

Comparative Results of with and without Intraoperative Mitomycin C application in Dacryocystorhinostomy

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ABSTRACT

Objective: To evaluate the results of intraoperative mitomycin C application in dacryocystorhinostomy (DCR) surgery compared with results of the conventional procedure.

Subjects and Methods: This study was conducted at Khyber Teaching Hospital, Peshawar, KPK from 5th Jan 2014 to 31st May 2015. In this prospective randomized controlled study, a total of 66 patients diagnosed with acquired nasolacrimal duct obstruction were randomly divided into a conventional DCR group and mitomycin C group in which mitomycin C was used during DCR surgery. The surgical procedures in both groups were exactly the same, except that in the patients in the mitomycin C group, a piece of cotton soaked with 0.2 mg/ml mitomycin C was applied to the osteotomy site for 3 minutes. The results of the DCR surgeries were evaluated by objective findings such as irrigation and the height of tear meniscus and subjective symptoms by asking patients the condition of tearing improvement.

Results: Among the 33 patients in the mitomycin C group, 94% of patients remained totally symptom free after 6 months of follow up; while in the conventional group, 69.6% of patients were reported to be symptom free and 18% of patients to have an improvement in their symptoms. There was a significant difference between these two groups. As far as objective findings were concerned, there were 30 patients in the mitomycin C group classified as having a normal and one eye with moderate tear meniscus level, compared with 24 and 5 patients, respectively, in the conventional group and a significant difference between these two groups. The non-patency rate in the mitomycin C group is 6% compared with 15.15% in the conventional group.

Conclusion: Intraoperative mitomycin C application is effective in increasing the success rate of DCR surgery in standard nasolacrimal duct obstruction, and no significant complications resulted from its use. *Al-Shifa Journal of Ophthalmology* 2016; 12(4), 189-194. © Al-Shifa Trust Eye Hospital, Rawalpindi.
