

Outcome of Probing for Congenital Naso-Lacrimal Duct Obstruction

Mozammel Hoq Sharife^{1*}
M Jalal Uddin²
Mostak Ahmed³

¹Department of Ophthalmology
Chattagram Maa-O-Shishu Hospital Medical College
Agrabad, Chittagong, Bangladesh.

²Department of Community Medicine
Chattagram Maa-O-Shishu Hospital Medical College
Agrabad, Chittagong, Bangladesh.

³Department of Ophthalmology
Dhaka Medical College, Bangladesh.

Abstract

Objective: The study was conducted to evaluate outcome of probing for congenital nasolacrimal duct obstruction. It was an interventional study at a tertiary level hospital of Chittagong. **Methods:** The study was conducted during April 2009 to March 2013 (04 years). Total 120 eyes of 102 children of 1-3 years age group were probed. Minimum follow up time was 01 year. **Results:** 110 eyes fully cured, 05 eyes needed re-probing, 03 eyes needed Dacrocystorhinostomy operation (DCR) and 02 cases were dropped out. Male female ratio was 72 (60%) and 48 (40%). **Conclusion:** Outcome of probing is better among 1-2 years age group than that of 2-3 years age group. A discussion is made with updated literature review.

Key words: Nasolacrimal duct; CNLDO; Probing, Congenital.

INTRODUCTION

Five percent (5%) newborn babies suffer from Congenital Nasolacrimal Duct Obstruction (CNLDO). This is due to mal-development of nasolacrimal drainage system. Obstruction occurs at different levels: commonest site of obstruction is at valve of Hasner. General stenosis of duct may be there. In some cases mal-development of punctum and canaliculi have been observed. Congenital absence of valves and other causes were also recorded.

History and clinical examinations are enough for diagnosis of CNLDO.

Conservative management is usually given up to first birth day. Non respondents are considered for probing and DCR. After all GA fitness probing is done. Standard post operative management with antibiotic and analgesics also needed. Probed patient needs follow up according to a schedule. Some patients need re-probing. Non responding patients need DCR operation¹.

MATERIALS AND METHODS

Study title	Outcome of probing for congenital nasolacrimal duct obstruction
Study period	April 2009 to March 2014 (4 years)
Study type	Interventional study with probing and DCR
Sampling technique	Convenient sampling
Sample size	120 eyes of 102 babies
Data collection	Investigator himself
Data management	Co investigator
Statistical analysis	Z test was used.
Ethical implication	Informed written consent was taken from guardians

*Correspondence to:

Dr. Mozammel Hoque Sharifi
Assistant Professor of Ophthalmology
Chattagram Maa O Shishu Hospital Medical College
Chittagong, Bangladesh.
Mobile : +88 01911-881547
Email : drmozammelhoque66@gmail.com

<http://www.banglajol.info/index.php/CMOSHMCJ>

RESULTS

Total 102 babies. 120 eyes underwent probing. Male – female representation 72(60%) and 48(40%). 97(80%) cases were of 1-2 year age group and remaining 23(20%) were of 2-3 year age group. Among 120 cases 115(97%) cured with probing, 03 (03%) cases underwent DCR operation and 02 cases were dropped out. All DCR were done after 3rd birth day when 3rd probing failed.

Table 1 : Outcome of probing of congenital nasolacrimal duct obstruction cases

Age group	Cured	Not cured	Total
1-2 year	95(100%)	00(00%)	95(100%)
2-3 year	20(87%)	03(13%)	23(100%)
Total	115(97%)	03(3%)	118(100%)

Source: Hospital records.

DISCUSSION

Probing was 97% successful in our study. Only 05 cases needed re-probing. 03 cases who underwent DCR operation had experienced 3rd probing failure. The result is consistent with recent studies in Bangladesh (P=0.059). Study conducted by him in 2013 showed that 104 cases out of 105 cases were cured with probing. Success rate was 99%. Only 01 case underwent DCR operation after failure of 3rd probing². Time of probing is very important. Among 1-2 year age group probing is very rewarding. In our study success rate is 100%. He observed 92% success rate beyond 01 year after birth³. He reported 860 cases of probing in 1985. 06% cases needed re-probing and only 0.5% cases needed 3rd time probing⁴.

CONCLUSION

Probing is very rewarding during 1-2 year age group. A multicenter large scale study may be undertaken before national guideline formulation for management of CNLDO.

DISCLOSURE

All the authors declare no competing interest

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