlas of Lacrimal Surgery. Berlin Heidelberg: Springer-Verlag GmbH.; 2007:12.
8. Nelson L, Olitsky S. Harley's Pediatric Ophthalmology. 6th ed. Philadelphia: Wolters Kluwer; 2015:335. –
9. MacEwen C, Young J, Barras C, Ram B, White P. Value of nasal endoscopy and probing in the diagnosis and management of children with congenital epiphora. British Journal of Ophthalmology. 2001;85(3):314-318.
10. FREITAG S, WOOG J. CONGENITAL NASOLACRIMAL OBSTRUCTION. Ophthalmology Clinics of North America. 2000;13(4):705-718.
11. Agarwal A, Jacob S. Color atlas of ophthalmology. 2nd ed. New York [etc.]: Thieme; 2010:67.
12. Pediatric ophthalmology and strabismus, BCSC 2014-2015. [San Francisco]: American Academy of Ophthalmology; 2014:234-236.
13. Hersh P,ZagelbaumB,CremersS, LhoweL.Ophthalmic surgical procedures.2nd ed.NewYork,NY:Thieme;2009:193-194
14. Rashid W, Shaheen N, Zargar S, Ganie M, Kounsar H. Outcome of Syringing and Probing In Congenital Nasolacrimal Duct Obstruction in Children above Two Years of Age: A Prospective Study. Annals of International Medical and Dental Research. 2017;2(5):1-3.
15. Cha D, Lee H, Park M, Lee J, Baek S. Clinical Outcomes of Initial and Repeated Nasolacrimal Duct Office-Based Probing for Congenital Nasolacrimal Duct Obstruction. Korean Journal of Ophthalmology. 2010;24(5):261-266.
16. Hung C, Chen Y, Lin S, Chen W. Nasolacrimal Duct Probing under Topical Anesthesia for Congenital Nasolacrimal Duct Obstruction in Taiwan. Pediatrics & Neonatology. 2015;56(6):402-407.
17. MAHMOUD K, MOSTAFA Y. Results of Early Probing in Cases of Congenital Nasolacrimal Duct Obstruction. Medical Journal Cairo University. 2009;77(1):519-521
18. Perveen S, Sofi A, Rashid S, Khan A. Success Rate of Probing for Congenital Nasolacrimal Duct Obstruction at Various Ages. J Ophthalmic Vis Res. 2014;9(1):60-69.
19. Abrishami M, Bagheri A, Salour S, Mirdehghan S. Late Probing for Congenital Nasolacrimal Duct Obstruction. Journal of Ophthalmic and Vision Research. 2009;4(2):102-104.
20. Pediatric Eye Disease Investigator Group*. Resolution of Congenital Nasolacrimal Duct Obstruction with Nonsurgical Management. Archives of Ophthalmology. 2012;130(6).

21. Gul S, Dabir S, Jatoi S, Narsani A, Alam M. Efficacy of probing in the treatment of congenital nasolacrimal duct obstruction in three age groups. International Journal of Ophthalmology. 2009;2(1):70-73.
22. Syed S, Arif M, Mahmood M. Syringing and Probing Results for Congenital Nasolacrimal Duct Obstruction. APMC. 2009;3(1):67-70.
23. Qamar R, Latif E, Tahir M, Moin M. Outcome of Delayed Lacrimal Probing in Congenital Obstruction of Nasolacrimal Duct. Pakistan Journal of Ophthalmology. 2011;27(4):175-179.
24. Sharife M, Uddin M, Ahmed M. Outcome of Probing for Congenital Naso-Lacrimal Duct Obstruction. Chattagram Maa-O-Shishu Hospital Medical College Journal. 2015;14(1):36-37.
25. Kashkouli M, Beigi B, Parvaresh M, Kassaee A, Tabataee Z. Late and very late initial probing for congenital nasolacrimal duct obstruction: what is the cause of failure?. British Journal of Ophthalmology. 2003;87(9):1151-1153.
26. Bahram Eshragi, Masoud Aghsaei Fard, Babak Masomian, Mohammadreza AkbariMiddle East Afr J Ophthalmol. 2013 Oct-Dec; 20(4): 349–352.
27. Amir M, Ullah M. Comparative Study of Results of Probing and Syringing at Different Age Groups. Proceeding SZPGMI. 2012;26(2):99-102.
28. Maheshwari R, Maheshwari S. LATE PROBING FOR CONGENITAL NASOLACRIMAL DUCT OBSTRUCTION. JCPSP 2007. 2007;17(1):41-43.

پوخته

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پێشەکی و ئارمانج: دارژینا روندکا یا ئیکە ژ بەربەلافترین نەخوشیا دناڤ زاروکا دا بشێوەکێ گشتی و بتایبەت زاورکێن نوی ژدایك بووي، ئێك ژ ئەگەرێن سەرەکي یێ دارژینا روندکا لدڤ زاروکا گرتنا جوبارا روندکا یا زکماکییە، ئەف نەخوشیە دبیتە ئەگەرێ دارژینا رونك لدەف زاورکێن نوی ژدایك دبن هەر ژ روژێن دەست پێکێ پشتي ژ دایکبوونێ یان پشتی بوورینا دوو تا سێ هەفتیا ژ دایکبوونێ, هندەك دەما دگەل هەبوونا روندکێت بەردەوام کنیشت ژی ب موچیلانکێت زاورکیڤە دئێتە دیتن، گرتنا جوبارا روندکا یا زکماکي دبیت تنێ ئێك چاڤی ڤەگریت یان هەدوو چاڤا ڤەگریت.

ئارمانج ژ ڤێ ڤەکولینێ ژبو دیارکرنا مەزنترین ریژەییا سەرکەفتنێ پشتی ئەنجامدانا نشتەگەرییا ڤەکرن و شیشتنا جوبارا روندکا لدەف زاروکێن ئەف نەخوشییة دناڤبەرا ژیێن جودا دا.

ڕێباز: نەخوش هاتە وەرگرتن ژ وان زاروکێن سەرەدانا نەخوشخانا دهوك یا چاڤا کري لدهوکی ژ بەر رژینا روندك یا بەردەوام و پشتی کو ئەگەرێ ڤێ رژینا روندکا هاتیە دەست نیشانکرن وەك گرتنا جوبارا روندکا یا زکماکي. د ڤێ ڤەکولینێ دا 241 چاڤ ژ سەرجەمێ 209 زاروکا بخوڤە گرتن. نشتەگەرییا ڤەکرن و شیشتنا جوبارا روندکا هاتە ئەنجامدان لژێر سرکرنا گشتی ل هولا نشتەگەرییا ل نەخوشخانا دهوك یا چاڤا. زاروکێن هاتینە دەست نیشانکرن دڤێ ڤەکولینێدا هاتنە دابەشکرن لسەر جوار گروپا ل دویف ژیێ زاروکا گروپێ ئێکی ژ 6 هەیڤی تا 9 هەیڤ، گروپێ دووێ ژ 9 هەیڤی تا 12 هەیف، گروپێ سیێ ژ1 سال تا 3 سال، گروپێ چارێ و دوماهیێ ژ 3 سال تا 9 سال. پشتی ئەنجام هاتینە وەرگرتن هاتنە بەراوردکرن دگەل ئێك.

ئەنجام: ژ کویێ 209 زاروکا 109 ژوان رەگەزی مێ بوون و 100 رەگەزێ نێر بوون. 177 زاروکا تنێ جوبارا روندکا ل چاڤەکی گرتی بوو و 32 زاورکا جوبارا روندکا ل هەردوو چاڤا یا گرتی بوو. ریژەییا سەرکەفتنێ پشتی ئەنجامدانا نشتەگەرێ بو هەر گروپەکی بڤی شێوێ لخوارێ بوو, گروپێ ئێکێ 94.6%، گروپێ دووێ 89.3%، گروپێ سیێ 81.6% گروپێ جارێ 72.9%. نتشەگەری بستەرکەفتیانە دهاتە دەست نیشانکرن پشتی کو چاڤێ زاروکی ب ئێکجاری رژینا روندکا یان کنیشت دان پاقژ دبوو.

رادەر: نشتەگەرییا ڤەکرن و شیشتنا جوبارا روندکا ئێك ژ ئاسانترین و بیمەترین نشتەگەرییا دهێتە ئەنجامدان بو وان زاروکێن گرتنا زکماکی یا جوبارا روندکا لدڤ وان هەی، سەرەرای وێ چەندێ کو رێژا سەرکەفتنا ڤێ نشتەگریێ دگەل مەزن بوونا ژیێ زاروکی کێم دبیت، بەلێ یا ژ هەژییە وەك ئێکەم پێنگاف بهێتە ئەنجامدان بەری بریار بێتە دان ژ بو ئەنجامدانا نشتەگەرییێت ئالوز و سەختتر ژ بو زاروکی.

الخلاصة

نتائج التحقيق في انسداد القناة الأنفية الدمعية الخلقية في مدينة دهوك

الخلفية والأهداف: يعتبر التدميع المستمر احدى اكثر الحالات شيوعا بين الاطفال بشكل عام وحديثي الولادة بشكل خاص، انسداد القناة الدمعي الخلقي من اكثر الامراض المسببة لحالة التدميع المستمر لدى الاطفال حديثي الولادة، وتظهر علاماتها مباشرة في الايام الاولى بعد الولادة او خلال اول اسبوعين او ثلاثة اسابيع منها، واكثر الاحيان ترافقها حالة افرازات مخاطية من عين واحدة او من كلتا العينين.

الغرض: لتسجيل نسبة وافيه من عمليات سبر وري القناة الدمعية لدى الاطفال المصابين بمرض انسداد القناة الدمعية الخلقي من اعمار مختلفة.

الطريقة: هذه دراسة مقارنة استرجاعية تاريخية، تم القيام بها في مستشفى دهوك للعيون، وقد شملت 241 عينا من 209 طفلا من عمر 6 اشهر الى 9 سنوات، تم تشخيص حالات انسداد المرى الدمعي الخلقي واخذت في هذه الدراسة عملية سبر وري القناة الدمعية التي جرت تحت تأثير التخدير العام، وحسب العمر تم تقسيم الاطفال الى أربعة مجاميع كالتالي المجموعة الاولى 6-9 اشهر، المجموعة الثانية 9-12 اشهر، المجموعة الثالثة 1-3 سنوات، المجموعة الرابعة 3-9 سنوات النتائج تمت مقارنتها.

النتائج: من 209 طفلا 109 اطفال كانوا اناثا، و100 اطفال كانوا ذكورا، 177طفلا كانت لديهم انسداد القناة الدمعي الخلقي في عين واحدة فقط بينما 32 طفلا مصابون بانسداد المجرى المعي في كلتا العينين. نسبة النجاح الحاصلة من المجموعات كانت كالتالي: المجموعة الاولى 94.6%، المجموعة الثانية 89.3%، المجموعة الثالثة 81.6%، المجموعة الرابعة 72.9%، وتم اعتبار نجاح عملية سبر وري القناة الدمعي من خلال اختفاء اعراض وعلامات التي كانت تدل على وجود انسداد في قناة الدمعي الخلقي.

المحصلة: عملية سبر وري المجرى الدمعي تعتبر اول تدخل جراحي لحالات انسداد القناة المدعية الخلقي، اللواتي لا تستجبن للعلاج التحفظي، بالرغم من ان نسبة النجاح كانت عكسية مع عمر الاطفال لكن مع ذلك محاولة فتح القناة الدمعية لدى الاطفال تستحق المحاولة من خلال سبر و الري قبل الشروع باجراء عمليات اكثر تعقيدا.