

Chronic dacryocystitis — A review of 50 cases in the University Hospital Kuala Lumpur

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Summary

A review of 50 cases of chronic dacryocystitis in the University Hospital over a 15 year period (1970 – 1985) is made. All cases had epiphora with no clear cut cause. Dacrocystoshinostomy gave good results.

Key words – Dacryocystitis nasolacrunal duct, Dacrocystorhinostomy.

Introduction

Dacryocystitis is inflammation of the lacrimal sac. Chronic dacryocystitis due to obstruction of nasolacrimal duct affects all ages and had been described by Galen as early as the second century BC.¹ It is most frequently seen in infants and in middle aged females. In the congenital type it is due to non-canalisation of the nasolacrimal duct and 50% undergo resolution by 6 months of age.² Dacryostorhinostomy (D.C.R.) is indicated in adults while in infants this is done usually after 2 – 3 failed probings and lacrimal intubations. The current standard technique using anterior and posterior flaps of nasal and lacrimal mucosa was described by Dupey-Dutemps and Bourget (1921).³ Ghosh T.N. anastomosed only the large anterior flaps of the lacrimal and nasal mucosa.⁴ The posterior flaps were completely excised. This makes the operation easier and less time consuming than the 2 flaps method. Whatever the technique, D.C.R. is an effective way of treating watery eyes due to chronic dacryocystitis. Yet it is not done often enough. Typically a patient gives a history of going from doctor to doctor over months and years before a D.C.R. is offered.

A review of 50 cases of chronic dacryocystitis in the University Hospital, Kuala Lumpur, over a 15 year period (1970–1985) is made. These cases included only those admitted for either probing or DCR.

Incidence: There were 33 Chinese, 11 Indians and 6 Malays in this series. The preponderance of Chinese in the series was perhaps due to their being more health conscious. The age range of patients was between 6 months to 81 years. 19 cases fell between the ages of 41 – 60 years (38%). Females were more affected than males. Of the 38 female cases, 21 were in the age range of 41 – 70 years (Table I).

Table I
Age & Sex
Distribution of 50 Patients with Chronic Dacryocystitis

Age Group	No.	(%)	Male	Female
6/12 – 20	14	(28%)	7	7
21 – 40	8	(16%)	1	7
41 – 60	19	(38%)	4	15
61 – 81	9	(18%)	0	9
Total	50		12 (24%)	38 (76%)

The lumen of the NLD is narrower in women than in men.⁵ This can also explain the higher frequency of bilateral disease in women. Others blame it on excessive crying and close work. Below 20 years of age the sex distribution showed no significance. This group included those with congenital dacryocystitis where there more males (5) than females (3).

Distribution: There were 39 unilateral cases, 22 of which involved the right sac and 17 the left. Of the bilateral cases, 4 were in the congenital group and the rest were in adults.

Social Distribution: Majority of patients were from the unemployed or low income groups where hygiene was perhaps not so important. This was not so in the congenital group.

Clinical Picture: Patients' symptoms included epiphora, discharge (mucous or pus), redness and irritation especially at the medial angles, swelling in the lacrimal sac region, eczema of skin of eyelids and foams in the eyes. All cases had epiphora. Ten came with mucocele and one with a fistula due to a burst lacrimal abscess. The diagnosis was made on slit lamp examination, regurgitation test and syringing to locate site of obstruction. Dacryocystography was not done as a routine. It had been done only on those casew with bony abnormalities and fractures in the lacrimal sac region.

The majority of cases did not have a clear cut cause. The disease seemed to start in the lacrimal passage itself. Others had history of trauma (2 cases), ENT problems like hypertrophied turbinates and sinusitis (6 cases) pericystitis and conjunctival disease (2 cases) and another 2 cases had history of previous eye operations.

Causative Organisms: A variety of organisms was incriminated including pneumococcus, straphylococcus, streptococcus and E-coli. Most were of mixed infection. Duke Elder found pneumococci as the most common infection often pure while others were mixed.¹

Treatment

Probing was done in children after the age of 6 months under general anaesthesia. Before this, parents were advised to apply pressure over the sac and antibiotics were given. A total of 8 cases were probed. 4 (50%) were asymptomatic after 3 months to one year follow up and the other 4 (50%) failed. Of the four failure, two cases agreed to have DCR done and the other two refused and were lost to follow up.

Dacryocystorhinostomy (D.C.R.): Forty-five D.C.Rs were done in this series. Five were under local anaesthesia and the rest were under general anaesthesia. Of the 42 adult cases, 1 was bilateral and 2 cases were done after failed probings. In 35 of the cases only the larger anterior flaps were anastomosed and the posterior flaps excised. No intubation of the nasolacrimal duct were done in the anterior flaps technique. 10 D.C.R.s used the anterior and posterior flaps anastomosis and of these 3 had intubations done.

Results: Patients were followed up over a period of 3 months to 1 year and success include those two were asymptomatic or where watering was minimal. There were 3 failures in the two types of D.C.R. done. This gives an approximate 93% success rate. (Table II).

Complications: In one case there was a large secondary haemorrhage on the fourth day. Scarring was a common complication but was acceptable and even preferred to troublesome watering.

Table II
Technique and Results for DCR

Techniques	Total No	Success	Failure
Anterior flaps anastomosis only	35	33	2
Anterior and posterior flaps anastomosis	10	9	1
	45	42 (approx. 93%)	3

Failures in D.C.R. were due to nasal opening being plugged by fibrous tissues.

Conclusion

Chronic dacryocystitis in adults is more common in Chinese females between the ages of 41 – 70 years. It is more common in the lower income group where better hygiene is desirable. D.C.R. is an effective way of relieving the epiphora due to chronic dacryocystitis. The anterior flaps anastomosis only is preferred by surgeons as this is easier and less time consuming. D.C.R. gave 93% success in this series. In spite of such a high rate of success it is surprising that D.C.R. is not done more frequently. The authors feel that this is as much due to the ophthalmologist's lack of confidence as patient's reluctance to have a hole drilled in the lateral nasal wall.

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