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## Outcomes of dacryocystorhinostomy (DCR) in failure cases of probing of congenital nasal duct obstruction

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### Abstract

Outcomes of external dacryocystorhinostomy (DCR) in failure cases of probing of congenital naso-lacrimal duct obstruction (CNLDO) is very successful. External DCR is indicated in failure cases of probing. Probing is modality of choice in CNLDO below one year.

**Keywords:** Dacryocystorhinostomy, Congenital naso-lacrimal duct obstruction

### Introduction

In 1912, Schaeffer<sup>[1]</sup> emphasized that irregularities in the naso-lacrimal duct and diverticula are common congenital aberrations.

Busse and colleagues (1980)<sup>[2]</sup> provided photographic documentation of these particular anatomic variations at the nasal end of the naso-lacrimal duct.

The incidence of congenital naso-lacrimal duct obstruction ranges from 1.75% to 5% (Cassady, 1948)<sup>[3]</sup>.

Some ophthalmologists advise a conservative approach (topical antibiotics and sac massage with various techniques) till 12-13 months of age.

### Materials and methods

The present study is a retrospective comparative case series. The inclusion criteria were either sex, failure cases of probing beyond 4 years of age, nosystemic disorder, and available followup of at least 3 months. Any patient who did not confirm to above was excluded from the study.

### Results

In 12 children with 18 eyes with failure cases of probing in congenital naso-lacrimal duct obstruction in which DCR done were subjected to this study.

**Table 1:** Sex Distribution

Sex	No. of patients	Percentage
Male	8	66.67
Female	4	33.33

Out of 12 patients of naso-lacrimal duct obstruction under study, 8 were males and 4 were females.

**Table 2:** Incidence of Side Affected

Laterality	No. of patients	No. of cases	%
Right eye only	4	6	33.33
Left eye only	5	8	41.67
Both eyes	3	6	25

The above table showed that 75% of patients had unilateral congenital naso-lacrimal duct obstruction. Each naso-lacrimal duct obstruction was considered as one case.

**Family History:** None of the cases under study had positive family history of similar complaints in the blood relations of the child.

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**Table 3:** Obstetrical History

Mode of delivery	No. of patients	Percentage
Normal delivery	9	75
Forceps delivery	1	8.33
Caesarean section	2	16.67

The mode of delivery of the child was normal in 75 % of patients.

#### **Success Rate of Dcr**

DCR done in 18 cases of failure of probing cases in which 16 cases responded to surgery and till their 3 month follow up they did not complain of any symptoms. Success rate of 88.89 % was found in our study.

#### **Discussion**

Many factors must enter the decision of when and how to treat congenital naso-lacrimal duct obstruction. The age at which the child presents to the hospital is an important consideration

#### **Conclusions**

These are different clinical spectrum of congenital nasal duct obstruction. Earlier diagnosis helps in management.

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