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Ophthalmology

Management of Congenital Nasolacrimal Duct Obstruction with Massaging and Probing Without General Anesthesia

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ABSTRACT

Management of congenital nasolarcimal duct obstruction with massaging and probing without general anesthesia.

Study design: Retrospective as well as prospective study.

Place and Duration of Study: This study was carried out in the out patients department of DHQ teaching hospital charsadda for the period of nine months between 2010 and 2011.

Patients and Methods: Total number of children/infants was fifty. All suspected patients were carefully examined and divided into two groups. Statistically analysis was done by student's "t" table.

Results: When results were summed up and test parameters were separated it was seen that the success rate with sample massaging and use of topical antibiotic was 90% at the end of nine months. Five infants improved with single probing.

Conclusion: Infantile epiphora due to nasolacrimal duct obstruction generally cured with auto canalization/ massaging with topical antibiotics at the age of 5 months. The 2nd thing in this study that we can use topical anesthetic agent instead of exposing the infant to the hazard and the complication of general anesthesia.

Key Words: Congenital Nasolacrimal, Duct Obstruction, General Anesthesia

INTRODUCTION

Watering of the eye is a common clinical presenting in ophthalmology. These patients are generally referred by general practitioner and pediatrician in the out department and clinics. With better understanding of the problem can give good results [1]. Causes of epiphora are conginetal block duct, dacryocystenosis, punctal and canalicular atresia. Among them the commonest conginetal block nasolacrimal duct. Due to the non canalization of the lower end of nasolacrimal duct [2]. In majority of the cases auto canalization occur after birth. But this varies from patients to patient. If auto canalization does not take place in nine months time then it usually require surgical intervention. Those patients not cured with massaging and topical antibiotic responds very well to single probing without general anesthesia [3]. This study was carried out in the department of ophthalmology DHQ teaching hospital charsadda between 2010 and 2011. Massaging management of conginetal block nasolacrimal duct was compared with probing of the nasolacrimal duct without general anesthesia.

MATERIALS AND METHODS

This study was carried out by 50 infants/children came to the out patients department of DHQ Teaching hospital Charsadda during 2010 and 2011. Among theses 50 infant/children 30 were male and 20 were female infant. The study period of infant was 9 months on completion of the said period infant was either discharge upon cessation of the symptoms or manage with probing without general anesthesia. The selected patients were mainly those referred by general practitioner and pediatrician. All the selected patients were thoroughly examined and were placed in two groups.

Group A: this group includes infants who followed the usual procedure of massaging with use of topical antibiotic and observation.

Group B: this group includes those infants who does not respond to massage with topical antibiotic till the age of 9 months. All these infants were examined from birth to 3 months age in the out patients department and then every third month till a period of 9 months is completed. Group B 10% infants were cured with single simple probing without general anesthesia. Student's "t" test was carried out to see any significance among various parameters

RESULTS

50 infants were included in the study all these infants were followed up till the end of study. Patients fallout was zero because all the patients completed the study. Among these 50 infants 60% were male infants and 40% female infants. The success rate with simple massaging and use of topical antibiotic was 90% at the end of 9 months as compared to 10% have not responded to massage and topical antibiotic and required further management with probing without

general anesthesia. 5 cases in group B who did not improve with conservative treatment they required surgical probing without general anesthesia. The only anesthesia agent we use was topical Alcain eye drops. All these 5 infants improved / cured with single probing. In this study the disappearance of epiphora also shows variability. Majority of the infants cured before the age of five months with simple massaging and topical antibiotic. However they all completed their visits with regular follow up till the termination of the study.

DISCUSSION

Conginetal block nasolacrimal duct in infants is very common often referred from general practitioner and pediatrician to ophthalmologist. Present study is compatible with studies [4-6]. The condition settles down with simple massage and topical antibiotic as seen by work done by Hooks [7]. Some time skin ulceration and cellulites occur with massage, so we add oral antibiotics also. This is also in agreement with studies done by Amanat and Geurry et al [8-9]. The end result of the study showed that massaging with topical antibiotic proved to be more successful than probing. Because in massage with topical antibiotics minimum tissue handling as compared to probing.

CONCLUSION

Infantile epiphora due to nasolacrimal duct obstruction generally cured with auto canalization/massaging with topical antibiotics at the age of 5 months. The 2nd thing in this study that we can use topical anesthetic agent instead of exposing the infant to the hazard and the complication of general anesthesia.

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