

# TREATMENT OF LACRIMAL FISTULA ASSOCIATED WITH DACRYOCYSTITIS

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**Abstract:** Treatment of the fistula associated with dacryocystitis without excision but removing only the source of infection by endoscopic dacryocystorhinostomy. Twelve cases of fistulae associated with dacryocystitis were collected. The idea not to remove the fistulae but to excise the underlying lesion. To accomplish this goal, all cases under general anesthesia were treated not with the classical way by excision but with intranasal endoscopic dacryocystorhinostomy associated with intubation. Healing of the fistulae occur within 10- 21 days. No need for classical surgical interference for treating a fistula if a profitable intranasal endoscopic dacryocystorhinostomy was realized.

## **Introduction:**

A fistula of the lacrimal sac is a sequel of acute suppurative dacryocystitis. It is possible regurgitation of pus into the conjunctival sac may be elicited and does not occur because of complete blockage of the canaliculi. Pus finds exit, in the course of few days, typically underneath the medial palpebral ligament due to necrosis of the overlying skin.

## **Patient and methods:**

Between 2001 to 2005 , twelve cases of fistulae consisting of nine females and three males, ranging between 15-35 years, are managed with intranasal endoscopic dacryocystorhinostomy associated with intubation with cilastic tube. All cases were done under general anesthesia. General anesthesia with hypotensive technique was selected. The nose is decongested with 1:200000 with saline adrenaline.

The initial mucosal incisions are made with a scalpel starting 8mm slightly behind and above the axilla of the middle turbinate. This incision is brought about 8mm anteriorly before the blade is turned vertically. A vertical incision is made to the height of the middle turbinate. A horizontal incision then is made posteriorly to the insertion of the uncinate on the lateral nasal wall under the middle turbinate.

A suction Freer is used to elevate the mucosal flap ensuring that the Freer stays on bone while the flap is elevated. The flap is tucked around the anterior end of the middle turbinate and left until the end of the middle turbinate and left until the end of the operation. A round knife is used to identify the junction between hard bone of the frontal process of the maxilla and the The dressing was removed in the second day and the nose was observed for any haemorrhages.

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The silicon was moved up and down to remove any stick debris, thin, soft lacrimal bone.

The soft lacrimal bone is flecked off with the round knife and the posteroinferior aspect of the lacrimal sac identified. A light pipe from the fibro-optic canaliculus intubation set can be placed through the inferior or superior canaliculus into the sac and the location of sac is confirmed. A sphenoid punch is used to remove thick bone of the frontal process and expose the anterior inferior part of the lacrimonal sac up to the level of the axilla of the middle turbinate.

The bone above the area thickens considerably and it is not possible to remove the bone over the upper half of the sac unless a chisel is used. The 2.9 mm curved diamond DCR bur is ideal for this purposes, as it gives angulation on to the lateral nasal wall which the diamond allows and the drill to come into contact with the mucosa of the lacrimal sac, damaging the sac wall.

The bone removal continues until the mucosal edge of the original incision is reached. The sac now is fully exposed, a nittle shape dilator is introduced to dilate puncti, passing in both upper and lower canaliculi 2mm vertical, 8mm horizontal, and a lacrimal probe is passed to be directed toward the nasal cavity. Silastic tube is introduced through the nose. Merocele nasal packs 4cm is set in 5 patients, all of them are observed for 24 hours. Anti-inflammatory and antibiotics, either local or systemic, are prescribed for 5 days post-operative.

Follow up of the patients are continued for 6 –12 months. The Silastic tube was removed after 6 months.

The patient was asked in the third day to blow his nose for the same reason. Follow up for six months were advised for all patients.

### Results

Healing of the fistulae occur within 10- 21 days (average 15 days) in all cases. Recurrent dacryocystitis had recurred in two cases (Female, 32y and 26years) among them one case followed by a fistula one month later. A convential dacryocystorhynostomy was done for both.

### DISCUSSION

Although simple excision of the fistula tract has been successful in many cases,<sup>(1)</sup> but other authors recommend cautery of the fistula, excision of the fistula with dacryocystorhinostomy (DCR), and DCR with common canalicular dissection, fistula excision, and canalicular intubation.<sup>(2,3)</sup> It was believed that the recurrence rate was high specially when cautery was used. A successful

treatment of lacrimal fistula can be achieved if a successful management of dacryocystitis was fulfilled.

### CONCLUSION

No need for classical surgical interference for treating a fistula if a profitable dacryocystorhynostomy was realized.

### REFERENCES

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