Bilateral dacryocystectomy in one sitting is convenient then in two sitting: A retrospective study

Murad MAU, Basory R, Chowdhury FI

Abstract

Objective: The study compared the effect of bilateral dacryocystectomy in one sitting over the unilateral dacryocystectomy. Method: This retrospective study was carried out in which 27 patients attended at OPD of Islamia Eye Hospital, Dhaka during the period from January 1997 to October 2000. Those who were suffering from chronic dacryocystitis of both eyes attend hospital for their operation and management. Results: Out of 20 bilateral dacryocystectomy 18 were cured and in 6 months follow up no recurrence otherwise unilateral dacryocystectomy were on 7 patients of which 6 did not turn up for operation of other infected eye. So failure rate was 85.8%. Ages of the patients were between 70 to 80 years. Conclusion: The study concludes that bilateral dacryocystectomy was more convenient both for the patient and the surgeon.

Key word
Dacryocystectomy, Bilateral and Unilateral.

Introduction

Dacryocystitis is an inflammatory condition of the lacrimal sac (tear sac), which is often due to an obstruction of the nasolacrimal duct (tear duct). Chronic infections are more common than acute episodes. It is divided into 3 types- acute, chronic and developmental. Incidence is 17.9% of total attendance in eye OPD. "Male & female ratio of dacryocystitis patient was 1:2. Most of the patients were poor (54.8%) and illiterate (80.39%) Th prevalence was highest 41.2% in age group 41-60 but above 60 age group, characteristically male preponderated.¹

"Dacryocystitis is highly prevalent in Bangladesh. Among the hospitalized eye patients, the bed occupancy rate by dacryocystitis is next to cataract."² Acute cases can be treated conservatively but in chronic cases it needs surgical interference. Usually dacryocystorhinostomy (DCR) is the choice of operation. But dacryocystectomy is indicated for old & debilitated patients where DCR was contraindicated. "With the increasing age it is common for aqueous tear production to decrease."³ Treatment of dacryocystitis is important as because, it is a constant source of infection. It may cause conjunctivitis, corneal ulcer, corneal perforation, uveitis and endophthalmitis. "Untreated dacryocystitis never goes spontaneous resolution."³

Methodology

This was a retrospective study. During the study period 27 patients were selected from OPD of Islamia Eye Hospital during the period of January 1997 to October 2000.

Through examination on both ocular and systemic were done. Following investigations were routinely done for all patients.

1. Vision.

The ORION Medical Journal 2007 Jan; 26:438-439

1. Dr. Md. Akhter Uddin Murad, MBBS, DO (Ophthalmology), Associate Professor & Head Dept. of Ophthalmology, International Medical College, Gushlia, Tongi, Gazipur.
2. Dr. Rabeya Basory, MBBS, Assistant Register, Dept. of Ophthalmology, International Medical College, Gushlia, Tongi, Gazipur.
3. Dr. Fakrul Islam Chowdhury, MBBS, FCPS (Part- II), CMO, Al Ashraf General Hospital, Uttara, Dhaka.

The ORION. Vol 26, January 2006
2. Sac patency test.
3. Slit lamp biomicroscopy.
4. External examination by well illuminated torch.
5. Random blood sugar with corresponding urine.
6. ECG.

In this study the patients of cardiovascular, respiratory diseases and extreme old age with other ocular pathology were excluded.

Operation
Under local anesthesia a mixture of lidocaine 2% and bupivacaine0.5% [3ml+3ml] 6ml were used in the presence of anesthesiologist. An oblique incision of 4 to 5 mm was given over the lacrimal sac area 2 to 3 mm away from the medial canthus. Incision was given by BP blade & wound was enlarged by blunt dissection with artery forceps. Orbicularis oculi muscle was split by sac dissector. Medial palpebral ligament were incised. Lacrimal sac was visible. Sac were caught by artery forceps and twisted and removed as far as possible by cutting the distal part of the lacrimal sac.

Two to three minutes time was taken to see any abnormal bleeding and stitched of the skin with 6/0 vicryl. 20 patients were given interrupted suture and 7 patients were given cosmetic [i.e. Intradermal] by 6/0 silk. Which were removing after 7 days? Same procedures were maintained on the other eyes. Before starting the operation diclofenac sodium & lidocaine injection 2 ml were given on the gluteal region [deep I/M]. After completion of the operation procedure, the pad and bandage were given eyes were not covered.

Follow up of the patients on 24 hours, 3 days, 7 days, 3 weeks and 3 months. After 24 hours remove the pad and bandage. Slight oedema around the operated area was seen but it subsides automatically with in 7-10 days.

Results
Results in this study shows that bilateral dacryocystectomy can be done in one sitting without any complication. Out of 27 patients 20 patients were done bilateral dacryocystectomy (74%).

In this series two patients did not turn up so it was not known of the fate of those two patients. In other series of 7 patients who had unilateral dacryocystectomy (26%) and they came for follow up for one month and then 6 patients out of 7 did not turn up for follow up and other side operation.

Discussion
Dacryocystitis is a common ocular disease in rural areas. Most of the patients are living below poverty level. They have no extra budget for health. In rural areas dacryocystitis is called 'Nali' in colloquial languages. "Dacryocystitis is more common in female especially at menopausal and post menopausal age". "At this stage of life there is hypertrophy of mucous membrane of lacrimal drainage system, which becomes more easily infected that usual and can obstruct congenitally narrow bony nasolacrimal canal. This ultimately leads to stasis of tears where infection can easily be ensured"1.

"Source of water for use may have some role in the aetiology of dacryocystitis, which needs to further works". Poor economic status is directly related to the prevalence of dacryocystitis. However, old established cases of dacryocystitis is not curable by the medical means, surgical interference is ultimately needed. So definite steps should be taken in this regards. Eye care facilities should be extended to the rural poor people. From the result of study it is evident that those who have unilateral operation did not turn up (85%) for other side of operation there are many
factors for this failure. Patients are elderly usually come from village and they don't have place to stay in the city so failure is more evident. There was a study where "out of 51 only two patient attained eye specialist and both of them were literate"1.

**Conclusion**
From this study the result of this series found that bilateral dacryocystectomy can be done without complication in one sitting. By this type of operation time, money, theatre and bed occupancy can be saved. So it is recommended that a longer series of operation of bilateral dacryocystectomy in one sitting should be done and if the results are favorable then it can be adopted for universal procedure.

**Acknowledgement**
Authors are grateful to Prof. M. S. ALAM ex-Chief Consultant, Department of anesthesiology. Bangladesh Medical College, Uttara, Dhaka.

**Reference**